Introduction | Cosumnes River College

In This Section

How to Use This Catalog (/2020-2021-catalog/catalog-introduction/how-to-use-this-catalog)

The college catalog is a vital resource for you as a Cosumnes River College student. Spend some time familiarizing yourself with the information in this catalog – it can be a key tool in your academic success.

About Cosumnes River College (/2020-2021-catalog/catalog-introduction/about-cosumnes-river-college)

Learn about Cosumnes River College, including its mission and vision, accreditation status, and leadership.
How to Use This Catalog
| Cosumnes River College

An Important Resource

This college catalog is a vital resource for you as a student at Cosumnes River College. Please spend some time becoming familiar with the information in this catalog – it can be a key tool in your academic success.

Changes

It's important to keep in mind that policies and regulations are subject to change. Many of these changes are dictated by the State of California or federal agencies. This catalog captures the latest information as of the publish date, but changes happen on a regular basis. For updated information, please consult the college website.

Official Updates

If there are significant changes – such as new courses, programs, or regulations – the college will publish a catalog update online (similar to an "addendum" in a print catalog). If updates are published, then they will typically appear in November of each year, but may be added at other times if critical content updates are necessary. Throughout the year, the catalog website (https://crc.losrios.edu/2020-2021-catalog) will always include the most current catalog content.

Career Education Program Changes

Please be aware that the required courses for career education (formerly career and technical education, or CTE) programs are subject to change due to state, regional, and federal agencies. It's important to meet with a counselor to stay on top of any potential changes to these programs.

About This Catalog

Every effort has been made to ensure that what is stated in this catalog is accurate. The courses and programs we offer, together with other information contained in this online catalog, are subject to change without notice by the administration of the Los Rios Community College District and Cosumnes River College for reasons related to student enrollment, level of financial support, or for any other reason, at the discretion of the district and Cosumnes River College. The district and Cosumnes River College further reserve the right to add, amend, or repeal any of their rules, regulations, policies, and procedures.
Cosumnes River College (CRC) values diversity, focuses on creativity and personal enrichment, and empowers students to reach their full potential as informed and productive members of the community. CRC is a leader in innovative ideas and sustainable values.

Serving south Sacramento County and Elk Grove since 1970, CRC’s main campus and its Elk Grove Center provides a dynamic learning environment for more than 14,000 ethnically and racially diverse students. One of the top 10 most diverse, 2-year public colleges in the nation (noted in the Almanac of Higher Education), CRC is a student-centered, open-access community college dedicated to preparing students for an ever-changing future.

In This Section

See Cosumnes River College's mission, vision, values, and commitment to equity.

Accreditation (/2020-2021-catalog/catalog-introduction/about-cosumnes-river-college/accreditation)
Cosumnes River College is accredited by the Accrediting Commission for Community and Junior Colleges (ACCJC) of the Western Association of Schools and Colleges.

Board of Trustees and Chancellor (/2020-2021-catalog/catalog-introduction/about-cosumnes-river-college/board-of-trustees-and-chancellor)
The Board of Trustees is the governing body of Los Rios Community College District, including Cosumnes River College.
Mission, Vision, and Values
| Cosumnes River College

Our Vision
To be an exemplary and innovative community college that empowers students and employees to strengthen the cultural, social, economic, and environmental well-being of their communities.

Our Mission
Cosumnes River College is a student-centered, open access community college dedicated to preparing students for an ever changing future. CRC courses and programs empower our diverse students to earn certificates or degrees, transfer to other educational institutions, or attain other lifelong academic or career aspirations.

Our Values
Cosumnes River College's culture builds upon a foundation of respect, compassion, civil discourse, and shared decision-making. CRC deeply values academic integrity, cultural competence, equity, social justice, innovation, and sustainability. CRC promotes teaching and learning excellence through diverse educational opportunities, varied instructional modes, and effective student services.

Our Commitment to Equity
Education should belong to everyone. To nourish this inclusion, CRC champions equity, diversity, social justice, and environmental sustainability as foundational to academic, campus, and community life. We work with the communities we serve toward just and fair inclusion into society in which all people can participate, prosper, and reach their full potential. We commit to equity driven decision-making, planning, and reflective processes that are responsive to the diverse identities and experiences in our community.

We seek to empower marginalized voices, nurture our many identities and social circumstances, foster cultural responsiveness, and stand against all manifestations of discrimination, including (but not limited to) those based on: ability statuses, age, ancestry, body size, citizenship/immigration status, economic status, educational status, employment status, ethnicity, food/housing insecurity, gender, gender identity, gender expression, incarceration experience, language, marital/partner status, military/veteran status, national origin, neurodiversity, political affiliation, pregnancy/reproductive status, race/racial identity, religion, sex, and sexual orientation.
Accreditation | Cosumnes River College

The Los Rios Community College District consists of four comprehensive, public California community colleges: American River College, Cosumnes River College, Folsom Lake College, and Sacramento City College. Cosumnes River College is accredited by the Accrediting Commission for Community and Junior Colleges (ACCJC) of the Western Association of Schools and Colleges, an institutional accrediting body recognized by the Council of Higher Education Accreditation and the US Department of Education. The Cosumnes River College educational centers are fully accredited under the college's accreditation status.
The Board of Trustees is the governing body of Los Ríos Community College District.

The board is responsible for the educational, physical, and financial well-being of the district. The board also sets legal policy for the district.

The board is composed of seven board members who are elected to four-year terms by registered voters. The board also includes a non-voting student trustee who is elected by students.

### Board Members

- Ms. Pamela Haynes
- Mr. Robert Jones
- Mr. Dustin Johnson
- Mr. John Knight
- Ms. Tami Nelson
- Ms. Deborah Ortiz
- Student Trustee

### Chancellor

Brian King
In This Section

[Academic Calendar](/2020-2021-catalog/getting-started/academic-calendar)
See important academic dates and deadlines for Cosumnes River College.

[How to Enroll](/2020-2021-catalog/getting-started/how-to-enroll)
Learn how to apply to Cosumnes River College and enroll in classes, and find other enrollment-related information.

[Admission Requirements and Procedures](/2020-2021-catalog/getting-started/admission-requirements-and-procedures)
Learn about admission requirements and procedures at Cosumnes River College.

[Fees](/2020-2021-catalog/getting-started/fees)
Learn about fees, payment deadlines, refunds, and more.
Summer 2020


<table>
<thead>
<tr>
<th>DATE</th>
<th>ACTION/EVENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>June 8</td>
<td>Instruction begins</td>
</tr>
<tr>
<td>June 19</td>
<td>Last day to petition for graduation/certification</td>
</tr>
<tr>
<td>July 3</td>
<td>Holiday – Independence Day (no classes; offices closed)</td>
</tr>
<tr>
<td>August 5</td>
<td>End of semester</td>
</tr>
<tr>
<td>August 10</td>
<td>Grades due</td>
</tr>
</tbody>
</table>

Fall 2020


<table>
<thead>
<tr>
<th>DATE</th>
<th>ACTION/EVENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>August 22</td>
<td>Instruction begins</td>
</tr>
<tr>
<td>September 7</td>
<td>Holiday – Labor Day (no classes; offices closed)</td>
</tr>
<tr>
<td>October 2</td>
<td>Last day to petition for graduation/certification</td>
</tr>
<tr>
<td>November 11</td>
<td>Holiday – Veterans Day (no classes; offices closed)</td>
</tr>
<tr>
<td>November 26 to 29</td>
<td>Holiday – Thanksgiving Recess</td>
</tr>
<tr>
<td>December 17</td>
<td>End of semester</td>
</tr>
<tr>
<td>January 4, 2021</td>
<td>Grades due</td>
</tr>
</tbody>
</table>

Spring 2021


<table>
<thead>
<tr>
<th>DATE</th>
<th>ACTION/EVENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>January 16</td>
<td>Instruction begins</td>
</tr>
<tr>
<td>January 18</td>
<td>Holiday – Martin Luther King, Jr. Birthday (no classes; offices closed)</td>
</tr>
<tr>
<td>February 12</td>
<td>Holiday – Lincoln Birthday (no classes; offices closed)</td>
</tr>
<tr>
<td>February 15</td>
<td>Holiday – Washington Birthday (no classes; offices closed)</td>
</tr>
<tr>
<td>March 5</td>
<td>Last day to petition for graduation/certification</td>
</tr>
<tr>
<td>March 29 to April 4</td>
<td>Holiday – Spring Recess (no classes; offices closed)</td>
</tr>
<tr>
<td>May 19</td>
<td>End of semester</td>
</tr>
<tr>
<td>DATE</td>
<td>ACTION/EVENT</td>
</tr>
<tr>
<td>--------</td>
<td>---------------</td>
</tr>
<tr>
<td>May 26</td>
<td>Grades due</td>
</tr>
</tbody>
</table>
How to Enroll | Cosumnes River College

In This Section

Steps to Enroll (/2020-2021-catalog/getting-started/how-to-enroll/steps-to-enroll)
Learn about the steps to enrollment, including how to apply to Cosumnes River College, how to apply for financial aid, and other admissions tips.

Challenges to Matriculation Process (/2020-2021-catalog/getting-started/how-to-enroll/challenges-to-matriculation-process)
Students can elect to not participate or be exempt from some or all of the matriculation process if they meet certain criteria.
Steps to Enroll | Cosumnes River College

Apply Now

Guarantee your admission to Cosumnes River College by completing the online application to Cosumnes River College (https://www.opencccapply.net/cccapply-welcome?cccMisCode=232).

Note: You must submit a new application any time you have a break of enrollment where you do not attend for a year or more.

When applying to one college in the Los Rios Community College District, you are able to enroll in all four colleges (American River College, Cosumnes River College, Folsom Lake College, and Sacramento City College).

Save Money

To qualify for the Los Rios Promise and other programs, fill out the Free Application for Federal Student Aid (FAFSA) or the California Dream Act Application (CADAA). Learn more about how to save money with financial aid (https://crc.losrios.edu/save-money).

Other Admissions Tips

- Submit your high school and/or college transcripts to be placed automatically into English and mathematics courses that match your skill level. Learn more about placement (https://crc.losrios.edu/admissions/placement). English as a Second Language (ESL) assessment testing is still available via assessment testing (https://crc.losrios.edu/admissions/placement/assessment-testing).

- Participate in orientation for new students (https://crc.losrios.edu/admissions/orientation).
Challenges to Matriculation Process
| Cosumnes River College

Students can elect to not participate or be exempt from most or parts of the matriculation process based on the following criteria:

1. The student has completed an associate degree or higher.
2. The student satisfies at least two of the following:
   - The student has identified a goal of upgrading job skills
   - The student has enrolled for fewer than 12 units
   - The student is concurrently enrolled in another post-secondary institution
   - The student has declared no degree or occupational objective
In This Section

Admissions Eligibility (/2020-2021-catalog/getting-started/admission-requirements-and-procedures/admissions-eligibility)
Learn about admissions eligibility for first-time college students, continuing Cosumnes River College students, returning or transfer students, and high school students.

Admission with Transfer Credit (/2020-2021-catalog/getting-started/admission-requirements-and-procedures/admission-with-transfer-credit)
Students who desire academic credit for courses taken at other regionally accredited colleges and universities must submit official transcripts to the Admissions and Records Office.

Admission for Veterans and Dependents Using Veterans Educational Benefits (/2020-2021-catalog/getting-started/admission-requirements-and-procedures/admission-for-veterans-and-dependents-using-veterans-educational-benefits)
Learn about admissions information for veterans, spouses of veterans, and dependents of veterans.

International Student Admission (/2020-2021-catalog/getting-started/admission-requirements-and-procedures/international-student-admission)
Learn about admissions for international students.

Advanced Education for High School Students (/2020-2021-catalog/getting-started/admission-requirements-and-procedures/advanced-education-for-high-school-students)
Learn about admissions for high school students who want to take college classes through advanced education.

Undocumented Student Admission (/2020-2021-catalog/getting-started/admission-requirements-and-procedures/undocumented-student-admission)
Learn about admissions for undocumented students, a group we define as all immigrants who reside in the US without legal status.

Residency Requirements (/2020-2021-catalog/getting-started/admission-requirements-and-procedures/residency-requirements)
Learn about the requirements for having and maintaining California residency.

Readmission from Dismissed Status (/2020-2021-catalog/getting-started/admission-requirements-and-procedures/readmission-from-dismissed-status)
Students on dismissed status from Cosumnes River College must submit a petition to be readmitted after dismissed status.
Admissions Eligibility  
| Cosumnes River College

Any person who has earned a high school diploma or the equivalent – such as a certificate of proficiency issued by the State Board of Education including a General Education Development (GED) – is eligible for admission to Cosumnes River College. Non-high school graduates 18 years of age or older who demonstrate ability to profit from a community college education may also be admitted.

There are four main types of students who attend Cosumnes River College:

First-Time College Students
First-time college students are individuals who are a high school graduates or are at least 18 years old and never attended any college (other than those who attended while in high school).

Continuing Students
Continuing students are individuals who attended classes at any Los Rios college in the term immediately prior to the next term.

Returning or Transfer Students
All students returning after an absence or transferring from a non-Los Rios college must complete an admissions application and submit official transcripts of all other college work to the Admissions and Records Office.

High School Students
High school students who will be a junior or senior (grades 11 or 12) or at least 16 years of age by the start of classes may be eligible to enroll in a maximum of two community college classes each semester through the Advanced Education program.
Admission with Transfer Credit
| Cosumnes River College

Students who desire academic credit for courses taken at other regionally accredited colleges and universities must submit official transcripts of that work to the Admissions & Records office. It is the student’s responsibility to initiate a request to each institution asking that an official transcript of their work be sent directly to:

To be credited by Cosumnes River College, the coursework must meet the following criteria:

- The course(s) must have been taken at a regionally accredited college or university.
- The course(s) must be at the undergraduate level.
- The course(s) must have been completed with a grade of D or higher. All transferred grades (including Fs) will be used in the calculation of units attempted, units completed, and the grade point average.
- For determination of course applicability equivalency, student must meet with a counselor.

Students who have completed college- or university-level courses outside of the United States and who are requesting credit must have those transcripts evaluated by a Foreign Credit Evaluation Service. Cosumnes River College will accept a foreign transcript evaluation from a current member of Association of International Credential Evaluators, Inc. (http://aice-eval.org/) (AICE) or National Association of Credential Evaluation Services (https://www.naces.org/) (NACES).

Credit for coursework/degrees will be granted if it is determined to be equivalent to that of a regionally accredited college or university in the US and is at the baccalaureate level. Once received by Cosumnes River College, the evaluation becomes property of the college and is treated in the same manner as an official transcript.
Admission for Veterans and Dependents
Using Veterans Educational Benefits
| Cosumnes River College

Veterans services are available to assist veterans, spouses, and children of disabled or deceased veterans who may be eligible for federal and/or state educational benefits. New students should contact the Admissions & Records office at least two months prior to the start of the college semester to initiate the required paperwork.

In most cases, all tuition and enrollment fees, miscellaneous fees, textbooks, and class supplies are paid for by the student and not by Veterans Affairs (VA). The exception is students who are using the Post 9/11 GI Bill or Vocational Rehabilitation benefits.

If you believe VA will be paying your enrollment fees, then please verify with Veterans Services before you enroll in courses. The benefit process may take several months to complete for new benefit recipients. For continuing students, the benefit process can take four to six weeks. Benefit recipients should anticipate a delay of at least two months before receiving the first payment.

Visit the GI Bill website (https://benefits.va.gov/gibill/) for more information on VA benefits. Disabled veterans who qualify for additional benefits should contact their VA Vocational Rehabilitation Counselor prior to enrolling.

For more information, see veteran student admissions (https://crc.losrios.edu/veteran-admissions).
Cosumnes River College welcomes students from all over the world. Students who enter the US on a non-immigrant visa are considered international students; however, there are different attendance requirements for each visa type.

Cosumnes River College is approved by the Bureau of Citizenship and Immigration Services (formerly INS) to issue the I-20 for the F-1 visa. An international student must be enrolled in at least 12 units each semester and must maintain a C (2.0) grade point average at all times, in order to comply with F-1 visa requirements.

For more information, see international student admissions (https://crc.losrios.edu/international-students).
Advanced Education for High School Students | Cosumnes River College

Courses that provide enrichment and advancement in educational experience may be offered on a limited basis to high school students who have demonstrated academic achievement. The student must be 16 years of age or have completed their sophomore year of high school prior to the first day of the college semester. Advanced education students may not take remedial classes, those classes which need to be repeated because of low grades, and classes offered in the student's own school.

High school students should request information from their high school counselor regarding eligibility and an advanced education application. Advanced education students should then submit online a completed advanced education application form which has been signed by a parent and by a high school counselor or principal, an official transcript plus work in progress, and a written statement describing how the eligibility criteria are met and why they wish to take classes.

After the advanced education application has been approved, the student may register for classes. Students must enroll in person at Admissions & Records. An advanced education student is not considered a continuing student when registering for classes for any subsequent semesters. It is the responsibility of the advanced education student to become familiar with, and aware of, all the requirements, processes, and deadlines pertaining to advanced education.

For more information, see advanced education admissions (https://crc.losrios.edu/advanced-education).
At Cosumnes River College, we define undocumented to include all immigrants who reside in the US without legal status. All undocumented students must:


2. Submit a California Non-Resident Tuition Exemption Form available to the Admissions & Records Office.


For more information, see undocumented student admissions (https://crc.losrios.edu/undocumented-students).
Residency Requirements
| Cosumnes River College

Students who are California residents pay in-state tuition of $46 per unit, whereas students who are non-residents pay out-of-state tuition of $353 per unit. (Note: Tuition fees are for the 2020-21 academic year.) Community college enrollment fees are set by the California State Legislature. All fees are subject to change.

The term "California resident" for fee purposes may differ from other definitions of California residency. A person who has a California driver's license and/or vehicle registration or who is a California resident for tax, voting, or welfare purposes may have established legal residence in the state but not necessarily be considered a resident for fee purposes.

Residency Eligibility

To be eligible for California residency, a student must do the following:

- Be a citizen or hold a US immigration status that does not prevent establishment of residency
- Verify physical presence in California for at least one year and one day prior to the first day of the semester/term
- Verify intent to make California your permanent place of residence
- Establish financial independence from a non-resident parent or guardian

For more information, go to residency requirements on the Cosumnes River College website (https://crc.losrios.edu/residency-requirements).
Students on dismissed status from Cosumnes River College must submit a Petition for Readmission After Dismissed Status form, which is completed with a college counselor. In order to enroll in classes, the dean must approve readmission following counselor recommendation.
In This Section

Schedule of Fees (/2020-2021-catalog/getting-started/fees/schedule-of-fees)
See the schedule of fees at Cosumnes River College, including tuition, student representation fees, health services fees, and more.

Fee Payment Deadlines (/2020-2021-catalog/getting-started/fees/fee-payment-deadlines)
See fee payment deadlines for each semester and learn how to pay for your classes at Cosumnes River College.

Debts Owed to College (/2020-2021-catalog/getting-started/fees/debts-owed-to-college)
If a student or former student fails to pay a debt owed to the institution, then the institution may withhold permission or access to certain information or services.

Federal Education Tax Credits (/2020-2021-catalog/getting-started/fees/federal-education-tax-credits)
Students (or parents of dependent students) may be able to obtain federal tax credits for enrollment fees if a student meets certain criteria.

Fee Refunds (/2020-2021-catalog/getting-started/fees/fee-refunds)
See which fees are refundable and learn how to apply for a refund.
# 2020-2021 Mandatory Fees

<table>
<thead>
<tr>
<th>FEE NAME</th>
<th>SUMMER 2020</th>
<th>FALL 2020</th>
<th>SPRING 2021</th>
<th>REFUNDABLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Resident tuition and enrollment</td>
<td>$46 per unit</td>
<td>$46 per unit</td>
<td>$46 per unit</td>
<td>Yes</td>
</tr>
<tr>
<td>Non-resident tuition and enrollment</td>
<td>$353 per unit</td>
<td>$353 per unit</td>
<td>$353 per unit</td>
<td>Yes</td>
</tr>
<tr>
<td>Foreign student application fee</td>
<td>$50</td>
<td>$50</td>
<td>$50</td>
<td>No</td>
</tr>
<tr>
<td>Student representation fee</td>
<td>N/A</td>
<td>$2</td>
<td>$2</td>
<td>Yes</td>
</tr>
<tr>
<td>Health services fee</td>
<td>N/A</td>
<td>$20</td>
<td>$20</td>
<td>Yes</td>
</tr>
<tr>
<td>Universal transit pass (UTP) fee</td>
<td>$11 (flat fee)</td>
<td>$2.50 per unit</td>
<td>$2.50 per unit</td>
<td>Yes</td>
</tr>
</tbody>
</table>

1 The foreign student application fee applies to international students who are not legal US residents or permanent residents.

2 Eligible students must be taking one (1) or more units to be charged the UTP fee. Students taking more than 15 units will only be charged for 15 units ($33.75). Fractions of units are rounded up to the nearest whole unit.

# 2020-2021 Parking Fees

<table>
<thead>
<tr>
<th>FEE NAME</th>
<th>SUMMER 2020</th>
<th>FALL 2020</th>
<th>SPRING 2021</th>
<th>REFUNDABLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Semester parking permit (automobiles)</td>
<td>N/A</td>
<td>$41</td>
<td>$41</td>
<td>Yes</td>
</tr>
</tbody>
</table>

1 N/A 2 (2020-2021-catalog/getting-started/fees/schedule-of-fees#sup3)

2 $41 4/1/2020-2021-catalog/getting-started/fees/schedule-of-fees#sup4
## Fee Descriptions

### Tuition and Enrollment Fee

Refundable: Yes. [Learn more about refunds](https://crc.losrios.edu/admissions/cost-of-attendance/refunds).

Tuition and enrollment fees are charged per unit of enrollment. These fees are set by the State of California and are subject to change at any time. Students who have registered for classes prior to an increase may be required to pay the additional amount.

### Foreign Student Application Fee

Refundable: No.

The foreign student application fee applies to all international students. Some international students may be exempt from paying this fee if they demonstrate economic hardship. Read Regulation R-2251 Nonresident and International Student Fees to learn more.

### Student Representation Fee

Refundable: Yes.

The student representation fee supports student government in its effort to advocate and lobby for legislative issues that affect students.

$1 of every $2 fee supports the operations of a statewide community college student organization that is recognized by the Board of Governors of the California Community Colleges (Assembly Bill 1504). This statewide organization provides for student representation and participation in state-level community college shared governance as well as governmental affairs representatives to advocate before the legislature and other state and local governmental entities.

Students can refuse to pay this fee based on moral, religious, political, or financial grounds. To be exempted from paying the fee, complete and submit the [Student Representation Fee Form BS-55 (PDF)](/shared/doc/bso/bs-55.pdf) to your college Business Services Office, preferably before you pay your fees.

This fee was established under provision of California Education Code section 76060.5 and California Code of Regulations, Title V, sections 54801-54805.

### Health Services Fee

Refundable: Yes.

---

<table>
<thead>
<tr>
<th>FEE NAME</th>
<th>SUMMER 2020</th>
<th>FALL 2020</th>
<th>SPRING 2021</th>
<th>REFUNDABLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Semester parking permit (carpools with 3 or more passengers)</td>
<td>N/A</td>
<td>$36</td>
<td>$36</td>
<td>Yes</td>
</tr>
<tr>
<td>Semester parking permit (motorcycles)</td>
<td>N/A</td>
<td>$26</td>
<td>$26</td>
<td>Yes</td>
</tr>
<tr>
<td>Daily parking permit</td>
<td>N/A</td>
<td>$2</td>
<td>$2</td>
<td>No</td>
</tr>
</tbody>
</table>

3 All summer 2020 classes will be online; therefore, no parking services will be available.

4 Students who receive the California College Promise Grant (formerly known as the BOG Fee Waiver) only pay $31 for a fall or spring semester parking permit.
The following students may be exempted from the health services fee if they submit the required paperwork to the Admissions and Records Office before they register for classes:

- Students who depend exclusively upon prayer for healing in accordance with the teachings of a bona fide religious sect, denomination, or organization
- Students who receive California College Promise Grant (formerly BOG Fee Waiver) Part A

The following students are not charged the health services fee:

- Students enrolled in the Sacramento Regional Public Safety Training Center (SRPSTC)
- Students enrolled in apprenticeship programs
- Students only enrolled in UC Davis Co-Op program courses
- Incarcerated students inside correctional facilities
- Students admitted as special part-time students (K-12 students)

Universal Transit Pass (UTP) Fee

Refundable: Yes. Learn more about refunds (https://crc.losrios.edu/admissions/cost-of-attendance/refunds).

The Universal transit pass (UTP) is available to certain students for use on Regional Transit (RT) services, including buses and light rail. All eligible students are charged the UTP fee, regardless of whether or not they use the pass. The UTP is a sticker that attaches to your student access card.

Visit the Regional Transit website (http://www.sacrt.com/fares/) for a list of all transit and bus systems that accept the UTP. UC Davis Unitrans does not accept the UTP.

Eligibility

Students taking one or more units during the spring or fall semester are eligible for the UTP. All students are eligible for the UTP in the summer semester, regardless of how many units they take.

Some students are not eligible for the UTP, and therefore are not charged the fee. These students include:

- Students enrolled in the Sacramento Regional Public Safety Training Center (SRPSTC)
- Students enrolled in apprenticeship programs
- Students taking classes on the UC Davis main campus
- Students studying abroad
- Incarcerated students inside correctional facilities
- Students whose home college is not a Los Rios college but who are enrolled in courses at a Los Rios college through the California Community Colleges Online Education Initiative Course Exchange

Valid Dates

- For the spring semester, the UTP is valid January 1 through May 31.
- For the summer semester, the UTP is valid June 1 through July 31.
- For the fall semester, the UTP is valid August 1 through December 31.

Fee Structure

Beginning with the fall 2020 semester, eligible students will pay $2.50 per unit during the fall and spring semesters. Any fraction of a unit is rounded up to the next whole unit. The minimum fee charged is $2.50 (for one unit) and the maximum fee is $37.50 (for 15 or more units). For example:

- A student enrolled in .5 units will not pay the UTP fee.
- A student enrolled in one unit will pay $2.50.
- A student enrolled in 1.5 units will pay $5.00.
- A student enrolled in 15 or more units will pay the maximum fee of $37.50.

During the summer 2020 semester, all eligible students pay $11 for the UTP.
Lost or Stolen UTP Stickers
If your UTP sticker is lost or stolen, then you will have to pay the full price of $37.50 for a new one.

Damaged UTP stickers
If your UTP sticker is damaged but the remnants are still attached to your student access card, then we will issue a replacement for free.

Semester Parking Permit Fee
Refundable: Yes. Learn more about refunds (https://crc.losrios.edu/admissions/cost-of-attendance/refunds).

Students can buy a semester parking permit online via eServices (https://ps.losrios.edu/student/signon.html) or in person*. The semester parking permit is a decal that is placed on the windshield or hung from the rear-view mirror.

Read Administrative Regulation R-2252: Student Parking Fees (https://www.losrios.edu/docs/lrccd/board/regulations/R-2252.pdf) to learn more.

Lost, Stolen, or Damaged Parking Permit
If a semester parking permit is lost or stolen, then you will have to pay full price for a new one. If a vehicle is sold or damaged, then a replacement can be issued for $2. You will need to provide the old decal and proof of sale or repair for the $2 replacement.

* At American River College, Cosumnes River College, and Sacramento City College, parking permits can be purchased at the Business Services Office. At Folsom Lake College, parking permits can be purchased at the Admissions & Records Office.

Daily Parking Permit Fee
Refundable: No.

Students can buy daily parking permits from machines located in the parking lots at each campus. Daily parking permits are not recommended for motorcycles because they can be easily stolen. Read Los Rios' Administrative Regulation R-2252: Student Parking Fees (PDF) (https://www.losrios.edu/docs/lrccd/board/regulations/R-2252.pdf) to learn more.

Instructional Material Fees
Instructional material fees for designated courses may be assessed in accordance with Title 5, Section 59400 and Los Rios Policy P-2253 (https://shared/doc/board/policies/P-2253.pdf).
Fee Payment Deadlines  
| Cosumnes River College

Your tuition and fees are due soon after you enroll in classes. You will be dropped if your fees are not paid by the fee payment deadline. This is true even if you enroll in a class that starts later in the semester.

Summer 2020 Payment Deadlines

Payment deadlines for the summer 2020 semester.

<table>
<thead>
<tr>
<th>DATE ENROLLED IN CLASSES</th>
<th>DATE DROPPED IF NOT PAID</th>
</tr>
</thead>
<tbody>
<tr>
<td>April 20 to May 22, 2020</td>
<td>14 days after enrollment date</td>
</tr>
<tr>
<td>May 23 to June 3</td>
<td>June 5</td>
</tr>
<tr>
<td>June 4 to June 8</td>
<td>June 9</td>
</tr>
<tr>
<td>June 9 or later</td>
<td>The next day</td>
</tr>
</tbody>
</table>

Fall 2020 Payment Deadlines

This information is still being finalized.

Spring 2021 Payment Deadlines

This information is still being finalized.

A Note About Financial Aid

Your financial aid award is not automatically applied to your fees (except the California College Promise Grant). After you have applied your financial aid, you are responsible for paying the remaining amount on your account.

Make sure you apply for financial aid as early as possible and review the financial aid deadlines (https://crc.losrios.edu/financial-aid-deadlines).
Debts Owed to College
| Cosumnes River College

Should a student or former student fail to pay a debt owed to the institution, the institution may withhold permission to any combination of the following from any person owing a debt until the debt is paid (Title 5, California Code of Regulations, Sections 42380 and 42381)

- Register
- Use facilities for which a fee is authorized to be charged
- Receive services, materials, food, or merchandise

If a student believes they do not owe all or part of an unpaid obligation, the student should contact the Business Services office.
Students (or parents of dependent students) may be able to obtain federal tax credits (including the American Opportunity Credit and Lifetime Learning Credit) for enrollment fees if the student:

- Is enrolled in at least six (6) units during any semester or summer session
- Meets the other conditions prescribed by federal law

Students who consent to online access can view and print the IRS Form 1098-T through eServices by January 31 of each year. For eligible students who do not consent to online access, the IRS Form 1098-T will be mailed by January 31.
Fee Refunds | Cosumnes River College

What Fees are Refundable?

Refundable Fees
- Resident enrollment and tuition fee
- Non-resident enrollment and tuition fee
- Universal transit pass (UTP) fee
- Student representation fee
- Health services fee
- Semester parking permit fee

Non-Refundable Fees
- Foreign student application fee
- Daily parking permit fee

How to Get a Refund

Refunds for Enrollment and Tuition Fees
Follow these steps to get a refund for enrollment and tuition fees:

1. Drop your class(es) by the deadline. After your class is dropped, money is credited to your eServices account. Keep all documentation that shows the date your class was officially dropped.

2. Request a refund [here](https://crc.losrios.edu/admissions/cost-of-attendance/refunds/refund-application) to get the money out of your eServices account by the deadline. You can submit this request online or in person at the Business Services Office.

Refunds for Student Representation Fee
Follow these steps to get a refund for the student representation fee:

1. Complete and submit the Student Representation Fee Form [here](/shared/doc/bso/bs-55.pdf) to your college Business Services Office.

2. If you paid by credit card, then a refund credit will be issued to the credit card you used. All other methods of payment will be refunded by check and mailed to the address on file with your college’s Admissions and Records Office.

Refunds for UTP and Health Services Fees
Follow these steps to get a refund for Universal Transit Pass (UTP) and health services fees:

1. Drop your class(es) by the deadline. After your class is dropped, money is credited to your eServices account. Keep all documentation that shows the date your class was officially dropped.

2. Request a refund [here](https://crc.losrios.edu/admissions/cost-of-attendance/refunds/refund-application) to get the money out of your eServices account by the deadline. You can submit this request online or in person at the Business Services Office.

Important Information About UTP Refunds

Fall or Spring Semester
For the spring or fall semester, the UTP fee is refundable if you drop your courses within the fee refund period. If you drop to less than one unit, then you are expected to return the UTP sticker.
Summer Semester
For the summer semester, the UTP fee is refundable if you drop all of your units within the refund period. A minimum fee of $11 will be withheld from your refund if you have already picked up a UTP sticker for the summer semester. You are expected to return the UTP sticker if you drop all units.

Refunds for Semester Parking Permits
To get a refund for a semester parking permit:

- Go to the Business Services Office to fill out a paper refund application before the deadline. Your parking permit decal must be attached to your application. You cannot do this step online. Your refund will be processed within 6-8 weeks.

Important Information About Refunds

Credit Balances in eServices
Money in your eServices account is not automatically refunded to you. If you have a credit balance in your eServices account and you do not request a refund by the last day of instruction of the semester, then you forfeit that money.

Exceptions for Military Students
If you have to withdraw from classes for military purposes, then you will be refunded 100% of your fees and tuition. This is true even if you drop after the deadline or request your refund after the end of the semester.

How long will it take to get my refund?
Refunds are issued within six to eight weeks. If you paid by credit card, then a refund will be issued to the credit card you paid with. All other methods of payment will be refunded by check and mailed to the address on file with Admissions and Records.
In This Section

Financial Aid (/2020-2021-catalog/while-you-are-here/financial-aid)
The Financial Aid Office is here to help you get the financial support you need to afford college. Learn how to apply for financial aid.

College and Academic Regulations (/2020-2021-catalog/while-you-are-here/college-and-academic-regulations)
Learn about Cosumnes River College's grading policies and academic regulations.

Enrollment Verification (/2020-2021-catalog/while-you-are-here/enrollment-verification)
Enrollment verification for child care, health insurance, or car insurance can be printed out via eServices or requested by fax or in-person. All other requests can be processed immediately by the National Student Clearinghouse for a small fee.

Alternative Credit/Study Options (/2020-2021-catalog/while-you-are-here/alternative-credit/study-options)
In addition to regularly scheduled credit classes, students may receive college credit for participation in certain alternative credit and study options.

College Safety and Security (/2020-2021-catalog/while-you-are-here/college-safety-and-security)
Learn about Cosumnes River College's commitment to maintaining a safe learning environment and supporting an ongoing comprehensive safety program

Student Rights and Responsibilities (/2020-2021-catalog/while-you-are-here/student-rights-and-responsibilities)
Learn about rights and responsibilities for students at Cosumnes River College.

Equal Opportunity, Equity, Discrimination, and Harassment (/2020-2021-catalog/while-you-are-here/equal-opportunity-equity-discrimination-and-harassment)
Learn about Cosumnes River College's commitment to equal opportunity, equity, and diversity. In addition, see our policies prohibiting harassment, discrimination, and retaliation.
Financial Aid | Cosumnes River College

Get the Financial Help You Need

Money shouldn't get in the way of getting a college education. The Financial Aid Office is here to help you get the financial support you need to afford college.

Financial Aid Eligibility

Generally, to be eligible for financial aid, students must:

- Demonstrate financial need (for most programs)
- Be a US citizen or an eligible non-citizen
- Have a valid Social Security number (with the exception of students from the Republic of the Marshall Islands, Federated States of Micronesia, or the Republic of Palau)
- Be registered with Selective Service ([/2020-2021-catalog/while-you-are-here/financial-aid#ss]), if you're a male (you must register between the ages of 18 and 25)
- Be enrolled or accepted for enrollment as a regular student in an eligible degree or certificate program
- Be enrolled at least half-time to be eligible for Direct Loan Program funds
- Maintain satisfactory academic progress
- Sign the certification statement on the Free Application for Federal Student Aid (FAFSA) stating that:
  - You are not in default on a federal student loan and do not owe money on a federal student grant
  - You will use federal student aid only for educational purposes
- Show you're qualified to obtain a college or career school education by one of the following:
  - Having a high school diploma or a recognized equivalent such as a General Educational Development (GED) certificate
  - Completing a high school education in a homeschool setting approved under state law (or – if state law does not require a homeschooled student to obtain a completion credential – completing a high school education in a homeschool setting that qualifies as an exemption from compulsory attendance requirements under state law)
  - Enrolling in an eligible career pathway program and meeting one of the ability-to-benefit alternatives ([/2020-2021-catalog/while-you-are-here/financial-aid#benefit])

Registering for Selective Service

Most male students must be registered with Selective Service to receive federal student aid. You also must register if you are a male and are not currently on active duty in the US armed forces. If you are a citizen of the Federated States of Micronesia, the Republic of the Marshall Islands or the Republic of Palau, then you are exempt from registering for selective service.

You can call Selective Service toll-free at (888) 655-1825 for general information about registering, register online at sss.gov ([https://www.sss.gov](https://www.sss.gov)), or register when you submit your Free Application for Federal Student Aid (FAFSA) ([https://fafsa.ed.gov](https://fafsa.ed.gov)).

Ability-to-Benefit Alternatives

If you were enrolled in college or career school prior to July 1, 2012, or if you are currently enrolled in an eligible career pathway program*, then you may show you're qualified to obtain a higher education by one of the following:

- Passing an approved ability-to-benefit test* (if you don't have a diploma or GED, a college can administer a test to determine whether you can benefit from the education offered at that school)
- Completing six credit hours or equivalent course work toward a degree or certificate (you may not receive aid while earning the six credit hours)
Free Application for Federal Student Aid (/2020-2021-catalog/while-you-are-here/financial-aid/free-application-for-federal-student-aid)
The Free Application for Federal Student Aid (FAFSA) is a form you fill out to get financial aid. Financial aid includes fee waivers, grants, work study, loans, and scholarships.

California Dream Act Application (/2020-2021-catalog/while-you-are-here/financial-aid/california-dream-act-application)
The California Dream Act is a law that allows some undocumented and nonresident students to receive certain types of financial aid. To apply, students submit the California Dream Act Application (CADAA).

Promise Programs (/2020-2021-catalog/while-you-are-here/financial-aid/promise-programs)
Promise programs offer first-time, full-time students up to two years of tuition-free education at Cosumnes River College.

Grants (/2020-2021-catalog/while-you-are-here/financial-aid/grants)
A grant is money given to you by the federal or state government that you don't usually have to pay back.

Federal Work-Study (/2020-2021-catalog/while-you-are-here/financial-aid/federal-work-study)
The Federal Work-Study (FWS) program provides jobs to students to help them pay for their educational expenses.

Federal Direct Loans (/2020-2021-catalog/while-you-are-here/financial-aid/federal-direct-loans)
A federal direct loan is money you borrow from the government that you have to pay back with interest. We encourage students to apply for grants and scholarships before taking out a student loan. A loan is a serious and long-term obligation.

Scholarships (/2020-2021-catalog/while-you-are-here/financial-aid/scholarships)
A scholarship is money given to you to help pay for your education or related expenses. Scholarships come from a variety of sources, such as your college or a private organization.
Free Application for Federal Student Aid | Cosumnes River College

What is FAFSA?

The Free Application for Federal Student Aid (FAFSA) ([https://fafsa.ed.gov/](https://fafsa.ed.gov/)) is a form you fill out to get financial aid. Financial aid includes fee waivers, grants, work-study, loans, and scholarships. Submit the FAFSA each year you are in college – it only takes about 30 minutes to complete when you are prepared.

Though undocumented students cannot apply for aid through the FAFSA, they may be eligible for state financial aid through the California Dream Act ([https://dream.csac.ca.gov/](https://dream.csac.ca.gov/)).

Deadline to Submit FAFSA

Submit the FAFSA as early as you can. This will help you figure out how to pay for college before classes begin.

Academic Year 2020-2021

The 2020-2021 academic year includes fall 2020, spring 2021, and summer 2021.

- Date FAFSA available: October 1, 2019
- Deadline to submit FAFSA: March 2, 2020*
- Tax filing year to use for FAFSA: 2018

* You can submit the FAFSA after the “Deadline to Submit” date until June 30 of the following year, but priority is given on a first-come, first-served basis. You may not be considered for a Cal Grant if you submit your application after this date.

Federal School Code

Cosumnes River College’s federal school code is 007536. Make sure you include this on your FAFSA if you want to receive financial aid at Cosumnes River College.
The California Dream Act is a law that allows undocumented and nonresident students (US citizens and eligible non-citizens) who qualify for a non-resident exemption under Assembly Bill 540 (AB 540) to receive certain types of financial aid. The California Dream Act is unrelated to the federal Deferred Action for Childhood Arrivals (DACA) program.

Instead of submitting the Free Application for Federal Student Aid (FAFSA), students for whom any of the following are true can submit the California Dream Act Application (https://dream.csac.ca.gov/) (CADAA) to receive financial aid. You are eligible to complete the CADAA if you:

- Are undocumented
- Have a valid or expired DACA status
- Are a U visa holder
- Have Temporary Protected Status (TPS)
- Meet the non-resident exemption requirements under AB 540

Financial Aid Available for Undocumented Students

Undocumented students may qualify for the following types of financial aid:

- State grants, including the California College Promise Grant (formerly BOG Fee Waiver), Cal Grants, Chafee Grants, and Student Success Completion Grant
- Assistance from EOPS, CARE, or CalWORKs
- Some scholarships
- Los Rios Promise Program
Promise Programs
| Cosumnes River College

Los Rios Promise

At Cosumnes River College, we believe in you and your goals, and we want to see you achieve them – that’s why we’re making the Los Rios Promise. Promise programs offer first-time, full-time students up to two years of tuition-free education at any Los Rios college.

The Los Rios Promise covers tuition for 12 to 18 units but does not cover the cost of books or other fees. Learn about other types of financial aid (https://crc.losrios.edu/student-resources/financial-aid/types-of-financial-aid) that can help cover your expenses.

Deadline for Los Rios Promise Program Enrollment and FAFSA Completion

Eligible students must enroll in classes and submit the FAFSA/CADAA by the following deadlines to receive Los Rios Promise funds:

<table>
<thead>
<tr>
<th>2019-2020</th>
<th>2020-2021</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Summer 2019:</strong> June 3, 2019</td>
<td><strong>Summer 2020:</strong> June 17, 2020</td>
</tr>
<tr>
<td><strong>Fall 2019:</strong> August 14, 2019</td>
<td><strong>Fall 2020:</strong> September 8, 2020</td>
</tr>
<tr>
<td><strong>Spring 2020:</strong> January 9, 2020</td>
<td><strong>Spring 2021:</strong> February 1, 2021</td>
</tr>
</tbody>
</table>

Eligibility

To be eligible for the Los Rios Promise, you must:

- Be a California resident
- Be a first-time college student*
- Enroll in and maintain at least 12 units for fall and spring semesters by the deadline
- Complete the Free Application for Federal Student Aid (FAFSA) or the California Dream Act Application (CADAA) by the deadline

* Courses taken during high school (through dual enrollment or advanced education) are considered "pre-college" and do not prevent you from taking advantage of the Los Rios Promise. Students who transfer from a college other than a Los Rios college are not eligible for the Los Rios Promise.

Los Rios Promise Funds for Summer Tuition Fees

To use Los Rios Promise funds to pay for your summer tuition fees, you must do both of the following by the Los Rios Promise Program Enrollment and FAFSA Completion deadline:

- Enroll in any number of units for the summer term
- Enroll in at least 12 units for the fall semester

Eligibility for a Second Year

To apply for the Los Rios Promise Program for a second year, you must have been enrolled in at least 24 units by the Los Rios Promise Program Enrollment and FAFSA Completion deadline for the previous year.
Grants | Cosumnes River College

What is a Grant?

A grant is money given to you by the federal or state government that you don't usually have to pay back.

Types of Grants for Community College Students

Learn more about the types of grants available to community college students, eligibility, and how and when to apply.

Cal Grant B

Cal Grants are awarded by the State of California and do not have to be repaid.

What it Covers

Cal Grant B Entitlement and Competitive awards provide up to $1,670 for books and living expenses, plus up to an additional $2,000 for full-time community college students. If you transfer to an eligible four-year college or university, Cal Grant B also helps pay for tuition, fees, and living expenses.

Eligibility

Cal Grant B Entitlement awards are for first-year, low-income students whose academic program is at least one academic year.

Cal Grant B Competitive awards are for disadvantaged and low-income students who have a minimum 2.0 grade point average (GPA) and are enrolled in an academic program that is at least one year long.

How to Apply

To apply for a Cal Grant, you must submit the following by March 2 each year you are eligible:

- FAFSA [https://fafsa.ed.gov/] or the California Dream Act [https://dream.csac.ca.gov/] application* (if you do not have a social security number)
- Verified Cal Grant GPA [http://www.csac.ca.gov/pod/cal-grant-gpa-information]

* DACA and AB 540 students are not eligible for Cal Grant Competitive awards.

Cal Grant C

Cal Grants are awarded by the State of California and do not have to be repaid. [http://www.csac.ca.gov/pod/cal-grant-gpa-information]

What it Covers

Cal Grant C awards pays $547 toward tuition, books, tools, and equipment for students in occupational, technical, or vocational programs at community colleges.

Eligibility

Cal Grant C awards are for students enrolled in vocational programs that are at least four months long. Funding is available for up to two years, depending on the length of your program.

How to Apply

To apply for a Cal Grant C award, you must submit the following by March 2 each year you are eligible:

- FAFSA [https://fafsa.ed.gov/] or the California Dream Act [https://dream.csac.ca.gov/] application (if you do not have a social security number)
- Verified Cal Grant GPA [http://www.csac.ca.gov/pod/cal-grant-gpa-information]
California College Promise Grant
The California College Promise Grant (formerly BOG Fee Waiver) is just for California community college students and does not have to be repaid.

What it Covers
The California College Promise Grant waives enrollment fees for eligible students. It does not cover the cost of books or other expenses.

Eligibility
You may qualify for the California College Promise Grant if you are a California resident or are exempt from nonresident fees under AB 540 and you meet the criteria of Type A, Type B, or Type C described below.

Type A
You are receiving Temporary Aid For Needy Families (TANF), Supplemental Security Income (SSI/SSP), or General Assistance.

Type B
You meet the income standards listed below. Please note:

- Family size means the number of people in your household, including yourself
- Total family income means adjusted gross income and/or untaxed income for the year listed

<table>
<thead>
<tr>
<th>FAMILY SIZE</th>
<th>2017 TOTAL FAMILY INCOME (FOR 2019/2020 SCHOOL YEAR)</th>
<th>2018 TOTAL FAMILY INCOME (FOR 2020/2021 SCHOOL YEAR)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>$18,210</td>
<td>$18,735</td>
</tr>
<tr>
<td>2</td>
<td>$24,690</td>
<td>$25,365</td>
</tr>
<tr>
<td>3</td>
<td>$31,170</td>
<td>$31,995</td>
</tr>
<tr>
<td>4</td>
<td>$37,650</td>
<td>$38,625</td>
</tr>
<tr>
<td>5</td>
<td>$44,130</td>
<td>$45,255</td>
</tr>
<tr>
<td>6</td>
<td>$50,610</td>
<td>$51,885</td>
</tr>
<tr>
<td>7</td>
<td>$57,090</td>
<td>$58,515</td>
</tr>
<tr>
<td>8</td>
<td>$63,570</td>
<td>$65,145</td>
</tr>
</tbody>
</table>

Note: For each additional family member, add $6,480

Type C
You submitted the Free Application for Federal Student Aid (FAFSA) or the California Dream Act application (if you don’t have a social security number) and it shows you have unmet financial need.

How to Apply
To apply, fill out the California College Promise Grant [application](https://home.cccapply.org/money/california-college-promise-grant) online. Alternatively, you can fill out the application below and return the completed application to the Financial Aid Office.

- 19-20 California College Promise Grant Application (/shared/doc/financial-aid/forms/19-20_CCPG_Application.pdf) PDF (For Summer 2019, Fall 2019, Spring 2020)
- 20-21 California College Promise Grant Application (/shared/doc/financial-aid/forms/20-21_CCPG_Application.pdf) PDF (For Summer 2020, Fall 2020, Spring 2021)

Maintaining the California College Promise Grant
If you qualify for the California College Promise Grant, then make sure you continue to meet the following academic and progress standards to keep receiving the grant funds.

- **Academic**: Maintain a grade point average (GPA) of 2.0 or higher. If your cumulative GPA falls below 2.0 for two consecutive primary terms (fall/spring semesters), then you may lose your grant eligibility.
• **Progress**: Complete more than 50% of your coursework. If the cumulative number of units you complete is not more than 50% in two consecutive primary terms (fall/spring semesters, or fall/winter/spring quarters), then you may lose your grant eligibility.

• **Combination of academic and progress standards**: Any combination of two consecutive terms of cumulative GPA below 2.0 and/or cumulative unit completion of not more than 50% may result in loss of grant eligibility.

### Chafee Grant for Foster Youth

Chafee Grants are awarded by the State of California to current or former foster youth. Chafee Grants do not have to be repaid.

#### What it Covers

A Chafee Grant can be used to pay for tuition, fees, books, supplies, transportation, living expenses, and child care.

#### Eligibility

To qualify for a Chafee Grant, you must meet the following criteria:

- You are a current or former foster youth who was a ward of the court, living in foster care, for at least one day between the ages of 16 and 18
- If you are or were in Kin-GAP, a non-related legal guardianship, or were adopted, you are only eligible if you were a dependent or ward of the court, living in foster care, for at least one day between the ages of 16 and 18
- You have not reached your 26th birthday as of July 1 of the award year
- You have not participated in the program for more than five years (consecutive or otherwise)

#### How to Apply

To apply for a Chafee Grant, you must submit the following each year you are eligible:

- [FAFSA](https://fafsa.ed.gov/) or the [California Dream Act](https://dream.csac.ca.gov/) application (if you do not have a social security number)
- The [Chafee Grant](https://chafee.csac.ca.gov) application

### Federal Pell Grant

Federal Pell Grant are awarded by the federal government and do not have to be repaid.

#### What it Covers

Federal Pell Grant can be used for tuition, fees, books, supplies, transportation, living expenses, and child care.

#### Eligibility

Federal Pell Grant is based on financial need, cost of attendance, the number of financial aid eligible units enrolled, and how long you plan to attend college. Eligible students can receive the Federal Pell Grant for up to six years (12 full-time semester or the equivalent), or 600%.

Pell Grant are usually only given to undergraduate students who have not earned a bachelor's degree or higher. In some cases, a student enrolled in a post-baccalaureate teacher certification program can receive a Federal Pell Grant. You are not eligible to receive a Pell Grant if you are incarcerated or are subject to an involuntary civil commitment upon completion of a period of incarceration for a forcible or non-forcible sex offense.

DACA and undocumented AB 540 students are not eligible to receive Federal Pell Grant.

#### How to Apply

Submit the [FAFSA](https://fafsa.ed.gov/) every year to see if you qualify for a Federal Pell Grant. The amount of other student aid you qualify for does not affect the amount of your Federal Pell Grant.

### Federal Supplemental Educational Opportunity Grant (FSEOG)

Federal Supplemental Educational Opportunity Grants are awarded by the federal government and do not have to be repaid.

#### What it Covers

A FSEOG can be used for tuition, fees, books, supplies, transportation, living expenses, and child care. You can receive $100 to $600 per year.
Eligibility
FSEOGs are awarded based on financial need, how early you apply, number of financial aid eligible units enrolled, and total amount of Financial Aid.

FSEOGs are only given to undergraduate students who have not earned a bachelor's or a professional degree.

DACA and AB 540 students are not eligible to receive FSEOGs.

How to Apply
Submit the FAFSA (https://fafsa.ed.gov) each year to see if you qualify for a FSEOG. Cosumnes River College has a limited amount of FSEOG funds, so make sure you submit your FAFSA as early as possible.

Student Success Completion Grant (SSCG)

What it Covers
The Student Success Completion Grant (SSCG) provides up to $4,000 per year to pay for educational costs.

Eligibility
To qualify for a SSCG, you must be:

- A Cal Grant B or C recipient
- Enrolled in at least 12 units each semester

Students enrolled in 12 to 14.99 units will receive $649 for that semester. Students enrolled in 15 or more units will receive $2,000 for that semester.

How to Apply
Students who qualify will be notified. No additional application is necessary for eligibility for the SSCG.
Federal Work-Study
| Cosumnes River College

What is Federal Work-Study?

The Federal Work-Study (FWS) program provides jobs to students to help them pay for their educational expenses.

Eligibility

To be eligible, you must:

- Have a complete financial aid file
- Have unmet financial need
- Be enrolled in at least six financial aid course eligible units at Cosumnes River College*
- Maintain satisfactory academic progress

*If you are enrolled at multiple Los Rios colleges, then you must have an approved consortium on file for those units to be counted towards your enrollment status.

You are not guaranteed a FWS job just because you are eligible for FWS. FWS jobs are limited, so make sure you apply for a FWS job as early as possible.

Hours

FWS students work an average of 17 hours per week during the fall and spring semesters. Students may be employed for no more than 26 hours per week during a semester and no more than 40 hours per week between semesters. The number of hours may change depending on the needs of the department. Summer FWS hours are based on funding availability.

You may not work more than the number of hours you were awarded.

Pay

FWS students are paid an hourly rate at minimum wage. On average, FWS students earn up to $7,000 during the school year. Paychecks are distributed on the tenth of each month.

Disclaimer

We reserve the right to reduce your FWS award at the end of the fall or spring semester for hours not worked or due to ineligibility. Your FWS award may also be reduced if your financial need changes. You will be notified of any change via email and it is your responsibility to notify your supervisor of the change.
Federal Direct Loans
| Cosumnes River College

What is a Federal Direct Loan?

A federal direct loan is money you borrow from the government that you have to pay back with interest. We encourage students to apply for grants and scholarships before taking out a student loan. A loan is a serious and long-term obligation.

Loan Eligibility

To be eligible for a federal student loan, you must:

- Submit the Free Application for Federal Student Aid (FAFSA) (https://fafsa.ed.gov/)
- Demonstrate that you are qualified to enroll in college by one of the following means:
  - You have a high school diploma
  - You have a General Education Development (GED) Certificate
  - You passed the California High School Proficiency Exam (CHSPE)
- Be a US citizen or eligible non-citizen with a social security number (SSN)
- Be enrolled in an eligible degree or certificate program
- Maintain satisfactory academic progress
- Register with the US Selective Service (for males age 18 to 25)
- Have never been convicted of selling or possessing illegal drugs
- Certify that you will use federal financial aid only for educational purposes
- Certify that you are not in default on a federal student loan and do not owe money on a federal student grant

All borrowers must sign the Master Promissory Note (MPN) annually. New borrowers must also complete entrance loan counseling through studentloans.gov (https://studentloans.gov).

Types of Federal Loans

Subsidized Direct Loans

Subsidized direct loans are given to eligible students who demonstrate financial need.

The federal government pays the interest on subsidized loans while you are enrolled in school at least half-time (six units in the fall or spring semester; three units in the summer semester). If you graduate, drop below half-time, or withdraw from school, then you have a six-month grace period where the federal government will continue to pay the interest on your loan. After the six-month grace period, you are responsible for paying the interest on your loan.

Unsubsidized Direct Loans

Unsubsidized direct loans are given to eligible students, regardless of their financial need. The combined amount of an unsubsidized direct loan and all other financial aid that you receive cannot exceed the cost of attendance.

Interest accrues from the time the loan is disbursed, and interest payments begin immediately but can be deferred until you are done with school. It is advantageous to pay the interest while you are in school. This way, the debt will be the principal amount only when repayment begins. Regular monthly payments begin six months after you graduate, drop below half-time status, or withdraw from school.
## Annual Loan Limits

<table>
<thead>
<tr>
<th>YEAR</th>
<th>DEPENDENT STUDENTS (EXCEPT STUDENTS WHOSE PARENTS ARE UNABLE TO OBTAIN PLUS LOANS)</th>
<th>INDEPENDENT STUDENTS (AND DEPENDENT UNDERGRADUATE STUDENTS WHOSE PARENTS ARE UNABLE TO OBTAIN PLUS LOANS)</th>
</tr>
</thead>
<tbody>
<tr>
<td>First-Year Undergraduate Annual Loan Limit</td>
<td>$5,500 – no more than $3,500 of this amount may be in subsidized loans.</td>
<td>$9,500 – no more than $3,500 of this amount may be in subsidized loans.</td>
</tr>
<tr>
<td>Second-Year Undergraduate Annual Loan Limit</td>
<td>$6,500 – no more than $4,500 of this amount may be in subsidized loans.</td>
<td>$10,500 – no more than $4,500 of this amount may be in subsidized loans.</td>
</tr>
<tr>
<td>Subsidized and Unsubsidized Aggregate Loan Limit</td>
<td>$31,000 – no more than $23,000 of this amount may be in subsidized loans.</td>
<td>$57,500 for undergraduates – no more than $23,000 of this amount may be in subsidized loans.</td>
</tr>
</tbody>
</table>

## Borrower's Rights and Responsibilities

When you accept a loan, you accept legal rights and responsibilities that last until the loan is repaid.

### Borrower's Rights

You have the right to:

- Receive a copy of your promissory note either before or at the time the loan is made.
- Receive a disclosure statement before repayment on your loan begins, including information about:
  - Interest rates
  - Fees
  - Loan balance
  - The number of payments
  - The amount of each payment
- A grace period after you leave school or drop below half-time status and before your loan payments begin (if applicable)
- Prepay all or part of your loans without a repayment penalty
- Receive written notice if your loan is sold to a new holder
- Apply for deferment for your loan payments for certain specified periods (if eligible)
- Request forbearance from the holder of your loan if unable to make payments and don't qualify for deferment
- Receive proof when your loan is paid in full

### Borrower's Responsibilities

You agree to:

- Repay your loan(s), including accrued interest and fees, even if you do not:
  - Complete or find satisfaction in your education
  - Complete the program within the regular timeframe
  - Obtain employment
- Attend exit counseling before you leave school or drop below half-time enrollment
- Notify your loan holder within ten days if you:
  - Change your name, address, or phone number
  - Drop below half-time status
  - Withdraw from school
  - Transfer to another school
  - Change your graduation date
- Direct all correspondence to your loan holder or servicer
- Make monthly payments on your loan after leaving school, unless you are granted a deferment or forbearance
- Notify your loan holder of anything that might change your eligibility for an existing deferment

### Loan Exit Counseling

All students who receive a loan must complete mandatory online loan exit counseling through the Department of Education. Loan exit counseling provides important information regarding repayment, deferment, and default prevention.

### How to Complete Loan Exit Counseling

Visit [studentloans.gov/ExitCounseling](https://studentloans.gov/ExitCounseling) to complete loan exit counseling. You will need your FAFSA PIN to complete the loan exit counseling. Be sure to select Cosumnes River College (federal school code: 007536) when asked, otherwise the Financial Aid Office will not receive confirmation that you completed the requirement.

### When to Complete Loan Exit Counseling

Loan recipients must complete loan exit counseling when they do any of the following:
- Withdraw from college
- Drop below half-time units
- Transfer to another college
- Graduate

Failure to complete loan exit counseling may result in the delay of your financial aid processing.
What is a Scholarship?

A scholarship is money given to you to help pay for your education or related expenses. Scholarships come from a variety of sources, such as your college or a private organization.

Examples of types of scholarships:

- Merit scholarships are based on a student's achievements.
- School scholarships are given to students by the school they attend.
- Work scholarships require students to work to receive scholarship money.
- Field of Study scholarships are given to students pursuing a specific field of study or academic program.
- Need scholarships are based on financial need.
- Student-specific scholarships can be based on a student's nationality, gender, race, religion, medical history, and so on.

The Financial Aid office maintains a list of local, state, and national scholarships. Enrollment verification is usually required.

LEARN MORE ABOUT SCHOLARSHIPS ➤ (HTTPS://CRC.LOSRIOS.EDU/SCHOLARSHIPS)
Academic Freedom

Statement of Principles on Academic Freedom (American Association of University Professors)

- The purpose of this statement is to promote public understanding and support of academic freedom and tenure and agreement upon procedures to ensure them in colleges and universities. Institutions of higher education are conducted for the common good and not to further the interest of either the individual teacher or the institution as a whole. The common good depends upon the free search for truth and its free exposition.

- Academic freedom is essential to these purposes and applies to both teaching and research. Freedom in research is fundamental to the advancement of truth. Academic freedom in its teaching aspect is fundamental for the protection of the rights of the teacher in teaching and the freedom of the student in learning. It carries with it duties correlative with rights.

- Teachers are entitled to freedom in the classroom in discussing their subject, but they should be careful not to introduce into their teaching controversial matter, which has no relation to their subject.

- College and university teachers are citizens, members of a learned profession, and officers of an educational institution. When they speak or write as citizens, they should be free from institutional censorship or discipline, but their special position in the community imposes special obligations. As scholars and educational officers, they should remember that the public may judge their profession and their institution by their utterances. Hence they should at all times be accurate, should exercise appropriate restraint, should show respect for the opinions of others, and should make every effort to indicate that they are not speaking for the institution.

Academic Honors

The distinction of honors and highest honors is noted on a student's transcript for each semester in which a student has enrolled in twelve (12) units or more, and has earned a grade point average (GPA) of at least 3.0 (honors) or 3.5 or higher (highest honors). Students earning highest honors will be notified by email of their eligibility to join the honor society, Phi Theta Kappa.

Honors at Graduation

Students who maintain a high grade point average are eligible for honors at graduation. Students who maintain a grade point average of 3.0 or better are eligible for graduation with honors, and students who maintain a grade point average of 3.5 or better are eligible for graduation with highest honors. All college coursework that a student has completed is used to calculate honors at graduation (including coursework taken outside of Los Rios). The published lists of students are compiled from the data available at the time of publication and may be subject to subsequent revision.

Academic Renewal

A student may petition to have previous sub-standard grades (a D or F) earned at Cosumnes River College discounted. Courses and grades which no longer reflect a student's current educational objective and current level of academic success may upon petition be discounted in the computation of the grade point average (Title 5, Section 55046). The following conditions must apply:

- A minimum of twelve (12) consecutive months shall have elapsed since the end of the semester or summer session in which the work to be alleviated was recorded; and a minimum of twelve (12) semester units (or its equivalent) with a grade of C or Pass/Credit or better shall have been attained. The coursework must have been completed at a regionally accredited college.

- Current educational objectives must be discussed with a counselor and the counselor's recommendation must be included on the petition.

- No more than thirty (30) units of substandard grades may be discounted.

- Under no circumstances may course work be discounted if it was used to fulfill requirements for a degree or certificate that has been awarded.

- All grades remain on the permanent record and transcript of grades. However, a proper notation on the transcript will indicate the specific grades that were discounted from the grade point average.

- Once elected, the academic renewal cannot be reversed.
Academic renewal is not intended for courses that are required and/or will be repeated.

Students with questions regarding this policy or who want to initiate a petition should contact the Counseling office.

**Attendance**

For students to successfully complete their college work, regular class attendance is necessary, and students are expected to attend all sessions of classes in which they are enrolled (Los Rios Regulation R-2222 [Los Rios Regulation R-2222](/shared/doc/board/regulations/R-2222.pdf)).

All students who remain enrolled in a class after the last day to withdraw (see the academic calendar [Los Rios Regulation R-2222](https://crc.losrios.edu/academic-calendar)) will be issued a letter grade for the course. If a student has stopped attending but not dropped the class, the student may receive an F grade for the course on their permanent record. Exception to this policy involves completion of the Student Petition, with appropriate signatures and documentation of extenuating circumstances.

**Excessive Absences**

Students are expected to attend all sessions of the class in which they are enrolled. Any student with excessive absences may be dropped from class (Title 5, Section 58004).

Per Los Rios Regulation R-2222, a student may be dropped from any class when that student’s absences exceed six percent (6%) of the total hours of class time. Instructors shall state in each course syllabus what constitutes excessive absences for that course.

**Non-Attendance at First Class**

Per Los Rios Regulation R-2222, students who fail to attend the first session of a class may be dropped by the instructor.

**Auditing Courses**

Cosumnes River College does not permit auditing of classes. Auditing is defined as attending a course without having enrolled in the course, without responsibility for completing assignments, and without receiving a grade or credit.

**Catalog Rights**

For purposes of graduation from any of the colleges of the Los Rios Community College District, students who remain in attendance in one regular session (semester or summer session) may elect to meet the requirements in effect at the Los Rios college from which the student intends to graduate, in one of three ways:

1. Requirements in effect at the time of admission to a Los Rios college
2. Requirements in effect at the time the student originally enrolled in a regionally accredited college or university
3. Requirements in effect at the intended date of graduation from a Los Rios college

Please note:

- A college may authorize or request substitution for discontinued courses.
- Students changing their major field of study may be required to complete those requirements for the major in effect at the point of change.
- For purposes of this section, “attendance” means taking classes in at least one session (semester or summer session) in each calendar year. Absence for attendance at another regionally accredited institution shall not be considered an interruption in attendance, Los Rios Policy P-7242 [Los Rios Policy P-7242](/shared/doc/board/policies/P-7242.pdf).

**Change of Address and/or Name**

Requests to have a student’s name changed are submitted directly to the Admissions & Records office. In order for this type of request to be processed, documentation (such as a marriage license, court documents, or naturalization papers) is required to verify a legal name change.

Students should report a change of address immediately. Changes can be submitted online in eServices [Los Rios Policy P-7242](https://ps.losrios.edu/student/signon.html) or by submitting a Change of Data form to the Admissions & Records office. Cosumnes River College is not responsible for misdirected mail if the address change is not provided by the student.

Students can submit birth date and social security number corrections to the Admissions & Records office along with proper documentation (official birth certificates or social security verification).

**Course Repetition and Repeatability**
Repetition of courses must be conducted by all California community colleges in compliance with Title 5, Sections 55040 through 55046.

**Course Repetition Where Substandard Grade is Recorded**

Where a student has received a substandard grade in a course taken at a college, a student may repeat that course up to a maximum of two (2) times in an effort to alleviate the substandard academic grade. Substandard grade is defined as a notation of D, F, NC (No Credit), NP (No Pass), or W (Withdrawal). This regulation is effective across all Los Rios colleges.

The grade and credits earned in the final enrollment shall be used exclusively in determining the grade points earned for that particular course (Title 5, Section 55042).

**Repeatable Courses**

Courses taken where a grade of C or better was earned cannot be repeated. There are, however, certain specialized courses that are designated as "repeatable" and are listed as such in the course description. These include:

- Courses for which repetition is necessary to meet the major requirements of CSU or UC for completion of a bachelor's degree
- Intercollegiate athletics and their related conditioning courses may be repeated to meet requirements for California Community College Athletic Association (CCCAA) eligibility.
- Intercollegiate academic or vocational competition courses with the primary purpose to prepare students for competition
- Variable unit courses that are open entry/exit such as math, reading, and writing laboratory courses. Students may re-enroll in these courses as many times as necessary to complete one time the entire curriculum of the course.
- Work Experience courses, which can be taken again when there is new or expanded learning on the job for a maximum of six (6) to sixteen (16) units.

**Repetition Without Substandard Grades**

Unless a specific exception applies, a student who has received a satisfactory grade shall not repeat the course. Satisfactory grade is defined as A, B, C, P (Pass), or CR (Credit). There are special circumstances that allow for repetition. However, the student must submit a petition requesting the course repetition. These include:

- Students may repeat a course where a course is required by a statute or regulation as a condition of continued paid or volunteer employment, or as a result of a significant change in industry or licensure standards such that repetition is necessary for employment or licensure. These repetitions are not limited and are granted based on the college's verification of established legal mandates (Cal. Code Regs., Title 5, section 55040).
- Students may repeat a course if there has been a significant lapse of time since the first grade was obtained, and:
  - If the college has a properly established recency prerequisite for a course or program (Title 5, Section 55043).
  - If the college finds that another institution of higher education to which the student seeks to transfer has established a recency requirement which the student shall not be able to satisfy without repeating the course in question (Title 5, Section 55043).
- The college finds that the student's most recent previous grade is, at least in part, the result of extenuating circumstances. Extenuating circumstances are verified cases of accident, illness, or other circumstances beyond the student's control. This is a one-time exception.
- A special course that can be repeatable by petition so that a particular student can be approved to repeat it as a disability-related accommodation.

**Limitations on Active Participatory Courses**

Active participatory courses are those courses where individual study or group assignments are the basic means by which learning objectives are obtained. These include kinesiology/physical education (PE) active participatory courses, as well as visual and performing arts active participatory courses (theatre arts, music, and art). Some courses in these categories are related in content and have been placed in groups that the Los Rios colleges are calling "families" of courses. Each family of courses allows for skill development beyond an introductory level.

Students are limited to taking a maximum of four courses in any one family across all four Los Rios colleges, regardless of how many courses there are. Sometimes a family of courses may include more than four. For example, the Modern Dance Technique family of courses across the four Los Rios colleges includes five courses – DANCE 330 through DANCE 334 (Modern Dance I, II, III, IV, and V).

In addition, if a student gets a substandard grade [a notation of D, F, NC (No Credit), NP (No Pass), or W (Withdrawal)] in any course within a family, the substandard grade counts as one of the four course limitations in the family. The list of families of courses is available in the Counseling office. Please consult with a counselor for more information.

**Course Time Conflict/Course Overlap**

Students may not enroll in two classes that meet during part of the same hour, except through a petition process. The student must state their justification for enrolling in the overlapping class, and instructors must indicate how the missed time will be made up (Title 5, Section 58031).
In some circumstances, a previous sub-standard grade (a D or F) can be alleviated. You may petition to discount these units in computing your grade point average (GPA) if they meet the criteria set out by the Admissions and Records policies. However, no discount will be given for coursework required for a degree or certificate that has been granted.

Grades and Grade Point Averages (GPA)

Types of Grades

<table>
<thead>
<tr>
<th>LETTER GRADE</th>
<th>EXPLANATION</th>
<th>GRADE POINTS PER UNIT</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Excellent</td>
<td>Four (4) grade points per unit</td>
</tr>
<tr>
<td>B</td>
<td>Good</td>
<td>Three (3) grade points per unit</td>
</tr>
<tr>
<td>C</td>
<td>Satisfactory</td>
<td>Two (2) grade points per unit</td>
</tr>
<tr>
<td>D</td>
<td>Passing (not satisfactory)</td>
<td>One (1) grade point per unit</td>
</tr>
<tr>
<td>F</td>
<td>Failing</td>
<td>Zero (0) grade points per unit</td>
</tr>
<tr>
<td>P</td>
<td>Pass (C or better)</td>
<td>Not computed in GPA</td>
</tr>
<tr>
<td>NP</td>
<td>No Pass (less than C)</td>
<td>Not computed in GPA; affects progress probation and dismissal</td>
</tr>
<tr>
<td>I</td>
<td>Incomplete</td>
<td>Not computed in GPA; affects progress probation and dismissal</td>
</tr>
<tr>
<td>W</td>
<td>Withdrawal</td>
<td>Not computed in GPA; affects progress probation and dismissal</td>
</tr>
<tr>
<td>EW</td>
<td>Excused Withdrawal</td>
<td>Not computed in GPA; does not affect progress probation and dismissal; does not count as one of your three attempts</td>
</tr>
</tbody>
</table>

Grade Point Average
The grade point average is found by taking the (Total Grade Points Earned) divided by (Total units attempted with a letter grade).

Progress Percentage
The progress percentage is found by taking the (Total units with W, I and NC) divided by (Total units enrolled).

Pass/No Pass Grading
You may choose one course each semester from courses that allow Pass/no Pass (P/NP) grading. A petition must be filed with the admissions office before the deadline published in the Class Schedule. A grade earned with an "A", "B" or "C" grade will be recorded as P with Grade Points Per Unit. A "D" or "F" grade will be recorded as NP with no Grade Points Per Unit. Units attempted for P/NP grades are not computed in the grade point average but are used for determining progress probation and dismissal. Once you have filed for P/NP grading in a course, it cannot be changed to a letter grade. No more than 15 units of Pass/No Pass may be applied toward an AA or AS degree.

Incomplete Grading
An instructor may assign an incomplete grade, "I", when the instructor believes the student cannot complete the requirements of the class before the end of the semester due to unforeseeable emergency and justified reasons. To receive credit for the class, the student must finish the incomplete work within one year after the end of the semester. After the work is completed and evaluated, or when the time has expired, a final grade will be assigned. A student receiving an incomplete may not re-enroll in the course.

In Progress
If you receive an "in-progress" grade, you must re-enroll in the class in the next semester. If you don't re-enroll, a grade will be assigned in lieu of the "in-progress."
Withdrawal from Class
A student may officially drop a class without notation on the permanent academic record/transcript prior to the point in which 15% of a class has occurred (see the academic calendar for withdrawal deadlines). Withdrawals occurring after this time, and before the point in which 75% of the class has occurred, shall result in a W notation on the permanent academic record/transcript. Official withdrawals are those that have been processed via eServices or in the Admissions and Records office.

A W grade on the permanent academic record/transcript is used for determining progress probation and progress dismissal. No withdrawals are permitted during the last 25% of a course (except due to extenuating circumstances verified cases of accidents, illness, or other circumstances beyond the control of the student), for which a student may request withdrawal through the student petition process. After consultation with the instructor and with administrative approval, the grade may be recorded as a W rather than as a less than satisfactory or failing grade on the permanent academic record/transcript. In all other cases, after the 75% date, a student will receive a grade in the course.

Military withdrawal is available for students who are members of an active or reserve military service, and who receive orders compelling a withdrawal from courses. Students requesting military withdrawal must file a student petition and include supporting documentation.

Excused withdrawal is available when a student is permitted to withdraw from a course(s) due to specific events beyond the control of the student making his or her ability to complete a course(s) impractical. These events may include a job transfer outside the geographical region, an illness in the family where the student is the primary caregiver, when the student who is incarcerated in a California state prison or county jail is released from custody or involuntarily transferred before the end of the term, the student is the subject of an immigration action, or other extenuating circumstances. Excused withdrawal shall not be counted in progress probation and dismissal calculation. Excused withdrawal shall not be counted toward the permitted number of withdrawals or counted as an enrollment attempt.

Probation and Dismissal
There are two types of probation: academic and progress.

Academic Probation
A student who has attempted at least twelve (12) units is placed on academic probation if the student has earned a cumulative grade point average below 2.0.

Progress Probation
A student who has enrolled in a minimum of twelve (12) semester units is placed on progress probation when W, I, or NP grades are recorded in one-half or more of all units in which a student has enrolled.

Unit Limitation
A student on either academic or progress probation may be limited to 12 or fewer units, or to a course load recommended by the student's counselor.

Removal from Probation
A student on academic probation is removed from probation and achieves good standing when the student's cumulative grade point average is 2.0 or higher.

A student on progress probation is removed from probation and placed in good standing when less than half of the student's units are recorded as W, I, or NP.

Remedial Unit Limitation
The California Community Colleges Board of Governors has adopted regulations limiting the number of remedial course units a student may take to 30. These courses are usually numbered 1 through 99. Students may petition for a waiver to the 30-unit limitation through a counselor. However, federal financial aid does not allow a student to receive aid for more than 30 remedial units.

Transcripts
Order Transcripts Online
Current and former students can order transcripts and authorize the release of student records online. Students must submit a separate order for each Los Rios college they attended.

Order Transcripts Online

Unit/Academic Load
Per Los Rios Regulation R-7211, fifteen (15) units each semester is considered a full load. Twelve (12) units each semester is a minimum full-time load and is usually acceptable to qualify for scholarships, grants, loans, and holding student offices.
Fall/Spring Semester
Eighteen (18) units per semester is a maximum load. Unit limit shall be district-wide. A petition to exceed the maximum load must be submitted in writing to the college at which the additional units will be taken prior to registration. A student may petition up to a maximum of six (6) additional units district-wide through this process.

Summer Session
Eight (8) units per summer session is a maximum load. Unit limit shall be district-wide. A petition to exceed the maximum load must be submitted in writing to the college at which the additional units will be taken prior to registration. A student may petition up to a maximum of four (4) additional units district-wide through this process.

Special Considerations
Full governmental subsistence for veterans and dependents requires the unit load of twelve (12) units (with reduced benefit amounts dependent on the total number of enrolled units).

The following categories require the minimum unit load indicated:

- International students – twelve (12) units
- Student athletes – twelve (12) units, including kinesiology/physical education

Unit of Credit
Units of credit are assigned to courses based on the “Carnegie Unit,” which assigns one unit of credit for three hours of work by the student per week. Usually this means one hour of lecture or discussion led by the instructor and two hours of outside preparation by the student. In laboratory courses, three hours of work in the laboratory are normally assigned one unit of credit which may include some additional preparation outside of class time. Students can find the number of units of credit with each course description.
Enrollment Verification
| Cosumnes River College

Enrollment verification for child care, health insurance, or car insurance can be printed out via eServices or requested by fax or in-person. All other requests can be processed immediately by the National Student Clearinghouse for a fee.

Verifications for Child Care, Health Insurance, and Car Insurance

eServices

You can print or save an enrollment verification certificate for free through eServices (https://ps.losrios.edu/student/signon.html). From your eServices dashboard:

1. Click Student Center
2. Click Enrollment Verification (under Academics)
3. Follow the instructions to get to your printable verification

Fax and In-Person Requests

We do not accept verification requests over the phone. Faxed and in-person requests are processed in five to seven business days after we receive the request. We do not fax back verifications – all verifications must be picked up in person at Admissions and Records. You must provide a photo ID when you pick up your enrollment verification.

Other Enrollment and Degree Verifications

Requests from the following types of companies or individuals will be directed to the National Student Clearinghouse:

- Credit issuers
- Travel and consumer product companies
- Housing providers
- Scholarship providers
- Employers and employment agencies
- Verifications required by students or parents that do not include child care, health insurance, or car insurance

For your convenience, Los Rios has authorized the National Student Clearinghouse to act as its agent for verification of student enrollment and degree status. You can obtain an official Enrollment Verification Certificate at any time via the National Student Clearinghouse website at nscverifications.org (http://nscverifications.org/welcome-to-verification-services/).
Alternative Credit/Study Options | Cosumnes River College

In addition to regular classes, students may receive college credit when they participate in the following alternative credit and study options.

Advanced Placement (AP) Exams

Cosumnes River College grants credit for College Board Advanced Placement (AP) examinations. A student who meets the following requirements may receive credit for exams they successfully passed:

- Official copies of test scores are on file with Admissions and Records
- Student is in good standing, which is defined as having completed twelve (12) units of credit and having a minimum 2.0 grade point average (GPA)

Students should be aware that other colleges and universities have the right to accept, modify, or reject the use of AP scores towards their graduation requirements. Check with your counselor to determine whether these test results will be accepted at the transfer institution of your choice.

Review the AP Credit Chart (https://crc.losrios.edu/ap-scores-chart) to see how Cosumnes River College grants credit for AP exams.

College-Level Examination Program (CLEP)

Cosumnes River College grants credit for College-Level Examination Program (CLEP) examinations. CLEP scores fulfill general education areas only; they do not fulfill graduation competencies, requirements for any major at Cosumnes River College, or enrollment limitations (such as prerequisite requirements) for any course at Cosumnes River College.

A student may receive credit for CLEP exams they have successfully passed once the following requirements are met:

- Official copies of test scores are on file with Admissions and Records
- Student has completed twelve (12) units of credit and has a minimum 2.0 grade point average (GPA)

Visit College Board's College-Level Examination Program website (https://clep.collegeboard.org) to learn more.

CLEP scores are not accepted for transfer to the University of California. Students should be aware that other colleges and universities have the right to accept, modify, or reject the use of CLEP scores towards their graduation requirements. Check with your counselor to determine whether these test results will be accepted at the transfer institution of your choice.

Review the CLEP Credit Chart (https://crc.losrios.edu/clep-scores-chart) to see how Cosumnes River College grants credit for CLEP exams.

International Baccalaureate (IB) Tests

Cosumnes River College may award college credit for international baccalaureate (IB) higher-level course completion, if the course work is compatible with the college's curriculum. No credit will be granted for lower-level course work completed in the IB program.

A student who meets the following requirements may receive credit for IB tests they successfully passed:

- Official copies of test scores are on file with Admissions and Records
- Student is in good standing, which is defined as having completed twelve (12) units of credit and having a minimum 2.0 grade point average (GPA)

Review the IB Credit Chart (https://crc.losrios.edu/ib-scores-chart) to see how Cosumnes River College grants credit for IB tests.

Students should be aware that other colleges and universities have the right to accept, modify, or reject the use of IB scores towards their graduation requirements. Check with your counselor to determine whether these test results will be accepted at the transfer institution of your choice.
Students who have earned credit from an IB test should not take a comparable college course because transfer credit will not be granted for both.

**Credit by Examination**

Credit by examination is a process by which students may earn credit in recognition of knowledge and skills gained from previous experience or training when such knowledge and skills are deemed to be substantially similar to the student learning outcomes of the course for which credit is being sought. A student may receive credit for some courses by passing an exam if they meet the following requirements:

- Completed 12 units at Cosumnes River College
- Have a cumulative GPA of 3.00 or better at Cosumnes River College

Under special circumstances these requirements may be waived by petition to the Dean of Student Services and Enrollment Management.

A maximum of 15 credit units of catalog courses may be earned through credit by examination. Credit by examination may not be applicable to all courses. Eligibility for credit by examination is not permissible under the following situations:

- The student has completed or enrolled in a more advanced course, which follows this course in sequence
- The course (or its equivalent) appears on the student's transcript with a grade other than a W
- The exam would duplicate coursework for which credit was granted previously
- The student does not meet the pre-requisite or co-requisite for the course

Under special circumstances these restrictions may be waived by petition to the Vice President of Student Services.

Please note that some four-year colleges and universities do not accept units granted through credit by examination. Students are advised to meet with a counselor for more information.

Please follow these steps to participate:

1. Find a professor who is willing to administer the exam. The examining instructor determines the scope and form of the exam.
2. Complete the appropriate paperwork at the Admissions and Records Office. Staff will verify your eligibility.
3. Have the examining professor sign the petition and schedule the examination.
4. Have the appropriate area dean sign the petition.
5. Return the completed petition to the Admissions and Records Office for enrollment in a test section and provide payment of appropriate enrollment fees.
6. Take the exam as scheduled. (The examining professor will submit a grade of "Pass" or "No Pass" to the Admissions and Records Office. See "Pass/No Pass" Grading for further information.)

Please note that all Cosumnes River College policies are in effect with respect to credit by examination, except as indicated here.

**Credit for Military Service**

Veterans may receive credit for military service if they present papers showing honorable discharge from active duty of one year or more in the United States armed forces.

**How to Apply**

After you have completed one semester at Cosumnes River College, submit a copy of your DD-214 (member copy 4) separation paper and a petition to the Admissions and Records Office.

You may be eligible to receive the following credit (if applicable):

- Three (3) units of living skills graduation requirements
- One (1) unit of elective credit

In some circumstances, veterans may also receive credit for satisfactory training completed in service school.

**Guidance from the American Council on Education**

Credit granted for military service is based on A Guide to the Evaluation of Educational Experiences in the Armed Services, published by the American Council on Education.
Students in the six-month reserve training program are not eligible for military credit. This is in accordance with the recommendation of the American Council on Education.

Students are encouraged to contact a counselor for more information.

Distance/Online Education

Cosumnes River College offers instruction via the internet. This includes online course sections where all work is carried out online, and partially online course sections where instruction is divided between online and in-person modalities.

To be successful in online courses, students need to be self-directed, motivated, and able to independently complete and electronically submit assignments on schedule. Students will also need reliable access to a computer and basic internet skills.

Online Classes

In online classes, classes meet online and all coursework is done online.

Partially Online or "Hybrid" Classes

Partially online classes feature a mix of online and in-person meetings and coursework. Class schedules will indicate the day/time of the in-person, on-campus class sessions.

Online Learning Platform

All online classes are offered through Canvas (https://canvas.losrios.edu), a cloud-based learning management system used by faculty and students within Los Rios Community College District.

Learn more about online education at Cosumnes River College (https://crc.losrios.edu/academics/online-education).

Experimental Offerings

An experimental offering is a course that is offered on a trial basis. Students enroll in experimental offerings through the regular registration process. Transfer institutions may not accept units earned in experimental offerings.

Honors Program and Honors Society

The Cosumnes River College Honors program is an enhanced transfer opportunity program designed specifically for academically-accomplished students and students seeking a challenge with the ability and desire for high achievement. Through its series of special Honors courses and co-curricular activities, the program provides opportunities for intellectual growth beyond those generally found in most lower division programs.

These one to three unit courses are intended to augment and enhance a student's knowledge and educational experience. In the broad plan of the program, some of these courses are linked to a particular course and are intended to provide in-depth, rigorous treatment of certain related topics. These classes may require concurrent or previous enrollment in another course. Prospective Honors Program students should possess the ability to think and work independently, write clearly and purposefully, and cooperate in the spirit of discovery and understanding.

Honors courses are special intensive courses in which students will confront and attempt to resolve difficult questions that arise in a careful study of the issues found in the discipline(s). Honors students are expected to research aspects of these questions and present their findings to the class in written form for seminar discussion. Field trips to attend events or to conduct research may be an integral part of the Honors course experience. Students who successfully complete units from Honors courses may be able to count these units as part of the Transfer Breadth Requirements. Students who complete 15 units or more in honors-designated courses will earn special recognition as an Honors Scholar, a distinction that may entitle the student to guaranteed transfer and scholarship opportunities at select transfer colleges and universities, including UCLA, in whose Transfer Alliance Program the Cosumnes River College Honors Program is a participating member.

Independent Study

An independent study course involves an individual student or small group of students in study, research, or activities beyond the scope of regularly offered courses, pursuant to an agreement among the college, faculty member, and student(s). Independent studies require regular meetings between the student and instructor. Additionally, the instructor may require examinations or other measures of evaluation, field trips, term papers, and other assignments.

Please note that some four-year colleges and universities do not accept units granted through independent study. Students are encouraged to meet with a counselor for more information.

For the appropriate petition and course proposal form, please contact Admissions and Records (https://crc.losrios.edu/admissions-records).

Reserve Officer Training Corps (ROTC)
Aerospace Studies
Air Force ROTC is available to Cosumnes River College students through a program offered at CSU Sacramento. There is no obligation to join the military to take the courses. Students may take courses to explore an interest in a military career. Two-, three-, and four-year programs are available, leading to a commission in the United States Air Force. Scholarships are available to qualified students. Classes are conducted at CSU Sacramento. Topics include military history, management, leadership, problem solving, ethics, public speaking, world politics, international relations, and current events.

To apply for the program or for more information, contact the Unit Admissions Officer at (916) 278-7315. It is recommended that applications be submitted no later than the first semester of the sophomore year.

Military Science
Army ROTC is available to Cosumnes River College students at CSU Sacramento. The Military Science Department offers hands-on training in management and leadership. There is no obligation to join the military by taking the course. The program stresses the following leadership dimensions: oral and written communications, oral presentations (formal briefings), initiative, sensitivity, influence, planning and organizing, delegation, administrative control, problem analysis, judgment, decisiveness, physical stamina, and mission accomplishment. Also stressed are current events, national and international politics, military affairs, ethics training and human relations with emphasis on eliminating racial and gender discrimination. Management and leadership are taught using the US Army as a model. Two- and three-year scholarships are available, covering up to $9,000 per year for tuition, $225 per semester for books and supplies, $200 per semester for lab fees, and $150 a month tax free stipend during the academic year.

To apply for the program or for more information, contact the Unit Admissions Officer at (916) 278-7682. It is recommended that applications be submitted no later than the first semester of the sophomore year.

Study Abroad
Study abroad can be an enlightening, maturing, and life-changing experience. Students are challenged to re-examine themselves, their attitudes, and their studies as they learn to understand new and different cultures. In cooperation with the American Institute for Foreign Study, Los Rios Community College District offers unique study opportunities in cities such as:

- London, England
- Barcelona, Spain
- Florence, Italy

Requirements
To study abroad, students must:

- Be at least 18 years old
- Be in good academic standing with 12 college units completed by the time you go abroad
- Have a minimum overall grade point average (GPA) of 2.25

During the 13-week Study Abroad program, all students take 12 units – a three-unit Life and Culture class, an additional Los Rios class, and two other classes from the list of offerings.

Financial Aid
Financial Aid is available for study abroad.

Upcoming Study Abroad Opportunities
Learn more about current and upcoming study abroad opportunities [here](https://crc.losrios.edu/study-abroad).

Work Experience and Internship Program
Work experience is an academic program in which students apply what they have learned in the classroom to a job or internship and work to earn college credits. There are two types of programs: vocational and general.

For more information, please visit the Work Experience and Internship Program [here](https://crc.losrios.edu/wexp).
Advanced Placement Test Scores
| Cosumnes River College

Students may earn credit for College Entrance Board Advanced Placement (AP) tests with scores of 3, 4, or 5. AP scores can be used to meet Cosumnes River College AA/AS general education requirements (2020-2021-catalog/while-you-are-here/alternative-credit/study-options/advanced-placement-test-scores#aa-as-ge), California State University (CSU) general education requirements (2020-2021-catalog/while-you-are-here/alternative-credit/study-options/advanced-placement-test-scores#csu-ge), and Intersegmental General Education Transfer Curriculum (IGETC) (2020-2021-catalog/while-you-are-here/alternative-credit/study-options/advanced-placement-test-scores#igetc).

A student may receive credit for AP exams they have successfully passed once the following requirements are met:

- Official copies of test scores are on file with Admissions and Records
- Student has completed twelve (12) units of credit and has a minimum 2.0 grade point average (GPA)

Students should be aware that other colleges and universities have the right to accept, modify, or reject the use of AP scores towards their graduation requirements. Check with your counselor to determine whether these test results will be accepted at the transfer institution of your choice.

### AP Credit Toward Cosumnes River College

#### General Education Requirements

This table describes how passing AP scores translate into college credit at Cosumnes River College, and which general education areas they satisfy (if any).

<table>
<thead>
<tr>
<th>AP EXAM</th>
<th>AP TEST SCORE</th>
<th>CRC COURSE EQUIVALENCY</th>
<th>SATISFIES CRC GE AREA</th>
<th>UNITS EARNED AT CRC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Art History</td>
<td>3, 4, 5</td>
<td>N/A</td>
<td>I</td>
<td>3</td>
</tr>
<tr>
<td>Biology</td>
<td>3</td>
<td>BIOL 310</td>
<td>IV</td>
<td>4</td>
</tr>
<tr>
<td>Calculus AB</td>
<td>3</td>
<td>MATH 341</td>
<td>II(b)</td>
<td>3</td>
</tr>
<tr>
<td>Calculus AB</td>
<td>4</td>
<td>MATH 350</td>
<td>II(b)</td>
<td>4</td>
</tr>
<tr>
<td>Calculus AB</td>
<td>5</td>
<td>MATH 400</td>
<td>II(b)</td>
<td>5</td>
</tr>
<tr>
<td>Calculus BC</td>
<td>3</td>
<td>MATH 400</td>
<td>II(b)</td>
<td>3</td>
</tr>
<tr>
<td>Calculus BC</td>
<td>4, 5</td>
<td>MATH 350 and MATH 351, or MATH 400 and MATH 401</td>
<td>II(b)</td>
<td>6 to 10</td>
</tr>
<tr>
<td>Chemistry</td>
<td>3, 4, 5</td>
<td>N/A</td>
<td>IV</td>
<td>4</td>
</tr>
<tr>
<td>Chinese Language and Culture</td>
<td>3, 4, 5</td>
<td>N/A</td>
<td>I</td>
<td>3</td>
</tr>
<tr>
<td>Comparative Government and Politics</td>
<td>3, 4, 5</td>
<td>N/A</td>
<td>V(b)</td>
<td>3</td>
</tr>
<tr>
<td>Computer Science A</td>
<td>4</td>
<td>CISP 360</td>
<td>N/A</td>
<td>4</td>
</tr>
</tbody>
</table>
# AP Credit Toward Cosumnes River College General Education Requirements

This table describes how passing AP scores translate into college credit at Cosumnes River College, and which general education areas they satisfy (if any).

<table>
<thead>
<tr>
<th>AP EXAM</th>
<th>AP TEST SCORE</th>
<th>CRC COURSE EQUIVALENCY</th>
<th>SATISFIES CRC GE AREA</th>
<th>UNITS EARNED AT CRC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Computer Science A</td>
<td>5</td>
<td>CISP 401</td>
<td>N/A</td>
<td>4</td>
</tr>
<tr>
<td>Computer Science AB</td>
<td>3</td>
<td>CISP 360</td>
<td>N/A</td>
<td>4</td>
</tr>
<tr>
<td>Computer Science AB</td>
<td>4, 5</td>
<td>CISP 400 and CISP 401</td>
<td>N/A</td>
<td>8</td>
</tr>
<tr>
<td>Computer Science Principles</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>English Language and Composition</td>
<td>3, 4, 5</td>
<td>ENGWR 300</td>
<td>II(a)</td>
<td>3</td>
</tr>
<tr>
<td>English Literature and Composition</td>
<td>3, 4, 5</td>
<td>ENGWR 300 and ENGWR 301</td>
<td>I or II(a) and II(b)</td>
<td>6</td>
</tr>
<tr>
<td>Environmental Science (taken after Fall 2009)</td>
<td>3, 4, 5</td>
<td>BIOL 350</td>
<td>IV</td>
<td>3</td>
</tr>
<tr>
<td>European History</td>
<td>3, 4, 5</td>
<td>N/A</td>
<td>I or V(b)</td>
<td>3</td>
</tr>
<tr>
<td>French Language and Culture</td>
<td>3, 4, 5</td>
<td>N/A</td>
<td>I</td>
<td>3</td>
</tr>
<tr>
<td>German Language and Culture</td>
<td>3, 4, 5</td>
<td>N/A</td>
<td>I</td>
<td>3</td>
</tr>
<tr>
<td>Human Geography</td>
<td>3, 4, 5</td>
<td>GEOG 350</td>
<td>V(b)</td>
<td>3</td>
</tr>
<tr>
<td>Italian Language and Culture</td>
<td>3, 4, 5</td>
<td>N/A</td>
<td>I</td>
<td>3</td>
</tr>
<tr>
<td>Japanese Language and Culture</td>
<td>3, 4, 5</td>
<td>N/A</td>
<td>I</td>
<td>3</td>
</tr>
<tr>
<td>Latin</td>
<td>3, 4, 5</td>
<td>N/A</td>
<td>I</td>
<td>3</td>
</tr>
<tr>
<td>Macroeconomics</td>
<td>3, 4, 5</td>
<td>ECON 302</td>
<td>V(b)</td>
<td>3</td>
</tr>
<tr>
<td>Microeconomics</td>
<td>3, 4, 5</td>
<td>ECON 304</td>
<td>V(b)</td>
<td>3</td>
</tr>
<tr>
<td>Physics 1</td>
<td>3</td>
<td>N/A</td>
<td>IV</td>
<td>3</td>
</tr>
<tr>
<td>Physics 1</td>
<td>4, 5</td>
<td>PHYS 350</td>
<td>IV</td>
<td>4</td>
</tr>
<tr>
<td>Physics 2</td>
<td>3</td>
<td>N/A</td>
<td>IV</td>
<td>3</td>
</tr>
<tr>
<td>Physics 2</td>
<td>4, 5</td>
<td>PHYS 360</td>
<td>IV</td>
<td>4</td>
</tr>
</tbody>
</table>
### AP Credit Toward Cosumnes River College General Education Requirements

This table describes how passing AP scores translate into college credit at Cosumnes River College, and which general education areas they satisfy (if any).

<table>
<thead>
<tr>
<th>AP EXAM</th>
<th>AP TEST SCORE</th>
<th>CRC COURSE EQUIVALENCY</th>
<th>SATISFIES CRC GE AREA</th>
<th>UNITS EARNED AT CRC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physics C (Electricity Magnetism)</td>
<td>3</td>
<td>N/A</td>
<td>IV</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>4, 5</td>
<td>PHYS 421</td>
<td>IV</td>
<td>4</td>
</tr>
<tr>
<td>Physics C (Mechanics)</td>
<td>3</td>
<td>N/A</td>
<td>IV</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>4, 5</td>
<td>PHYS 411</td>
<td>IV</td>
<td>4</td>
</tr>
<tr>
<td>Psychology</td>
<td>3</td>
<td>N/A</td>
<td>V(b)</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>4, 5</td>
<td>PSYC 300</td>
<td>V(b)</td>
<td>3</td>
</tr>
<tr>
<td>Spanish Language and Culture</td>
<td>3, 4, 5</td>
<td>SPAN 401 and SPAN 402</td>
<td>I</td>
<td>8</td>
</tr>
<tr>
<td>Spanish Literature and Culture</td>
<td>3, 4, 5</td>
<td>N/A</td>
<td>I</td>
<td>3</td>
</tr>
<tr>
<td>Statistics</td>
<td>3, 4, 5</td>
<td>STAT 300</td>
<td>II(b)</td>
<td>4</td>
</tr>
<tr>
<td>Studio Art – 2D Design, 3D Design, or Drawing</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>US Government and Politics</td>
<td>3</td>
<td>N/A</td>
<td>V(a)</td>
<td>6</td>
</tr>
<tr>
<td>US History</td>
<td>3, 4, 5</td>
<td>HIST 310 and HIST 311, or credit for Humanities (I)</td>
<td>V(a) or I</td>
<td>6</td>
</tr>
<tr>
<td>World History</td>
<td>3, 4, 5</td>
<td>N/A</td>
<td>V(a) or I</td>
<td>3</td>
</tr>
</tbody>
</table>

### AP Credit Toward CSU General Education Requirements

This table describes how a passing AP exam score of 3, 4, or 5 meets California State University (CSU) general education (GE) breadth requirements as well as how they translate into credit.

<table>
<thead>
<tr>
<th>AP EXAM</th>
<th>AMERICAN INSTITUTIONS AND/OR GE BREADTH AREA</th>
<th>SEMESTER CREDITS TOWARD GE BREADTH CERTIFICATION</th>
<th>MINIMUM SEMESTER CREDITS EARNED</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physics C (Electricity Magnetism)</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Physics C (Mechanics)</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Psychology</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Spanish Language and Culture</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Spanish Literature and Culture</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Statistics</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Studio Art – 2D Design</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>US Government and Politics</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>US History</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>World History</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Subject</td>
<td>Grade</td>
<td>Credits</td>
<td></td>
</tr>
<tr>
<td>----------------------------------------------</td>
<td>-------</td>
<td>---------</td>
<td></td>
</tr>
<tr>
<td>Art History</td>
<td>C1 or C2</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Biology</td>
<td>B2 and B3</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Calculus AB</td>
<td>B4</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Calculus BC</td>
<td>B4</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Calculus BC/AB Subscore</td>
<td>B4</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Chemistry (taken in Fall 2009 or later)</td>
<td>B1 and B3</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Chemistry (taken before Fall 2009)</td>
<td>B1 and B3</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>Chinese Language and Culture</td>
<td>C2</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Comparative Government and Politics</td>
<td>D</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Computer Science A</td>
<td>N/A</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Computer Science AB</td>
<td>N/A</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Computer Science Principles</td>
<td>B4</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>English Language and Composition</td>
<td>A2</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>English Literature and Composition</td>
<td>A2 and C2</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>Environmental Science (taken in Fall 2009 or after)</td>
<td>B1 and B3</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Environmental Science (taken before Fall 2009)</td>
<td>(B1 and B3) or (B2 and B3)</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>European History</td>
<td>C2 or D6</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>French Language and Culture</td>
<td>C2</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>French Language (taken from Fall 2009 through Fall 2011)</td>
<td>C2</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>French Language (taken before Fall 2009)</td>
<td>C2</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>French Literature (taken before Fall 2009)</td>
<td>C2</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>German Language and Culture</td>
<td>C2</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>German Language (taken from Fall 2009 through Fall 2011)</td>
<td>C2</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>
### AP Credit Toward CSU General Education Requirements

This table describes how a passing AP exam score of 3, 4, or 5 meets California State University (CSU) general education (GE) breadth requirements as well as how they translate into credit.

<table>
<thead>
<tr>
<th>AP EXAM</th>
<th>AMERICAN INSTITUTIONS AND/OR GE BREADTH AREA</th>
<th>SEMESTER CREDITS TOWARD GE BREADTH CERTIFICATION</th>
<th>MINIMUM SEMESTER CREDITS EARNED</th>
</tr>
</thead>
<tbody>
<tr>
<td>German Language (taken before Fall 2009)</td>
<td>C2</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>Human Geography</td>
<td>D5</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Italian Language and Culture</td>
<td>C2</td>
<td>3</td>
<td>6</td>
</tr>
<tr>
<td>Japanese Language and Culture</td>
<td>C2</td>
<td>3</td>
<td>6</td>
</tr>
<tr>
<td>Latin</td>
<td>C2</td>
<td>3</td>
<td>6</td>
</tr>
<tr>
<td>Latin Literature (taken before Fall 2009)</td>
<td>C2</td>
<td>3</td>
<td>6</td>
</tr>
<tr>
<td>Latin: Vergil (taken before Fall 2012)</td>
<td>C2</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Macroeconomics</td>
<td>D2</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Microeconomics</td>
<td>D2</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Music Theory (taken before Fall 2009)</td>
<td>C1</td>
<td>3</td>
<td>6</td>
</tr>
<tr>
<td>Physics 1 **</td>
<td>B1 and B3</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Physics 2 **</td>
<td>B1 and B3</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Physics B (taken before Fall 2009) **</td>
<td>B1 and B3</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>Physics B (taken from Fall 2009 through Fall 2013) **</td>
<td>B1 and B3</td>
<td>4</td>
<td>6</td>
</tr>
<tr>
<td>Physics C (Electricity/Magnetism) **</td>
<td>B1 and B3</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Physics C (Mechanics) **</td>
<td>B1 and B3</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Psychology</td>
<td>D9</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Seminar</td>
<td>N/A</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>Spanish Language (taken before Spring 2014)</td>
<td>C2</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>Spanish Language and Culture</td>
<td>C2</td>
<td>3</td>
<td>6</td>
</tr>
</tbody>
</table>
AP Credit Toward CSU General Education Requirements

This table describes how a passing AP exam score of 3, 4, or 5 meets California State University (CSU) general education (GE) breadth requirements as well as how they translate into credit.

<table>
<thead>
<tr>
<th>AP EXAM</th>
<th>AMERICAN INSTITUTIONS AND/OR GE BREADTH AREA</th>
<th>SEMESTER CREDITS TOWARD GE BREADTH CERTIFICATION</th>
<th>MINIMUM SEMESTER CREDITS EARNED</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spanish Literature (taken before Spring 2013)</td>
<td>C2</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>Spanish Literature and Culture</td>
<td>C2</td>
<td>3</td>
<td>6</td>
</tr>
<tr>
<td>Statistics</td>
<td>B4</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Studio Art – 2D Design</td>
<td>N/A</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>Studio Art – 3D Design</td>
<td>N/A</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>Studio Art – Drawing</td>
<td>N/A</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>US Government and Politics</td>
<td>D8 and US-2</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>US History</td>
<td>(C2 or D6) and US-1</td>
<td>3</td>
<td>6</td>
</tr>
<tr>
<td>World History</td>
<td>C2 or D6</td>
<td>3</td>
<td>3</td>
</tr>
</tbody>
</table>

* If a student passes more than one AP exam in calculus or computer science, then only one examination may be applied to the CSU baccalaureate.

** If a student passes more than one AP exam in physics, then only six units of credit may be applied to the CSU baccalaureate and only four units of credit may be applied to CSU general education.

AP Credit Toward IGETC

This table describes how a passing AP score of 3, 4, or 5 meets Intersegmental General Education Transfer Curriculum (IGETC) requirements as well as how they translate into credit.

<table>
<thead>
<tr>
<th>AP EXAM</th>
<th>IGETC AREA</th>
<th>SEMESTER CREDITS TOWARD CSU GE BREADTH</th>
<th>TOTAL UC QUARTER UNITS AWARDED</th>
<th>TOTAL UC SEMESTER UNITS AWARDED</th>
</tr>
</thead>
<tbody>
<tr>
<td>Art History</td>
<td>3A or 3B</td>
<td>3</td>
<td>8 quarter</td>
<td>5.3 semester</td>
</tr>
<tr>
<td>Biology</td>
<td>5B and 5C</td>
<td>4</td>
<td>8 quarter</td>
<td>5.3 semester</td>
</tr>
<tr>
<td>Calculus AB</td>
<td>2A</td>
<td>3</td>
<td>4 quarter ©</td>
<td>2.6 semester ©</td>
</tr>
<tr>
<td>Calculus BC</td>
<td>2A</td>
<td>3</td>
<td>8 quarter ©</td>
<td>5.3 semester ©</td>
</tr>
<tr>
<td>Calculus AB Subscore from BC Exam</td>
<td>2A</td>
<td>3</td>
<td>4 quarter ©</td>
<td>2.6 semester ©</td>
</tr>
<tr>
<td>Chemistry</td>
<td>5A and 5C</td>
<td>4</td>
<td>8 quarter</td>
<td>5.3 semester</td>
</tr>
</tbody>
</table>
This table describes how a passing AP score of 3, 4, or 5 meets Intersegmental General Education Transfer Curriculum (IGETC) requirements as well as how they translate into credit.

<table>
<thead>
<tr>
<th>AP EXAM</th>
<th>IGETC AREA</th>
<th>SEMESTER CREDITS TOWARD CSU GE BREADTH</th>
<th>TOTAL UC QUARTER UNITS AWARDED</th>
<th>TOTAL UC SEMESTER UNITS AWARDED</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chinese Language and Culture</td>
<td>3B and 6A</td>
<td>3</td>
<td>8 quarter</td>
<td>5.3 semester</td>
</tr>
<tr>
<td>Comparative Government and Politics</td>
<td>4</td>
<td>3</td>
<td>4 quarter</td>
<td>2.6 semester</td>
</tr>
<tr>
<td>Computer Science A</td>
<td>N/A</td>
<td>N/A</td>
<td>8 quarter</td>
<td>5.3 semester</td>
</tr>
<tr>
<td>Computer Science AB</td>
<td>N/A</td>
<td>N/A</td>
<td>4 quarter</td>
<td>2.6 semester</td>
</tr>
<tr>
<td>Computer Science Principles</td>
<td>N/A</td>
<td>N/A</td>
<td>8 quarter</td>
<td>5.3 semester</td>
</tr>
<tr>
<td>English Language and Composition</td>
<td>1A</td>
<td>3</td>
<td>8 quarter ^</td>
<td>5.3 semester ^</td>
</tr>
<tr>
<td>English Literature and Composition</td>
<td>1A or 3B</td>
<td>3</td>
<td>8 quarter ^</td>
<td>5.3 semester ^</td>
</tr>
<tr>
<td>Environmental Science</td>
<td>5A or 5C %</td>
<td>3</td>
<td>4 quarter</td>
<td>2.6 semester</td>
</tr>
<tr>
<td>European History</td>
<td>3B or 4</td>
<td>3</td>
<td>8 quarter</td>
<td>5.3 semester</td>
</tr>
<tr>
<td>French Language/Culture</td>
<td>3B and 6A</td>
<td>3</td>
<td>8 quarter</td>
<td>5.3 semester</td>
</tr>
<tr>
<td>German Language/Culture</td>
<td>3B and 6A</td>
<td>3</td>
<td>8 quarter</td>
<td>5.3 semester</td>
</tr>
<tr>
<td>Human Geography</td>
<td>4</td>
<td>3</td>
<td>4 quarter</td>
<td>2.6 semester</td>
</tr>
<tr>
<td>Italian Language and Culture</td>
<td>3B and 6A</td>
<td>3</td>
<td>8 quarter</td>
<td>5.3 semester</td>
</tr>
<tr>
<td>Japanese Language and Culture</td>
<td>3B and 6A</td>
<td>3</td>
<td>8 quarter</td>
<td>5.3 semester</td>
</tr>
<tr>
<td>Latin $</td>
<td>3B and 6A</td>
<td>3</td>
<td>8 quarter</td>
<td>5.3 semester</td>
</tr>
<tr>
<td>Macroeconomics</td>
<td>4</td>
<td>3</td>
<td>4 quarter</td>
<td>2.6 semester</td>
</tr>
<tr>
<td>Microeconomics</td>
<td>4</td>
<td>3</td>
<td>4 quarter</td>
<td>2.6 semester</td>
</tr>
<tr>
<td>Music Theory</td>
<td>N/A</td>
<td>N/A</td>
<td>8 quarter</td>
<td>5.3 semester</td>
</tr>
<tr>
<td>Physics 1</td>
<td>5A and 5C</td>
<td>4</td>
<td>8 quarter ~</td>
<td>5.3 semester ~</td>
</tr>
</tbody>
</table>
# AP Credit Toward IGETC

This table describes how a passing AP score of 3, 4, or 5 meets Intersegmental General Education Transfer Curriculum (IGETC) requirements as well as how they translate into credit.

<table>
<thead>
<tr>
<th>AP EXAM</th>
<th>IGETC AREA</th>
<th>SEMESTER CREDITS TOWARD CSU GE BREADTH</th>
<th>TOTAL UC QUARTER UNITS AWARDED</th>
<th>TOTAL UC SEMESTER UNITS AWARDED</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physics 2</td>
<td>5A and 5C</td>
<td>4</td>
<td>8 quarter</td>
<td>5.3 semester</td>
</tr>
<tr>
<td>Physics B</td>
<td>5A and 5C</td>
<td>4</td>
<td>8 quarter</td>
<td>5.3 semester</td>
</tr>
<tr>
<td>Physics C (Electricity/Magnetism)</td>
<td>5A and 5C %</td>
<td>3</td>
<td>4 quarter</td>
<td>2.6 semester</td>
</tr>
<tr>
<td>Physics C (Mechanics)</td>
<td>5A and 5C %</td>
<td>3</td>
<td>4 quarter</td>
<td>2.6 semester</td>
</tr>
<tr>
<td>Psychology</td>
<td>4</td>
<td>3</td>
<td>4 quarter</td>
<td>2.6 semester</td>
</tr>
<tr>
<td>Seminar</td>
<td>N/A</td>
<td>0</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Spanish Literature and Culture</td>
<td>3B and 6A</td>
<td>3</td>
<td>8 quarter</td>
<td>5.3 semester</td>
</tr>
<tr>
<td>Spanish Language and Culture</td>
<td>3B and 6A</td>
<td>3</td>
<td>8 quarter</td>
<td>5.3 semester</td>
</tr>
<tr>
<td>Spanish Language</td>
<td>3B and 6A</td>
<td>3</td>
<td>8 quarter</td>
<td>5.3 semester</td>
</tr>
<tr>
<td>Spanish Literature</td>
<td>3B and 6A</td>
<td>3</td>
<td>8 quarter</td>
<td>5.3 semester</td>
</tr>
<tr>
<td>Statistics</td>
<td>2A</td>
<td>3</td>
<td>4 quarter</td>
<td>2.6 semester</td>
</tr>
<tr>
<td>Studio Art – 2D Design</td>
<td>N/A</td>
<td>N/A</td>
<td>8 quarter</td>
<td>5.3 semester</td>
</tr>
<tr>
<td>Studio Art – 3D Design</td>
<td>N/A</td>
<td>N/A</td>
<td>8 quarter</td>
<td>5.3 semester</td>
</tr>
<tr>
<td>Studio Art – Drawing</td>
<td>N/A</td>
<td>N/A</td>
<td>8 quarter</td>
<td>5.3 semester</td>
</tr>
<tr>
<td>US Government and Politics</td>
<td>4 and US-2 **</td>
<td>3</td>
<td>4 quarter</td>
<td>2.6 semester</td>
</tr>
<tr>
<td>US History</td>
<td>(3B or 4) and US-1 **</td>
<td>3</td>
<td>8 quarter</td>
<td>5.3 semester</td>
</tr>
<tr>
<td>World History</td>
<td>3B or 4</td>
<td>3</td>
<td>8 quarter</td>
<td>5.3 semester</td>
</tr>
</tbody>
</table>

© The maximum UC credit for AP calculus exams is 8 quarter units or 5.3 semester units.

^ The maximum UC credit for both AP English tests is 8 quarter units or 5.3 semester units.

% AP test meets IGETC science course and lab requirement but only grants three units toward IGETC. Student will need to earn at least seven units in IGETC Area 5 to be certified.

$ Offered May 2013 and beyond.

¨ The maximum UC credit for all AP physics exams is 8 quarter units or 5.3 semester units.
**Students need to complete a course that covers California State and Local Government to complete CSU American Institutions requirement.**

For more information about transferring to the University of California (UC), see [how UC campuses accept AP credit](http://admission.universityofcalifornia.edu/counselors/exam-credit/ap-credits/index.html).
Cosumnes River College grants credit for College-Level Examination Program (CLEP) examinations. CLEP scores may be used to meet Cosumnes River College AA/AS general education requirements (/2020-2021-catalog/while-you-are-here/alternative-credit/study-options/college-level-examination-program-scores#aa-as-ge) and California State University (CSU) general education requirements (/2020-2021-catalog/while-you-are-here/alternative-credit/study-options/college-level-examination-program-scores#csu-ge). They do not fulfill graduation competencies, requirements for any major at Cosumnes River College, or enrollment limitations (such as prerequisite requirements) for any course at Cosumnes River College.

A student may receive credit for CLEP exams they have successfully passed once the following requirements are met:

- Official copies of test scores are on file with Admissions and Records
- Student has completed twelve (12) units of credit and has a minimum 2.0 grade point average (GPA)

Visit [College Board’s College-Level Examination Program](https://clep.collegeboard.org/) website to learn more.

CLEP scores are not accepted for transfer to the University of California. Students should be aware that other colleges and universities have the right to accept, modify, or reject the use of CLEP scores towards their graduation requirements. Check with your counselor to determine whether these test results will be accepted at the transfer institution of your choice.

### CLEP Credit Toward Cosumnes River College General Education Requirements

This table describes how passing CLEP scores translate into college credit at Cosumnes River College, and which general education areas they satisfy (if any).

<table>
<thead>
<tr>
<th>CLEP EXAM</th>
<th>CLEP SCORE</th>
<th>SATISFIES CRC GE AREA</th>
<th>UNITS EARNED AT CRC</th>
</tr>
</thead>
<tbody>
<tr>
<td>American Government</td>
<td>50</td>
<td>V(a)</td>
<td>3</td>
</tr>
<tr>
<td>American Literature</td>
<td>50</td>
<td>I</td>
<td>3</td>
</tr>
<tr>
<td>Analyzing and Interpreting Literature</td>
<td>50</td>
<td>I</td>
<td>3</td>
</tr>
<tr>
<td>Biology</td>
<td>50</td>
<td>IV</td>
<td>3</td>
</tr>
<tr>
<td>Calculus</td>
<td>50</td>
<td>II(b)</td>
<td>3</td>
</tr>
<tr>
<td>Chemistry</td>
<td>50</td>
<td>IV</td>
<td>3</td>
</tr>
<tr>
<td>College Algebra</td>
<td>50</td>
<td>II(b)</td>
<td>3</td>
</tr>
<tr>
<td>College Algebra – Trigonometry</td>
<td>50</td>
<td>II(b)</td>
<td>3</td>
</tr>
<tr>
<td>English Literature</td>
<td>50</td>
<td>I</td>
<td>3</td>
</tr>
<tr>
<td>French</td>
<td>59</td>
<td>I</td>
<td>3</td>
</tr>
<tr>
<td>German</td>
<td>60</td>
<td>I</td>
<td>3</td>
</tr>
<tr>
<td>History, US I</td>
<td>50</td>
<td>V(a)</td>
<td>3</td>
</tr>
<tr>
<td>History, US II</td>
<td>50</td>
<td>V(a)</td>
<td>3</td>
</tr>
</tbody>
</table>
### CLEP Credit Toward Cosumnes River College General Education Requirements

This table describes how passing CLEP scores translate into college credit at Cosumnes River College, and which general education areas they satisfy (if any).

<table>
<thead>
<tr>
<th>CLEP EXAM</th>
<th>CLEP SCORE</th>
<th>SATISFIES CRC GE AREA</th>
<th>UNITS EARNED AT CRC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Human Growth and Development</td>
<td>50</td>
<td>III(b)</td>
<td>3</td>
</tr>
<tr>
<td>Humanities</td>
<td>50</td>
<td>I</td>
<td>3</td>
</tr>
<tr>
<td>Introduction to Psychology</td>
<td>50</td>
<td>V(b)</td>
<td>3</td>
</tr>
<tr>
<td>Introduction to Sociology</td>
<td>50</td>
<td>V(b)</td>
<td>3</td>
</tr>
<tr>
<td>Natural Sciences</td>
<td>50</td>
<td>IV</td>
<td>3</td>
</tr>
<tr>
<td>Pre-Calculus</td>
<td>50</td>
<td>II(b)</td>
<td>3</td>
</tr>
<tr>
<td>Principles of Macroeconomics</td>
<td>50</td>
<td>V(b)</td>
<td>3</td>
</tr>
<tr>
<td>Principles of Microeconomics</td>
<td>50</td>
<td>V(b)</td>
<td>3</td>
</tr>
<tr>
<td>Spanish</td>
<td>63</td>
<td>I</td>
<td>3</td>
</tr>
<tr>
<td>Trigonometry</td>
<td>50</td>
<td>II(b)</td>
<td>3</td>
</tr>
<tr>
<td>Western Civilization I</td>
<td>50</td>
<td>I or V(b)</td>
<td>3</td>
</tr>
<tr>
<td>Western Civilization II</td>
<td>50</td>
<td>V(b)</td>
<td>3</td>
</tr>
</tbody>
</table>

### Exceptions

Cosumnes River College does not offer credit for the following CLEP exams, and these exams do not satisfy associate degree general education requirements:

- College Composition
- College Composition – Modular
- College Mathematics
- English Composition (with or without essay)
- Financial Accounting
- Freshman College Composition
- German
- Information Systems and Computer Applications
- Introduction to Educational Psychology
- Introduction to Business Law
- Principles of Accounting
- Principles of Management
- Principles of Marketing
- Social Sciences and History
## CLEP Credit Toward California State University General Education Requirements

This table describes how passing CLEP scores meet California State University (CSU) general education (GE) breadth requirements as well as how they translate into credit.

<table>
<thead>
<tr>
<th>CLEP EXAM</th>
<th>CLEP SCORE</th>
<th>CSU GE AREA</th>
<th>SEMESTER UNITS OF GE CREDIT</th>
<th>SEMESTER UNITS *</th>
<th>REMOVAL DATE FOR GE BREADTH **</th>
</tr>
</thead>
<tbody>
<tr>
<td>American Government</td>
<td>50</td>
<td>D</td>
<td>3</td>
<td>3</td>
<td>N/A</td>
</tr>
<tr>
<td>American Literature</td>
<td>50</td>
<td>C2</td>
<td>3</td>
<td>3</td>
<td>N/A</td>
</tr>
<tr>
<td>Analyzing and Interpreting Literature</td>
<td>50</td>
<td>C2</td>
<td>3</td>
<td>3</td>
<td>N/A</td>
</tr>
<tr>
<td>Biology</td>
<td>50</td>
<td>B2 (no lab credit)</td>
<td>3</td>
<td>3</td>
<td>N/A</td>
</tr>
<tr>
<td>Calculus</td>
<td>50</td>
<td>B4</td>
<td>3</td>
<td>3</td>
<td>N/A</td>
</tr>
<tr>
<td>Chemistry</td>
<td>50</td>
<td>B1 (no lab credit)</td>
<td>3</td>
<td>3</td>
<td>N/A</td>
</tr>
<tr>
<td>College Algebra</td>
<td>50</td>
<td>B4</td>
<td>3</td>
<td>3</td>
<td>N/A</td>
</tr>
<tr>
<td>College Algebra – Trigonometry</td>
<td>50</td>
<td>B4</td>
<td>3</td>
<td>3</td>
<td>N/A</td>
</tr>
<tr>
<td>English Literature</td>
<td>50</td>
<td>C2</td>
<td>3</td>
<td>3</td>
<td>Fall 2011</td>
</tr>
<tr>
<td>Financial Accounting</td>
<td>50</td>
<td>N/A</td>
<td>0</td>
<td>3</td>
<td>N/A</td>
</tr>
<tr>
<td>French Level I ***</td>
<td>50</td>
<td>N/A</td>
<td>0</td>
<td>6</td>
<td>N/A</td>
</tr>
<tr>
<td>French Level II ***</td>
<td>59</td>
<td>C2</td>
<td>3</td>
<td>9</td>
<td>N/A</td>
</tr>
<tr>
<td>French Level II ***</td>
<td>59</td>
<td>C2</td>
<td>3</td>
<td>12</td>
<td>Fall 2015</td>
</tr>
<tr>
<td>German Level I ***</td>
<td>50</td>
<td>N/A</td>
<td>0</td>
<td>6</td>
<td>N/A</td>
</tr>
<tr>
<td>German Level II ***</td>
<td>60</td>
<td>C2</td>
<td>3</td>
<td>9</td>
<td>N/A</td>
</tr>
<tr>
<td>German Level II ***</td>
<td>60</td>
<td>C2</td>
<td>3</td>
<td>12</td>
<td>Fall 2015</td>
</tr>
<tr>
<td>History, US I</td>
<td>50</td>
<td>D and US-1</td>
<td>3</td>
<td>3</td>
<td>N/A</td>
</tr>
<tr>
<td>History, US II</td>
<td>50</td>
<td>D and US-1</td>
<td>3</td>
<td>3</td>
<td>N/A</td>
</tr>
<tr>
<td>Human Growth and Development</td>
<td>50</td>
<td>E</td>
<td>3</td>
<td>3</td>
<td>N/A</td>
</tr>
</tbody>
</table>
This table describes how passing CLEP scores meet California State University (CSU) general education (GE) breadth requirements as well as how they translate into credit.

<table>
<thead>
<tr>
<th>CLEP EXAM</th>
<th>CLEP SCORE</th>
<th>CSU GE AREA</th>
<th>SEMESTER UNITS</th>
<th>SEMESTER UNITS *</th>
<th>REMOVAL DATE FOR GE BREADTH **</th>
</tr>
</thead>
<tbody>
<tr>
<td>Humanities</td>
<td>50</td>
<td>C</td>
<td>3</td>
<td>3</td>
<td>N/A</td>
</tr>
<tr>
<td>Information Systems and Computer Applications</td>
<td>50</td>
<td>N/A</td>
<td>0</td>
<td>3</td>
<td>N/A</td>
</tr>
<tr>
<td>Introduction to Educational Psychology</td>
<td>50</td>
<td>N/A</td>
<td>0</td>
<td>3</td>
<td>N/A</td>
</tr>
<tr>
<td>Introduction to Business Law</td>
<td>50</td>
<td>N/A</td>
<td>0</td>
<td>3</td>
<td>N/A</td>
</tr>
<tr>
<td>Introduction to Psychology</td>
<td>50</td>
<td>D</td>
<td>3</td>
<td>3</td>
<td>N/A</td>
</tr>
<tr>
<td>Introduction to Sociology</td>
<td>50</td>
<td>D</td>
<td>3</td>
<td>3</td>
<td>N/A</td>
</tr>
<tr>
<td>Natural Sciences</td>
<td>50</td>
<td>B1 or B2 (no lab credit)</td>
<td>3</td>
<td>3</td>
<td>N/A</td>
</tr>
<tr>
<td>Pre-Calculus</td>
<td>50</td>
<td>B4</td>
<td>3</td>
<td>3</td>
<td>N/A</td>
</tr>
<tr>
<td>Principles of Accounting</td>
<td>50</td>
<td>N/A</td>
<td>0</td>
<td>3</td>
<td>N/A</td>
</tr>
<tr>
<td>Principles of Macroeconomics</td>
<td>50</td>
<td>D</td>
<td>3</td>
<td>3</td>
<td>N/A</td>
</tr>
<tr>
<td>Principles of Management</td>
<td>50</td>
<td>N/A</td>
<td>0</td>
<td>3</td>
<td>N/A</td>
</tr>
<tr>
<td>Principles of Marketing</td>
<td>50</td>
<td>N/A</td>
<td>0</td>
<td>3</td>
<td>N/A</td>
</tr>
<tr>
<td>Principles of Microeconomics</td>
<td>50</td>
<td>D</td>
<td>3</td>
<td>3</td>
<td>N/A</td>
</tr>
<tr>
<td>Spanish Level I ***</td>
<td>50</td>
<td>N/A</td>
<td>0</td>
<td>6</td>
<td>N/A</td>
</tr>
<tr>
<td>Spanish Level II ***</td>
<td>63</td>
<td>C2</td>
<td>3</td>
<td>9</td>
<td>N/A</td>
</tr>
<tr>
<td>Spanish Level II ***</td>
<td>63</td>
<td>C2</td>
<td>3</td>
<td>12</td>
<td>Fall 2015</td>
</tr>
<tr>
<td>Trigonometry</td>
<td>50</td>
<td>B4</td>
<td>3</td>
<td>3</td>
<td>Fall 2006</td>
</tr>
<tr>
<td>Western Civilization I</td>
<td>50</td>
<td>C2 or D</td>
<td>3</td>
<td>3</td>
<td>N/A</td>
</tr>
</tbody>
</table>
CLEP Credit Toward California State University General Education Requirements

This table describes how passing CLEP scores meet California State University (CSU) general education (GE) breadth requirements as well as how they translate into credit.

<table>
<thead>
<tr>
<th>CLEP EXAM</th>
<th>CLEP SCORE</th>
<th>CSU GE AREA</th>
<th>SEMESTER UNITS OF GE CREDIT</th>
<th>SEMESTER UNITS *</th>
<th>REMOVAL DATE FOR GE BREADTH **</th>
</tr>
</thead>
<tbody>
<tr>
<td>Western Civilization II</td>
<td>50</td>
<td>D</td>
<td>3</td>
<td>3</td>
<td>N/A</td>
</tr>
</tbody>
</table>

* These unit values are used only in determination of eligibility for admissions to CSU and should not be confused with the unit values applied toward GE Certification.

** Students seeking certification in GE Breadth prior to transfer must have passed the CLEP exam before this date.

*** If a student passes more than one CLEP examination in the same language other than English (such as two exams in Spanish), then only one examination may be applied to the baccalaureate (BA or BS). For each examination in a language other than English, a passing score of 50 is considered "Level I" and earns six units of credit towards the baccalaureate (BA or BS); the higher score listed for each test is considered "Level II" and earns additional units of credit and placement in Area C2 of GE Breadth, as noted.

Exceptions

CSU does not offer credit for the following CLEP exams, and these exams do not satisfy CSU GE breadth requirements:

- College Composition
- College Composition – Modular
- College Mathematics
- English Composition (with or without essay)
- Freshman College Composition
- Social Sciences and History
Cosumnes River College may award college credit for international baccalaureate (IB) higher-level (HL) course completion, if the course work is compatible with the college’s curriculum. IB test scores may be used to meet Cosumnes River College AA/AS general education requirements, California State University (CSU) general education requirements, and Intersegmental General Education Transfer Curriculum (IGETC). No credit will be granted for lower-level course work completed in the IB program.

A student may receive credit for IB tests they have successfully passed once the following requirements are met:

- Official copies of test scores are on file with Admissions and Records
- Student has completed twelve (12) units of credit and has a minimum 2.0 grade point average (GPA)

Students should be aware that other colleges and universities have the right to accept, modify, or reject the use of IB scores towards their graduation requirements. Check with your counselor to determine whether these test results will be accepted at the transfer institution of your choice.

Students who have earned credit from an IB exam should not take a comparable college course because transfer credit will not be granted for both.

**IB Credit Toward Cosumnes River College General Education Requirements**

This table describes how passing IB scores translate into college credit at Cosumnes River College, and which general education areas they satisfy (if any).

<table>
<thead>
<tr>
<th>IB EXAM</th>
<th>PASSING SCORE</th>
<th>CRC GE AREA</th>
<th>UNITS EARNED AT CRC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biology HL</td>
<td>5</td>
<td>IV</td>
<td>3</td>
</tr>
<tr>
<td>Chemistry HL</td>
<td>5</td>
<td>IV</td>
<td>3</td>
</tr>
<tr>
<td>Economics HL</td>
<td>5</td>
<td>V(b)</td>
<td>3</td>
</tr>
<tr>
<td>Geography HL</td>
<td>5</td>
<td>V(b)</td>
<td>3</td>
</tr>
<tr>
<td>History (any region) HL</td>
<td>5</td>
<td>I or V(b)</td>
<td>3</td>
</tr>
<tr>
<td>Language A (any language) HL</td>
<td>5</td>
<td>I</td>
<td>3</td>
</tr>
<tr>
<td>Language A: Language and Literature HL (any language)</td>
<td>5</td>
<td>I</td>
<td>3</td>
</tr>
<tr>
<td>Language A: Language and Literature HL (any language except English)</td>
<td>5</td>
<td>I</td>
<td>3</td>
</tr>
</tbody>
</table>
IB Credit Toward Cosumnes River College General Education Requirements

This table describes how passing IB scores translate into college credit at Cosumnes River College, and which general education areas they satisfy (if any).

<table>
<thead>
<tr>
<th>IB EXAM</th>
<th>PASSING SCORE</th>
<th>CRC GE AREA</th>
<th>UNITS EARNED AT CRC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Language A: Literature HL (any language except English)</td>
<td>5</td>
<td>I</td>
<td>3</td>
</tr>
<tr>
<td>Language A1 (any language) HL</td>
<td>5</td>
<td>I</td>
<td>3</td>
</tr>
<tr>
<td>Language A2 (any language) HL</td>
<td>5</td>
<td>I</td>
<td>3</td>
</tr>
<tr>
<td>Language B (any language) HL</td>
<td>5</td>
<td>N/A</td>
<td>0</td>
</tr>
<tr>
<td>Mathematics HL</td>
<td>5</td>
<td>II(b)</td>
<td>3</td>
</tr>
<tr>
<td>Physics HL</td>
<td>5</td>
<td>IV</td>
<td>3</td>
</tr>
<tr>
<td>Psychology HL</td>
<td>5</td>
<td>V(b)</td>
<td>3</td>
</tr>
<tr>
<td>Theatre HL</td>
<td>5</td>
<td>I</td>
<td>3</td>
</tr>
</tbody>
</table>

Exceptions

Cosumnes River College does not offer credit for the following IB tests, and these tests do not satisfy associate degree general education requirements:

- Language B (any language) HL

IB Credit Toward California State University General Education Requirements

This table describes how passing IB test scores meet California State University (CSU) general education (GE) breadth requirements as well as how they translate into credit.

<table>
<thead>
<tr>
<th>IB TEST</th>
<th>PASSING SCORE</th>
<th>CSU GE AREA</th>
<th>SEMESTER UNITS FOR GE CERTIFICATION</th>
<th>MINIMUM SEMESTER CREDITS EARNED</th>
<th>REMOVAL DATE FOR GE BREADTH *</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biology HL</td>
<td>5</td>
<td>B2</td>
<td>3</td>
<td>6</td>
<td>N/A</td>
</tr>
<tr>
<td>Chemistry HL</td>
<td>5</td>
<td>B1</td>
<td>3</td>
<td>6</td>
<td>N/A</td>
</tr>
<tr>
<td>Economics HL</td>
<td>5</td>
<td>D2</td>
<td>3</td>
<td>6</td>
<td>N/A</td>
</tr>
<tr>
<td>Geography HL</td>
<td>5</td>
<td>D5</td>
<td>3</td>
<td>6</td>
<td>N/A</td>
</tr>
<tr>
<td>History (any region) HL</td>
<td>5</td>
<td>C2 or D6</td>
<td>3</td>
<td>6</td>
<td>N/A</td>
</tr>
</tbody>
</table>
IB Credit Toward California State University General Education Requirements

This table describes how passing IB test scores meet California State University (CSU) general education (GE) breadth requirements as well as how they translate into credit.

<table>
<thead>
<tr>
<th>IB TEST</th>
<th>PASSING SCORE</th>
<th>CSU GE AREA</th>
<th>SEMESTER UNITS FOR GE CERTIFICATION</th>
<th>MINIMUM SEMESTER CREDITS EARNED</th>
<th>REMOVAL DATE FOR GE BREADTH *</th>
</tr>
</thead>
<tbody>
<tr>
<td>Language A (any language) HL</td>
<td>4</td>
<td>C2</td>
<td>3</td>
<td>6</td>
<td>N/A</td>
</tr>
<tr>
<td>Language A: Language and Literature HL (any language)</td>
<td>4</td>
<td>C2</td>
<td>3</td>
<td>6</td>
<td>N/A</td>
</tr>
<tr>
<td>Language A: Language and Literature HL (any language except English)</td>
<td>4</td>
<td>C2</td>
<td>3</td>
<td>6</td>
<td>N/A</td>
</tr>
<tr>
<td>Language A: Literature HL (any language except English)</td>
<td>4</td>
<td>C2</td>
<td>3</td>
<td>6</td>
<td>N/A</td>
</tr>
<tr>
<td>Language A1 (any language) HL</td>
<td>4</td>
<td>C2</td>
<td>3</td>
<td>6</td>
<td>Fall 2013</td>
</tr>
<tr>
<td>Language A2 (any language) HL</td>
<td>4</td>
<td>C2</td>
<td>3</td>
<td>6</td>
<td>Fall 2013</td>
</tr>
<tr>
<td>Language B (any language) HL **</td>
<td>4</td>
<td>N/A</td>
<td>0</td>
<td>6</td>
<td>N/A</td>
</tr>
<tr>
<td>Mathematics HL</td>
<td>4</td>
<td>B4</td>
<td>3</td>
<td>6</td>
<td>N/A</td>
</tr>
<tr>
<td>Physics HL</td>
<td>5</td>
<td>B1</td>
<td>3</td>
<td>6</td>
<td>N/A</td>
</tr>
<tr>
<td>Psychology HL</td>
<td>5</td>
<td>D9</td>
<td>3</td>
<td>3</td>
<td>N/A</td>
</tr>
<tr>
<td>Theatre HL</td>
<td>4</td>
<td>C1</td>
<td>3</td>
<td>6</td>
<td>N/A</td>
</tr>
</tbody>
</table>
* Students seeking certification in GE Breadth prior to transfer must have passed the test before this date.

** For CSU only – the IB curriculum offers language at various levels for native and non-native speakers. Language B courses are offered at the intermediate level for non-natives. Language A1 and A2 (any language) HL are advanced courses in literature for native and non-native speakers, respectively.

### IB Credit Toward IGETC Requirements

This table describes how passing IB test scores meet Intersegmental General Education Transfer Curriculum (IGETC) requirements as well as how they translate into credit.

<table>
<thead>
<tr>
<th>IB TEST</th>
<th>PASSING SCORE</th>
<th>IGETC AREA</th>
<th>SEMESTER UNITS FOR IGETC CERTIFICATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biology HL</td>
<td>5</td>
<td>5B (no lab)</td>
<td>3</td>
</tr>
<tr>
<td>Chemistry HL</td>
<td>5</td>
<td>5A (no lab)</td>
<td>3</td>
</tr>
<tr>
<td>Economics HL</td>
<td>5</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>Geography HL</td>
<td>5</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>History (any region) HL</td>
<td>5</td>
<td>3B or 4</td>
<td>3</td>
</tr>
<tr>
<td>Language A: Language and Literature HL (any language)</td>
<td>5</td>
<td>3B</td>
<td>3</td>
</tr>
<tr>
<td>Language A: Language and Literature HL (any language except English)</td>
<td>5</td>
<td>3B and 6A</td>
<td>3</td>
</tr>
<tr>
<td>Language A: Literature HL (any language except English)</td>
<td>5</td>
<td>3B and 6A</td>
<td>3</td>
</tr>
<tr>
<td>Language A: Literature HL (any language)</td>
<td>5</td>
<td>3B</td>
<td>3</td>
</tr>
<tr>
<td>Language B (any language) HL</td>
<td>5</td>
<td>6A</td>
<td>3</td>
</tr>
<tr>
<td>Mathematics HL</td>
<td>5</td>
<td>2A</td>
<td>3</td>
</tr>
<tr>
<td>Physics HL</td>
<td>5</td>
<td>5A (no lab)</td>
<td>3</td>
</tr>
<tr>
<td>Psychology HL</td>
<td>5</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>Theatre HL</td>
<td>5</td>
<td>3A</td>
<td>3</td>
</tr>
</tbody>
</table>
College Safety and Security
| Cosumnes River College

At Cosumnes River College, we are committed to maintaining a safe learning environment and supporting an ongoing comprehensive safety program. The Los Rios Police Department (LRPD) employs sworn police officers who are certified through California Peace Officers Standards and Training (POST) and are responsible for protecting life and property across the district.

LRPD has excellent working relationships with other law enforcement agencies and emergency service providers in our neighboring communities. These strong partnerships help support more effective responses in emergency situations.

Learn more about Los Rios Police Department [here](https://police.losrios.edu).

---

**In This Section**

- **Crime Prevention** ([link](/2020-2021-catalog/while-you-are-here/college-safety-and-security/crime-prevention))
  Learn about crime prevention programs at Cosumnes River College.

- **Campus Traffic Regulations** ([link](/2020-2021-catalog/while-you-are-here/college-safety-and-security/campus-traffic-regulations))
  Learn about campus traffic regulations enforced by Los Rios Police Department.

- **Reporting a Crime/Incident** ([link](/2020-2021-catalog/while-you-are-here/college-safety-and-security/reporting-a-crime/incident))
  Learn how to report an on-campus crime or incident to Los Rios Police Department.

- **Clery Report** ([link](/2020-2021-catalog/while-you-are-here/college-safety-and-security/clery-report))
  Each year, the Los Rios Police Department publishes the Jeanne Clery Disclosure of Campus Security Policy and Campus Crime Statistics Report.
Crime Prevention

Cosumnes River College

Cosumnes River College actively supports crime prevention through a number of programs, including:

Emergency Automobile Assistance

Though they are not mechanics, Los Rios Police officers are equipped and trained to start cars with dead batteries or unlock non-electric car doors. Proper identification is required for the performance of these services.

Firearms

California Penal Code Section 626.9 (h) prohibits the possession of a firearm on college grounds.

Alcohol

Consumption of, or being under the influence of, alcohol while on campus is strictly prohibited. Violators are subject to suspension, expulsion, and/or criminal prosecution (Los Rios Policy P-2443) (/shared/doc/board/policies/P-2443.pdf).

Emergency Telephones

Outdoor, emergency telephones have been installed at strategic locations throughout the campuses. These blue phones, when accessed, will automatically connect the caller to the Los Rios Police Department.

Illegal Drugs

Cosumnes River College is committed to being a drug-free campus. Violators will be subject to disciplinary procedures. The use, sale, or possession on campus of, or presence on campus under the influence of, any controlled substance is strictly prohibited. Violators are subject to suspension, expulsion, and/or criminal prosecution (Los Rios Policy P-2441) (/shared/doc/board/policies/P-2441.pdf) and (Los Rios Policy P-2443) (/shared/doc/board/policies/P-2443.pdf).

Children on Campus

It is not appropriate for children to attend classes with their parents. All children on campus must be under the direct supervision of a parent, guardian, or other authorized adult. Unattended or disruptive children will be reported to the proper authorities.

Parking

Vehicles that do not have a valid semester parking decal or daily permit properly displayed will be issued a parking citation. There is a $283 fine for parking in designated disabled spaces (including hatch marks next to disabled spaces) without a state-issued disabled decal or plate.

Sexual Harassment

Sexual harassment in any situation is unacceptable and is in violation of state and federal laws and regulations. Corrective action will be taken where evidence of sexual harassment is found (Los Rios Policy P-2424) (/shared/doc/board/policies/P-2424.pdf).
Los Rios Police Department (LRPD) enforces the California Vehicle Code (CVC) and board-approved regulations on grounds designated for vehicle parking and traffic.

For more information, see parking regulations (https://police.losrios.edu/parking-resources/parking-regulations).
To report an on-campus crime or incident, see [crime and reporting](https://police.losrios.edu/crime-and-reporting) on the Los Rios Police Department website.
Clery Report | Cosumnes River College

Each year, the Los Rios Police Department publishes the Jeanne Clery Disclosure of Campus Security Policy and Campus Crime Statistics Report (also known as the Annual Clery Report). This report includes information about our safety and security policies and specific crime statistics.

Student Rights and Responsibilities
| Cosumnes River College

In This Section

  The classroom is the essential part of any college where freedom to learn should flourish. Learn about student rights and responsibilities.

- **Access to Student Records (FERPA)** ([2020-2021-catalog/while-you-are-here/student-rights-and-responsibilities/access-to-student-records-(ferpa)](2020-2021-catalog/while-you-are-here/student-rights-and-responsibilities/access-to-student-records-(ferpa))
  Learn about the use and release of student information.

  Learn about our policy regarding alcohol, drugs, and smoking.

  Learn about our policies for the use of computers and the internet on campus.

  Learn about Cosumnes River College's copyright and piracy policies.

  Learn about the student disciplinary procedures and due process at Cosumnes River College.

- **Honor Code** ([2020-2021-catalog/while-you-are-here/student-rights-and-responsibilities/honor-code](2020-2021-catalog/while-you-are-here/student-rights-and-responsibilities/honor-code))
  Cosumnes River College's Honor Code serves as a bridge between the catalog's formal treatment of academic integrity and the day-to-day decisions of the members of our academic community.

  Learn about Cosumnes River College's stance on plagiarism, cheating, and academic integrity.

- **Right-to-Know Program Completion** ([2020-2021-catalog/while-you-are-here/student-rights-and-responsibilities/right-to-know-program-completion](2020-2021-catalog/while-you-are-here/student-rights-and-responsibilities/right-to-know-program-completion))
  In compliance with the Student Right-to-Know and Campus Security Act of 1990, completion and transfer rates for students attending Cosumnes River College can be found on the California Community College State Chancellor's Office website.

- **Service Animals on Campus** ([2020-2021-catalog/while-you-are-here/student-rights-and-responsibilities/service-animals-on-campus](2020-2021-catalog/while-you-are-here/student-rights-and-responsibilities/service-animals-on-campus))
  See guidelines for bringing service animals onto Cosumnes River College's campuses and centers.

- **Social Media Policy** ([2020-2021-catalog/while-you-are-here/student-rights-and-responsibilities/social-media-policy](2020-2021-catalog/while-you-are-here/student-rights-and-responsibilities/social-media-policy))
  Learn about Cosumnes River College's social media policy.

- **Standards of Conduct** ([2020-2021-catalog/while-you-are-here/student-rights-and-responsibilities/standards-of-conduct](2020-2021-catalog/while-you-are-here/student-rights-and-responsibilities/standards-of-conduct))
  Learn about Cosumnes River College's code of conduct and disciplinary offenses.
Student Grievance and Class-Related Concerns (/2020-2021-catalog/while-you-are-here/student-rights-and-responsibilities/student-grievance-and-class-related-concerns)

See information related to student grievances, how to file a formal grievance at Cosumnes River College, and steps to resolution.
Academic Rights and Responsibilities | Cosumnes River College

The classroom (including laboratories, field trips, independent study, and so on) is the essential part of any college where freedom to learn should flourish. The instructor has the responsibility for the manner of instruction and the conduct of the classroom. The instructor should not act in any way that denies the rights of students as set forth below (Los Rios Regulation R-2411 (/shared/doc/board/regulations/R-2411.pdf)).

Student Academic Rights

Student Publications

In preparing student publications, the editorial staff and faculty advisors shall be free from censorship and advance copy approval except as provided by published district policy, statutes, or college regulation. These publications should do the following:

- Adhere to canons of responsible journalism, such as avoidance of libel, indecency, undocumented allegations, attacks on personal integrity, and the techniques of harassment and innuendo.
- State on the editorial page that the opinions expressed are not necessarily those of the college or the student body.

Support Causes

Students shall have the right to:

- Take stands on issues
- Examine and discuss questions of interest to them
- Support causes by orderly means which are in harmony with the regular functioning of the institution

Free Assembly and Free Speech

Students shall have the right to hear speakers on any subject and college recognized student organizations shall have the right to present speakers on any subject. In addition, students shall have the right of free assembly on each campus subject to regulations that assure the regular functioning of the institution.

The policies and regulations shall include reasonable provisions for the time, place, and manner of conducting these activities, but shall not prohibit the right of students to exercise free expression including, but not limited to, the use of bulletin boards, the distribution of printed materials or petitions, and the wearing of buttons, badges, and other insignia.

Expression which is obscene, libelous, or slanderous according to current legal standards, or which so incites students as to create a clear and present danger of the commission of unlawful acts on college premises, or the violation of lawful district or college regulations, or the substantial disruption of the orderly operation of the college, shall be prohibited.

Free to Organize

Students shall have the right to form an organization around any particular interest. This right includes the freedom to organize and to join student organizations subject to published college and district regulations.

Voice in Decision-Making

Students shall have the right to be informed on all college matters that can be shown to be directly relevant to them by having a voice in decision making that affects their academic future, with the exception of staff appointment, termination, and tenure.

In case of conflict in determining what college matters are relevant to students, the determination will be made by a college-designated student, faculty, and administrative committee.
In addition, student representatives shall be members of all faculty and administrative committees related to students' concerns; such student representatives shall have a vote as committee members.

Confidentiality

Students shall have the right to have their academic records treated in a confidential and responsible manner with due regard to the personal nature of the information these records contain. Students' records will be released only on the written consent of the students or as provided by law. Learn more about access to student records (https://crc.losrios.edu/access-to-student-records).

Academic Evaluation

Students shall have the right of protection against prejudiced or capricious academic evaluation. At the same time, students are responsible for maintaining standards of academic performance established in advance for each course in which they are enrolled.

Grievance Procedure

Students shall have the right to file a grievance as outlined in Los Rios Regulation R-2412 (/shared/doc/board/regulations/R-2412.pdf), in the event of an alleged breach of their rights. Cosumnes River College's designated grievance officer will hear grievances of students who believe their academic rights have been denied or violated.

Student Responsibilities

The Expectations of the College

Admission to college assumes the expectation that the student will:

- Be a responsible member of the college community
- Obey the law
- Comply with the published rules and regulations of the college
- Respect the rights, privileges, and property of the other members of the college community
- Not interfere with legitimate college affairs

Students enrolled in a class are responsible for meeting standards of performance and conduct established by the Los Rios Community College District and the instructor. Students are responsible for registering, "adding," and "dropping" classes in a timely fashion to make sure that other students have an opportunity to take classes. Students are responsible for completing and submitting all class assignments, examinations, tests, projects, reports, and so on by scheduled due dates, or face penalties.

If any problem arises regarding coursework or attendance, the student will be held responsible for initiating communication and contact with the instructor. In addition, students will be held responsible for behavior and conduct adverse to the preservation of order as established by the college and the instructor. Students are responsible for meeting their degree requirements as provided in the college catalog.

Students also have the responsibility to use information technology resources effectively. Each user has the responsibility to:

- Use the resources appropriately and efficiently
- Respect the freedom and privacy of others
- Protect the stability and security of the resources
- Understand and fully abide by established college policies and applicable public laws

In the case of student conduct that involves an alleged or proven violation of criminal law, the disciplinary authority of the college will not be used to duplicate the function of criminal authority. Disciplinary action may be taken if the conduct also involves a violation of district or college policy.
Access to Student Records (FERPA)  
| Cosumnes River College

Use and Release of Student Information

The Family Educational Rights and Privacy Act of 1974 (FERPA) was designed to protect the privacy of educational records and to establish the rights of students to inspect and review their educational records. It also provides control over the release of educational record information. The original intent of this legislation was to keep elementary and high school records private and to give parents access to their child's school records.

After a student turns eighteen or attends an institution of higher education (a college or university), the rights of access to the student's records transfer to the student. This means that all academic information regarding a college student goes directly to the student unless the student has given specific, written permission to release that information to someone else.

While parents understandably have an interest in their child's academic progress, they are not automatically granted access to a student's records without written consent of the student. Parents are encouraged to consult with the student if academic information is needed.

A student can give permission for a third party to access their records by filing a Student Consent for Release of Records Form (/shared/doc/admissions-records/forms/student-consent-for-release-of-student-records.pdf) (PDF) with the Admissions and Records office.
Alcohol, Drug, and Smoking Policy | Cosumnes River College

Alcohol and Drug Policy

The abuse of illicit drugs and alcohol disrupts classes, compromises your physical and mental health, subjects you to criminal penalties, and impairs your ability to benefit from the learning experience. We therefore ask the college community to actively support a drug- and alcohol-free learning environment by knowing and making others aware of college policies and the substantial health and legal consequences of abuse.

District Policy

Policy P-2443: Drug and Alcohol-Free Workplace and College Premises (/shared/doc/board/policies/P-2443.pdf) states that the district “is committed to maintaining a drug- and alcohol-free workplace in accordance with the requirements of the US Drug-Free Workplace Act of 1988, and a drug- and alcohol-free college environment for students and employees in accordance with the requirements of the Drug-Free Schools and Community Act Amendment of 1989.”

Legal Sanctions

The Los Rios Standards of Student Conduct prohibit the use, sale, or possession on campus of, or presence on campus under the influence of, any controlled substance. Controlled substances include cocaine, marijuana, LSD, heroin, methadone, mescaline, peyote, and methaqualone, among others.

If you abuse drugs or alcohol on campus, or appear on campus or at a college-sponsored function under the influence of drugs or alcohol, you can be suspended, expelled, and/or criminally prosecuted. The penalties for the more common offenses are:

- Possession or use of alcohol: year in jail and/or fine
- Possession of marijuana: criminal citation and fine
- Possession of cocaine: imprisonment in a state prison
- Sales of any illegal drug: imprisonment in a state prison
- Possession or use of alcohol by a minor: one year in jail and/or fine
- If you are a student employee, you may be terminated
- You are required to report any convictions within five days of the occurrence
- You will be ineligible for financial aid

Smoking Policy

Per section 2.23 of Regulation R-1411: Use of Facilities (/shared/doc/board/regulations/R-1411.pdf), smoking, vaping, and the use of tobacco is prohibited on all district/college property. Smoking is defined as inhaling, exhaling, burning, or carrying any lighted or heated cigar, cigarette, pipe, or any other lighted or heated tobacco or other product intended for inhalation, in any matter or in any form. Smoking also includes the use of e-cigarettes. An e-cigarette is any oral device that provides a vapor of nicotine or any other substance for inhalation. E-cigarettes do not include products approved by the United States Department of Food and Drug Administration for medical treatment.
Computer and Internet Use Policy
| Cosumnes River College

Computer Use Policy

The following rules apply to all computer labs on campus. Specific labs may have additional rules.

General Rules

- Equipment use in the lab is intended for class assignments only – use of computers is closely monitored for compliance with acceptable use standards
- Computers are available on a first-come, first-served basis
- Food and/or drinks (including water bottles) are not allowed in computer labs at any time
- Children (under 18) are not allowed to use computer equipment unless they are current Cosumnes River College students
- Report problems with computers and/or printers to computer lab staff
- A valid login may be used for assigned purposes only – sharing access with others is not permitted
- All downloading and saving must be to removable media
- Playing games on college computers is prohibited except for class assignments
- When you're done, log off the computer but don't turn the computer off
- Directions from any lab assistant or instructor concerning equipment/facilities or student conduct must be followed in order to continue use of the facilities

Respect Those Around You

- Bring your own headphones for sound control.
- Pets are not allowed, except for service animals.
- Keep noise to a minimum
- Use one workstation per person
- Keep backpacks out of the walkways
- Turn off or silence cell phones and pagers and answer phone calls outside of the lab

Software

- Software may not be copied from computers or network drives
- Installing software or games on computers is prohibited

Internet Use Policy

Internet access is limited to classroom assignments only.

The acceptable use standards concerning internet use must be followed where applicable. The following activities are not allowed:

- Transmitting unsolicited information, which contains profane language or panders to bigotry, sexism, or other forms of discrimination
- Using the internet to gain unauthorized access to any computer
- Engaging in personal attacks (writing bullying, intimidating, threatening, or harassing entries)
- Making threats (directed towards others or yourself) without expecting the recipients of those threats, the college, and the police to consider them real
- Transmitting information that contains obscene, indecent, lewd, or lascivious material or other material that explicitly or implicitly refers to sexual conduct. This includes displaying such material where other individuals could potentially view it
- Inappropriate mass mailing, which includes multiple mailing to news groups, mailing lists, or individuals

Attempts by students to obtain, manipulate, delete, or change the contents of another user's files, passwords, etc. are regarded as infractions of the California Computer Crime Penal Code. Attempts to "break" the operating system constitute a felony under this law.
Copyright and Piracy Policy
| Cosumnes River College

What is a Copyright?

A copyright is a legal protection that gives the developer of an original piece of work (intellectual or artistic) exclusive rights for a certain time period. Copyright infringement is the unauthorized use of copyrighted material.

What is Piracy?

Piracy is the recreational downloading of copyrighted materials. Piracy is a violation of both federal law and college policy. The Recording Industry Association of America (RIAA) and Motion Pictures Association of America (MPAAP) have been cracking down on piracy in the US and targeting university and college networks, since this is where the highest amount of copyright infringements occur.

What is Peer-to-Peer (P2P) Software?

Peer-to-Peer (P2P) software allows users to download and distribute files from computer to computer across networks using P2P protocols, regardless of whether the user has paid for the files. When users have not paid for these files, they break federal and international copyright laws.

Piracy is not the only downside of using P2P software. P2P software allows users to access your computer and potentially hack into your private data. The result is exposure of your computer to significant security risks from viruses, worms, and hackers that could lead to possible loss of data, identity theft, and other liabilities.

College Actions for Violation

Sharing music, videos, or other copyrighted materials using Peer-to-Peer (P2P) applications over the network exposes you and anyone you share files with to legal action.

If a notice is sent from a trusted agency to Cosumnes River College, then the student’s account will be blocked from accessing the WiFi network. The student in question may have to go through the college’s disciplinary process to regain access.

Summary of Civil and Criminal Penalties for Violation of Federal Copyright Laws

Copyright infringement is the act of exercising, without permission or legal authority, one or more of the exclusive rights granted to the copyright owner under section 106 of the Copyright Act (Title 17 of the United States Code). These rights include the right to reproduce or distribute a copyrighted work. In the file-sharing context, downloading or uploading substantial parts of a copyrighted work without authority constitutes an infringement.

Penalties for copyright infringement include civil and criminal penalties. In general, anyone found liable for civil copyright infringement may be ordered to pay either actual damages or “statutory” damages affixed at not less than $750 and not more than $30,000 per work infringed. For “willful” infringement, a court may award up to $150,000 per work infringed. A court can, in its discretion, also assess costs and attorneys’ fees. For details, see Title 17, United States Code, Sections 504, 505.

Willful copyright infringement can also result in criminal penalties, including imprisonment of up to five years and fines of up to $250,000 per offense.

Additional Resources

- Policy P-8861: Copyright (http://www.cosumnesriver.edu/board/policies/P-8861.pdf)
- US Copyright Office (http://www.copyright.gov)
- Recording Industry Association of America (RIAA) (https://www.riaa.com/resources-learning/about-piracy/)
- Motion Picture Association (MPA) (https://www.motionpictures.org)
- Business Software Alliance (BSA) (http://www.bsa.org/anti-piracy)
Disciplinary Procedures and Due Process | Cosumnes River College

The following are the disciplinary and due process procedures for when a student is referred to the Office of Student Conduct.

1. A student who is referred for discipline is required to meet with the Student Conduct Officer. This referral means the student's alleged behavior is believed to have been a violation of the Los Rios Student Standards of Contact.

2. The student will receive a certified letter via US standard mail notifying them of their referral. In the notification, the student is instructed to make an appointment for an investigative meeting with the Student Conduct Officer.

3. At the informal, investigative meeting, the Student Conduct Officer shall interview the student for the purpose of discussing the alleged misconduct and the disciplinary action that should be taken (if any).

4. At the investigative meeting, the parties shall have the right to present statements, testimony, evidence, and witnesses, except that neither party shall have the right to be represented by an attorney.

5. The investigative meeting is mandatory. If the student fails to make an appointment and/or does not attend the meeting, then the Student Conduct Officer may review the case and initiate disciplinary action without input from the student.

6. After the investigative meeting, the Student Conduct Officer may initiate disciplinary action by filing a notice with the Vice President of Student Services and serving such notice on the student charged. This decision depends entirely on the information obtained during the investigation.

7. The student has the right to request an appeal to the disciplinary action with the Vice President of Student Services no later than seven (7) days after the service of the notice of disciplinary action. A copy of the appeal form will be mailed to you along with your notice of disciplinary action.

8. After an appeal hearing, a written decision will be mailed to the student from the Office of the President within ten days of the conclusion of the hearing.

9. At this point, the final decision for disciplinary action rests with the college president. The president may approve, reject, or modify the written decision. The decision of the college president for disciplinary action is final.

Refer to Regulation R-2442: Due Process (/shared/doc/board/regulations/R-2442.pdf) for complete information regarding student standards of conduct and due process.

Contact

For additional information on student conduct, please contact the Student Conduct Officer:

Shannon Cooper (Dean, Counseling and Student Services)
Email: coopers@crc.losrios.edu (mailto:coopers@crc.losrios.edu)
Phone: (916) 691-7350
Cosumnes River College's Honor Code serves as a bridge between the catalog's formal treatment of academic integrity and the day-to-day decisions of the members of our academic community. Its focus is on core academic values, the appropriate expression of those values in behavior, and the way those values create and sustain our academic community. It is intended as a straightforward tool for communicating and clarifying the college's fundamental expectations. It is also intended to be used frequently and easily.

Suggested Honor Code Uses

- As a syllabic supplement
- In conjunction with major assignments
- In conjunction with field trips/special events
- As a classroom management tool
- As documentation in the context of:
  - Referrals for 'Student Code of Conduct' violations
  - Grievance processes
  - Student disciplinary appeal processes

I understand that Cosumnes River College (CRC) values academic integrity. Academic integrity requires:

**Honesty**, which means:
- A commitment to truthfulness
- The refusal to steal or mislead, cheat or plagiarize

**Fairness**, which means:
- The willingness to treat others as I would wish to be treated upon careful consideration

**Respect**, which means valuing, in attitude and practice:
- All human beings
- Myself
- My community at CRC and beyond

**Responsibility**, which means:
- Recognizing that the quality of a CRC education and the quality of the CRC student experience depend upon my behavior
- Accepting, at all times, the consequences of my actions

I understand that I, as a member of the Cosumnes River College community, am responsible for upholding this value, supporting academic quality, academic rigor, and an appropriate college atmosphere.

* This code is modeled after that of Santa Monica Community College, Santa Monica, California.
Plagiarism and Cheating Policy
| Cosumnes River College

Academic Integrity and Responsibility

Academic integrity and responsibility mean acting honestly, conscientiously, and honorably in all academic endeavors. Students are accountable for all that they say and write. Since trust is the foundation of an intellectual community, and since student work is the basis for instructors to evaluate student performance in courses, students should not misrepresent their work nor give or receive unauthorized assistance.

Academic Dishonesty

In contrast to academic integrity and responsibility, academic dishonesty takes the form of plagiarism and/or cheating.

Plagiarism

The word plagiarism comes from the Latin word “plagiarius,” meaning kidnapper. Plagiarism is generally the taking of words, sentences, organization, and ideas from another source without acknowledging that source.

Plagiarism may include:

- Submitting papers, examinations, or assignments written/completed entirely or in part by others
- Directly copying portions of another's work without enclosing the copied passage in quotation marks for written work or without citing appropriately in an oral presentation and without acknowledging the source in the appropriate scholarly convention whether the work is presented in written or oral form
- Using a unique term or concept without acknowledging the source
- Paraphrasing or summarizing a source’s ideas without acknowledging the source
- Replicating a visual presentation, representation, or performance without acknowledging the source

Cheating

Cheating is similar to plagiarism in that it involves representing another's work as one's own. However, cheating often involves more overtly deceptive or fraudulent acts of academic dishonesty designed to gain credit for academic work that is not one's own.

Cheating may include:

- Giving or receiving unauthorized assistance during an examination
- Fabricating or altering a source of data in a laboratory or experiment
- Collaborating with others when collaboration is not permitted, or when the contributions of others are not made clear
- Using unauthorized materials or aids during an examination, including calculators, dictionaries, or information accessed via any electronic devices
- Acquiring, without permission, tests or other academic material belonging to a member of the college faculty or staff
In compliance with the Student Right-to-Know and Campus Security Act of 1990, completion and transfer rates for students attending Cosumnes River College can be found on the California Community College State Chancellor's Office Student Right-to-Know Rate Disclosure Website (http://srtk.cccco.edu/index.asp).
Service Animals on Campus
| Cosumnes River College

Students and employees with a disability* who need a service animal may use a service animal (including a service animal in training) on district and college property. Therapy animals and pets are not allowed.

*Disability must be consistent with guidelines set forth by the Americans with Disabilities Act (ADA) and the Fair Employment and Housing Act (FEHA).

Service Animal Guidelines

Service animals are subject to the following guidelines:

1. A service animal is any dog or a miniature horse that is trained to do work or perform tasks for an individual with a disability.

2. Faculty, staff or student owners of service animals that wish to bring the animal to campus, are requested, but not required, to register their service animal with the Vice President of Student Services or Vice President of Administrative Services. Registration provides a quick way to demonstrate the service animal is properly on campus.

3. If owner applies for registration, owner must provide documentation of their service animal’s current shot/vaccination records at the time of registration. Visitors should check in with the Vice President’s offices.

4. If owner applies for registration, owner must provide documentation of appropriate licenses.

5. If owner applies for registration, owner should carry proof of service animal registration when accompanied by that service animal on campus.

6. The service animal must be in good health, and free of fleas and external parasites.

7. The service animal must be on a leash at all times.

8. Owner is responsible for all cleanup of animal feces.

9. Service animals that disrupt the learning environment and the ability of others to learn may be excluded from campus.

10. Service animals that are ill, unclean, noisy, or bedraggled will not be allowed on campus.

11. Service animals that show unprovoked aggressive tendencies or are deemed potentially dangerous will not be allowed on campus.

12. Service animals are not permitted to be in the following areas: mechanical rooms/custodial closets, any room where protective gear is worn, or any room that poses a potential danger to the animal.

13. Owner will be financially responsible for any damage or cleaning costs resulting from the animal being brought on to campus. Animals that cause damage may be excluded from the campus.

Individuals who bring a service animal to campus must extend courtesy and respect to colleagues, students, and visitors in the area. Owners are required to keep service animals on a leash and should consider safety, health, and the possible fears others may have in the presence of animals.
Social Media Policy | Cosumnes River College

Social Media Participation Guidelines

As an institution of higher learning, Cosumnes River College – by its very nature – embraces the free and open exchange of ideas. To that end, we are committed to the community's First Amendment rights and the core values of free speech.

We believe in fostering a thriving online community. We support the various channels of social networking – Facebook, Twitter, YouTube, Instagram, and so on – as valuable tools for engaging students, staff, faculty, alumni, friends, and supporters in a constructive two-way dialogue about Cosumnes River College and its mission.

At the same time, the long-term value, vibrancy, and success of any social media community depends on a shared philosophy of how to behave. It's important that members of our community become familiar with Facebook's Terms of Service (https://www.facebook.com/legal/terms), Twitter's Rules and Policies (https://help.twitter.com/en/rules-and-policies), YouTube's Policies (https://www.youtube.com/about/policies/#community-guidelines), Instagram's Terms of Use (https://help.instagram.com/58066965581870), and similar support sites for social media. The emphasis for all participants – including site administrators – should always be transparency, honesty, respect, and civility.

All content, information, and views expressed on social media belong to the individuals posting the content. These views do not necessarily reflect the official policies or positions of the college, district, or Board of Trustees. We are not responsible for unanswered posts or inaccurate information posted by others.

Here are guidelines for engaging in Cosumnes River College social media platforms:

- Be respectful of the rights and opinions of others. Be willing to agree to disagree and move on.
- Stay on topic. Our social media sites are established as forums for the open and honest discussion of matters and developments related to – and limited to – our mission (https://crc.losrios.edu/about-us/our-values).
- Be transparent and honest.
- Add value. Be part of the conversation but don't take it over.
- Avoid hateful speech, personal attacks, flaming, profanity, vulgarity, pornography, nudity, and abusive language.
- Keep personal information (for example, your phone number and address) out of your posts.
- Think before you post. Almost everything you write or post to a social media site – words, pictures, video – is public or can be discovered. If you post on any of our social media sites, then you consent that what you post can be published and you waive any expectation of privacy regarding the post. What you choose to add to the conversation today will live on long after the subject matter has come and gone as a topic of conversation.
- We encourage you to post comments and “like” articles, photos, and videos you enjoy.

On our Facebook, Twitter, YouTube, and Instagram pages and other social media platforms, our goal is to post interesting, entertaining, and educational content. We welcome your comments and suggestions. We encourage conversation and dialogue, but we want to ensure a respectful online environment and invigorating conversation for the broader college community. Our page administrators review posts and comments regularly to ensure any issues or concerns are addressed in a timely manner.

We may or may not reply to comments, but if it's provocative, fair, and insightful, chances are others will engage in the conversation.

We reserve the right to determine and remove from Cosumnes River College social media sites any of the following:

- Comments, links, images, or videos that are illegal or encourage illegal activity, or are obscene, defamatory/libelous/slanderous, indecent, lewd, lascivious, sexually harassing or explicit in nature, or pose risks to the health or safety of individuals
- Comments that personally attack or threaten any person
- For students, anything that would violate District policies regarding student regulations (https://losrios.edu/about-los-rios/board-of-trustees/policies-and-regulations)
- For staff and faculty, anything that would violate District policies regarding staff and faculty regulations (https://losrios.edu/about-los-rios/board-of-trustees/policies-and-regulations)
- Successive off-topic posts by one or more individuals or groups
- Repetitive posts copied and pasted or duplicated by one or more individuals or groups
- Solicitations or advertisements
- Any materials that infringe upon the intellectual property or other rights of any third party
Standards of Conduct  
| Cosumnes River College

Code of Conduct

A student who enrolls at Cosumnes River College may rightfully expect that students, faculty, and administrators will maintain an environment in which there is freedom to learn.

Student conduct must comply with federal and state laws, college rules and regulations, and Regulation R-2441: Standards of Conduct (/shared/doc/board/regulations/R-2441.pdf). Students who violate such rules and regulations are subject to disciplinary action.

Disciplinary Offenses

Any student found to have committed, or to have attempted to commit, the following misconduct is subject to appropriate disciplinary action:

- Continued disruptive behavior, continued willful disobedience, habitual profanity or vulgarity, or the open and persistent defiance the authority of, or persistent abuse of, members of the college community
- Assault, battery, or any threat of force or violence upon members of the college community
- Willful misconduct which results in injury or death to members of the college community, or which results in cutting, defacing, or other injury to any real or personal property owned by the district
- The use, sale, or possession on campus of, or presence on campus under the influence of, any controlled substance (See alcohol, drug, and smoking policies)
- Willful or persistent smoking in any area where smoking has been prohibited by law or district policy (See alcohol, drug, and smoking policies)
- Persistent, serious misconduct where other means of correction have failed to bring about proper conduct
- Violation of College rules and regulations including those concerning student organizations, the use of college facilities, or the time, place and manner of public expression and distribution of materials
- Obstruction or disruption of teaching, research, administrative disciplinary procedures or other college activities, including its community service activity, or of other authorized activities on college-controlled premises
- Theft of or non-accidental damage to property of the college or a member of the college community while on campus or at college-sponsored events
- Unauthorized entry to or use of college facilities
- Dishonesty, such as cheating, plagiarism, or furnishing false information to the college; forgery, alteration, or misuse of college documents, records, or identifications (See plagiarism and cheating policies)
- Knowing possession or use of explosives, dangerous chemicals or deadly weapons on college property or at a college function without prior authorization of the college president or designated representative
- Use, possession, distribution or being under the influence of alcoholic beverages, narcotics or dangerous drugs on college property or at college-sponsored events (See alcohol, drug, and smoking policies)
- Soliciting or assisting another to do any act which would subject a student to expulsion, suspension, probation or other discipline pursuant to Regulation R-2441: Standards of Conduct
- Violation of any order of a college president, notice of which has been given prior to such violation, and which order is not inconsistent with any of the other provisions of this policy. This notice may be given by publication in the college newspaper, by posting on an official bulletin board designated for this purpose or by any other means reasonably calculated to inform students of its provisions.
- Attempting to commit an act that would be cause for disciplinary action identified above
Student Grievance and Class-Related Concerns | Cosumnes River College

Steps to Resolution

1. Students should speak with their professor about the concern.
2. Students who feel as though they are unable to speak with their professor or resolve the situation, should then contact the instructional division area dean.

Note: Most complaints, grievances, or disciplinary matters should be resolved at the campus level. This is the quickest and most successful way of resolving issues involving the college. You are encouraged to work through the campus complaint process first.

Contact

For information on how to file a formal grievance, please contact the Student Grievance Officer:

Yolanda Garcia (Dean, Student Services & Enrollment Management)
Email: yolanda.garcia@crc.losrios.edu
Phone: (916) 691-7333

Additional Grievance Information

Issues that are not resolved at the college or district level may be presented via resources provided by the California Community Colleges Chancellor's Office. Complainants are encouraged to use the official form provided by the Chancellor's office (https://www.cccco.edu/Complaint-Process-Notice), however, that form is not required and complaints will not be considered defective or rejected if you do not use the form.

A student may file a grievance or grieve an action or decision of the district or one of its colleges when the student's status and/or rights have been adversely affected.

Grievances relating to grades are subject to Education Code Section 76224(a), which reads:

"When grades are given for any course of instruction taught in a community college district, the grade given to each student shall be the grade determined by the instructor of the course and the determination of the student's grade by the instructor, in the absence of mistake, fraud, bad faith, or incompetence, shall be final."

In addition to complaints being filed by students or employees, complaints may be initiated by other individuals or entities, such as a family member, representative, organization, or other third party wishing to file on behalf of an individual or group alleged to have suffered unlawful discrimination or harassment (Los Rios Regulation R-2423 (/shared/doc/board/regulations/R-2423.pdf)).
Equal Opportunity, Equity, Discrimination, and Harassment | Cosumnes River College

In This Section

Equal Opportunity (/2020-2021-catalog/while-you-are-here/equal-opportunity-equity-discrimination-and-harassment/equal-opportunity)
Learn about Cosumnes River College's commitment to equal opportunity.

At Cosumnes River College, we value equity and diversity. No person shall be unlawfully discriminated against, harassed, or excluded from any benefits, activities, or programs because they possess certain characteristics (actual or perceived).

Sexual Harassment or Assault (/2020-2021-catalog/while-you-are-here/equal-opportunity-equity-discrimination-and-harassment/sexual-harassment-or-assault)
Learn about Cosumnes River College's policies against sexual harassment and assault. This includes gender harassment, sexual violence, domestic violence, dating violence, and stalking.

Types of Harassment (/2020-2021-catalog/while-you-are-here/equal-opportunity-equity-discrimination-and-harassment/types-of-harassment)
It is a priority of Cosumnes River College to prevent and respond to all forms of harassment, including bullying, psychological harassment, racial harassment, religious harassment, stalking, mobbing, hazing, and backlash.

Learn about Cosumnes River College's discrimination and harassment complaint procedures and resolution process.
Equal Opportunity
| Cosumnes River College

Equal Opportunity is the Law

Cosumnes River College is an equal opportunity employer/program. Auxiliary aids and services are available upon request to individuals with disabilities through Disability Support Programs and Services (https://crc.losrios.edu/dsps).

As a recipient of federal financial assistance, it is against the law for Cosumnes River College to discriminate against any individual in the US based on the following: race, color, religion, sex (including pregnancy, childbirth, and related medical conditions, sex stereotyping, transgender status, and gender identity), national origin (including limited English proficiency), age, disability, or political affiliation or belief, or, against any beneficiary of, applicant to, or participant in programs financially assisted under Title I of the Workforce Innovation and Opportunity Act, on the basis of the individual’s citizenship status or participation in any WIOA Title I-financially assisted program or activity.

Cosumnes River College must not discriminate in any of the following areas:

- Deciding who will be admitted, or have access, to any WIOA Title I-financially assisted program or activity
- Providing opportunities in, or treating any person with regard to, such a program or activity
- Making employment decisions in the administration of, or in connection with, such a program or activity

Recipients of federal financial assistance must take reasonable steps to ensure that communications with individuals are as effective as communications with others. This means that, upon request and at no cost to the individual, Cosumnes River College is required to provide appropriate auxiliary aids and services to qualified individuals with disabilities.

What to Do If You Believe You Have Experienced Discrimination

If you think that you have been subjected to discrimination under a Workforce Innovation and Opportunity Act (WIOA) Title I financially assisted program or activity, then you may file a complaint within 180 days from the date of the alleged violation with either Cosumnes River College’s Equal Opportunity Officer (or the person whom the recipient has designated for this purpose) or the Civil Rights Center.

Cosumnes River College Equity Officer

Email: equity@crc.losrios.edu

Phone: (916) 691-7740

Civil Rights Center (https://www.dol.gov/agencies/oasam/centers-offices/civil-rights-center)

US Department of Labor
200 Constitution Avenue NW, Room N-4123
Washington, DC 20210

If you file your complaint with Cosumnes River College, then you must wait either until Cosumnes River College issues a written Notice of Final Action, or until 90 days have passed (whichever is sooner), before filing with the Civil Rights Center (see address above).

If Cosumnes River College does not give you a written Notice of Final Action within 90 days of the day on which you filed your complaint, then you may file a complaint with Civil Rights Center before receiving that notice. However, you must file your Civil Rights Center complaint within 30 days of the 90-day deadline (in other words, within 120 days after the day on which you filed your complaint with the recipient).

If Cosumnes River College does give you a written Notice of Final Action on your complaint, but you are dissatisfied with the decision or resolution, then you may file a complaint with the Civil Rights Center. You must file your Civil Rights Center complaint within 30 days of the date on which you received the Notice of Final Action.

La Igualdad De Oportunidades Es La Ley
Es contra la ley que este beneficiario de asistencia financiera federal discrimine de la siguiente manera: contra cualquier individuo en los Estados Unidos, sobre la base de raza, color, religión, sexo (incluyendo embarazo, parto y afecciones médicas relacionadas, estereotipos sexuales, estatus de transexuales e identidad de género), origen nacional (incluyendo la competencia limitada en inglés), edad, incapacidad, o afiliación o creencia política o contra cualquier beneficiario de, solicitante o participante en programas con asistencia financiera bajo el Título 1 del Workforce Innovation and Opportunity Act (WIOA), sobre la base del estatus de ciudadanía del individuo o la participación en cualquier programa o actividad con asistencia financiera del Título de WIOA.

El destinatario no debe discriminar en ninguna de las siguientes áreas: decidir quién será admitido, o tendrá acceso, a cualquier programa o actividad con asistencia financiera del Título 1 de WIOA; proporcionar oportunidades o el tratar a cualquier persona con respeto a dicho programa o actividad; o, tomar decisiones de empleo en la administración de, o en relación con, tal programa o actividad.

Los destinarios de la asistencia financiera federal deben tomar medidas razonables para garantizar que las comunicaciones con las personas sean tan efectivas como las comunicaciones con los demás. Esto significa que, previa solicitud y sin costo para el individuo, se requiere que los destinarios proporcionen ayuda y servicios auxiliares adecuados a personas calificadas con discapacidades.

Qué Hacer Si Usted Cree Que Ha Experimentado Discriminación

Si usted piensa que ha sido sometido a discriminación bajo una ley de Workforce Innovation and Opportunity Act I (WIOA) Título I programa o actividad asistida financieramente, usted puede presentar una queja dentro de 180 días a partir de la fecha de la presunta violación con cualquier.

El funcionario de Igualdad de Oportunidades del destinario (o la persona a la que el destinatario ha designado para este propósito):

Cosumnes River College Oficial de Equidad
Email: equity@crc.losrios.edu
Teléfono: (916) 691-7740

Civil Rights Center (https://www.dol.gov/agencies/oasam/centers-offices/civil-rights-center)
US Department of Labor
200 Constitution Avenue NW, Room N-4123
Washington, DC 20210

Si presenta su queja con el destinatario, debe esperar hasta que el destinatario emita una Notificación por escrito de la Acción Final. o hasta que hayan pasado 90 días (lo que ocurra primero), antes de presentar su queja con el Civil Rights Center (véase la dirección anterior).

Si el destinatario no le da una Notificación por escrito de la Acción Final dentro de los 90 días del día en que usted presento su queja, usted puede presentar una queja ante el Civil Rights Center antes de recibir ese aviso. Sin embargo, usted debe presentar su queja de Civil Rights Center dentro de 30 días de la fecha límite de 90 días (en otras palabras, dentro de los 120 días después del día en que usted presento su queja con el destinatario).

Si el destinatario le da una Notificación por escrito de la Acción Final sobre su queja, pero usted no está satisfecho con la decisión o resolución, usted puede presentar una queja ante el Civil Rights Center. Usted debe presentar su queja de Civil Rights Center dentro de 30 días de la fecha en que recibió Notificación de le Acción Final.
At Cosumnes River College, we value equity and diversity. That's why we work toward just and fair inclusion into a society in which all people can participate, prosper, and reach their full potential.

No person shall be unlawfully discriminated against, harassed, or excluded from any benefits, activities, or programs because they possess of any of the following characteristics (actual or perceived):

- Ethnic group identification
- Race or color
- Sex, gender, gender identity, or gender expression
- Pregnancy or childbirth-related condition
- Sexual orientation or sexual identity
- Religion or religious creed
- Age (over forty)
- National origin or ancestry
- Physical or mental disability
- Medical condition
- Political affiliation or belief
- Military and veteran status
- Marital status

In addition, retaliation against a person who files a complaint, refers a matter for investigation, participates in an investigation, or serves as an advocate for a complainant or respondent is prohibited by district policy.

For more information or to file a complaint, contact the Cosumnes River College Equity Officer at equity@crc.losrios.edu or (916) 691-7740.
Sexual Harassment or Assault
| Cosumnes River College

Title IX (Sex Discrimination)

Title IX of the Educational Amendments of 1972 and subsequent amendments bans sex discrimination in schools, whether it be in academics or athletics. Title IX states: “No person in the United States shall, on the basis of sex, be excluded from participation in, be denied benefits of, or be subjected to discrimination under any education program or activity receiving federal financial assistance.”

The underlying intent of Title IX is to eliminate any form of discrimination based on gender that may interfere with a student's physical well-being, emotional well-being, and academic performance. Colleges and universities receiving federal funds bear an affirmative duty to ensure that no student (male or female) is deprived of an educational opportunity or benefit due to such discrimination.

Gender Harassment

Sex discrimination in the form of gender harassment consists primarily of repeated comments, jokes, and innuendoes directed at persons because of their gender or sexual orientation. This behavior typically is not aimed at eliciting sexual cooperation, but, like racial harassment, it contaminates the learning and work environment and has no place at Cosumnes River College.

Examples of gender harassment include the following:

- Disparaging women's intellectual abilities and potential
- Using sexist statements in classroom discussions
- Disparaging the lifestyles or behaviors of gays or lesbians

Sexual Harassment Policy

It is the desire of the Los Rios Community College District Board of Trustees to provide for all students and employees an educational environment and workplace free from sexual harassment. Sexual harassment in any situation is unacceptable and is in violation of state and federal laws and regulations. Where evidence of harassment is found, appropriate corrective action shall be taken.

Definition of Sexual Harassment

Sexual harassment means unwelcome sexual advances, requests for sexual favors, and other verbal, visual, or physical conduct of a sexual nature, made by someone from or in the work or educational setting, under any of the following conditions:

- Submission to the conduct is explicitly or implicitly made a term or a condition of an individual's employment, academic status, or progress
- Submission to, or rejection of, the conduct by the individual is used as the basis of employment or an academic decision affecting the individual
- The conduct has the purpose or effect of having a negative impact upon the individual's work or academic performance, or of creating an intimidating, hostile, or offensive work or educational environment
- Submission to, or rejection of, the conduct by the individual is used as the basis for any decision affecting the individual regarding benefits and services, honors, programs, or activities available at or through the educational institution.

Sexual harassment includes, but is not limited to:

- Making unsolicited written, verbal, visual, or physical contact with sexual overtones. Some examples are:
  - Epithets
  - Derogatory comments or slurs of a sexual nature
  - Impeding or blocking movements or any physical interference with normal work
Derogatory posters or cartoons
Continuing to express sexual interest after being informed that the interest is unwelcome (reciprocal attraction is not considered sexual harassment)

Within the work environment, engaging in explicit or implicit coercive sexual behavior which controls, influences, or affects the career, salary, and/or work environment, or any other term or condition of employment

Within the educational environment, engaging in explicit or implicit coercive sexual behavior which controls, influences, or affects the educational opportunities, grades, and/or learning environment of the student

Making reprisals, threats of reprisal, or implied threats of reprisal following a negative response to a sexual advance. For example, within the work environment, either suggesting or actually withholding support for an appointment, promotion, or change of assignment; suggesting a poor performance report will be prepared; or suggesting probation will be failed. Within the educational environment, either suggesting or actually withholding grades earned or deserved; suggesting a poor performance evaluation will be prepared; or suggesting a scholarship recommendation or college application will be denied

Offering favors of educational or employment benefits, such as grades or promotions, favorable performance evaluations, favorable assignments, favorable duties or shifts, recommendations, reclassifications, and so on, in exchange for sexual favors.

Sexual Assault

Sexual assault includes, but is not limited to:

- Rape
- Forced sodomy
- Forced oral copulation
- Rape by a foreign object
- Sexual battery
- Domestic violence
- Dating violence
- Stalking
- Threat of sexual assault

Sexual assault is a form of sexual harassment and should be reported under the district's Discrimination and Harassment Procedures Policy P-2423 and Regulation R-2423.

Sexual Violence

Sexual violence means physical sexual acts perpetrated against a person's will or where a person is incapable of giving consent due to the victim's use of drugs or alcohol. An individual also may be unable to give consent due to an intellectual or other disability. Sexual violence includes, but is not limited to, rape, sexual assault, sexual battery, and sexual coercion.

Consent

Consent is the informed, affirmative, conscious decision by each participant to engage in mutually agreed-upon sexual activity.

Consent must be voluntary, and given without coercion, force, threats, or intimidation. Consent requires positive cooperation in a particular sexual act, or expression of intent to engage in that sexual act through the exercise of free will.

Consent can be withdrawn or revoked. Consent to one form of sexual activity (or one sexual act) does not constitute consent to other forms of sexual activity (or other sexual acts). Consent to sexual activity given on one occasion does not constitute consent to sexual activity on another occasion. The fact that two people are, or were in, a dating or sexual relationship does not constitute consent to engage in sexual activity. There must always be mutual and affirmative consent to engage in sexual activity. Consent to a sexual act may be withdrawn or revoked at any time, including after penetration. The victim's request for the perpetrator to use a condom or birth control does not, in and of itself, constitute consent. Once consent is withdrawn or revoked, the sexual activity must stop immediately.

Consent cannot be given by a person who is incapacitated. For example, a person cannot give consent if she/he is unconscious or coming in and out of consciousness. A person is incapacitated if she/he lacks the physical and/or mental ability to make informed, rational judgments. Examples of incapacitation include unconsciousness, sleep, and blackouts. Whether an intoxicated person (as a result of using alcohol or other drugs) is incapacitated depends on the extent to which the alcohol or other drugs impact the person's decision-making capacity, awareness of consequences, and ability to make fully informed judgments. A person with a medical or mental disability may also lack the capacity to give consent.
Being intoxicated by drugs or alcohol does not diminish a person's responsibility to obtain consent from the other party before engaging in sexual activity. Factors to be considered include whether the person knew, or whether a reasonable person in the accused's position should have known, that the victim did not give, or revoked, consent; was incapacitated; or was otherwise incapable of giving consent.

Sexual intercourse with a minor is never consensual when the victim is under 18 years old, because the victim is considered incapable of giving legal consent due to age.

**Domestic Violence**

Domestic violence is a form of sexual violence and is abuse committed against someone who is a current or former spouse, current or former cohabitant, someone with whom the abuser has a child, someone with whom the abuser has or had a dating or engagement relationship, or a person similarly situated under California domestic or family violence law.

Cohabitant means two unrelated persons living together for a substantial period of time, resulting in some permanency of relationship. Factors that may determine whether persons are cohabiting include, but are not limited to:

1. Sexual relations between the parties while sharing the same living quarters
2. Sharing of income or expenses
3. Joint use or ownership of property
4. Whether the parties hold themselves out as husband and wife
5. The continuity of the relationship
6. The length of the relationship

**Dating Violence**

Dating violence is a form of sexual violence and is abuse committed by a person who is, or has been, in a social or dating relationship of a romantic or intimate nature with the victim. This may include someone the victim just met; for example, a person they met at a party, were introduced to through a friend, or met on a social networking website.

**Stalking**

Stalking means a repeated course of conduct directed at a specific person (when based on gender or sex) that places that person in reasonable fear for his/her or others' safety, or to suffer substantial emotional distress.

**Resources**

For issues regarding sexual harassment and assault, the following resources are available:

- Los Rios Police, (916) 558-2221
- WEAVE Confidential Advocate, (916) 568-3011 or WEAVE@losrios.edu (mailto:WEAVE@losrios.edu)
- Claire Oliveros (Title IX Coordinator), (916) 691-7487 or oliverc@crc.losrios.edu (mailto:oliverc@crc.losrios.edu)
Types of Harassment

It is a priority of Cosumnes River College to prevent and respond to all forms of harassment, including bullying, psychological harassment, racial harassment, religious harassment, stalking, mobbing, hazing, and backlash.

Bullying

Bullying is physical and psychological harassing behavior perpetrated against an individual, by one or more persons. Bullying can occur on the playground, in school, on the job, or any other place.

HB 1576 defines bullying as recklessly or intentionally endangering the health or safety of a student by exposing the student repeatedly and over time to physical aggression or intimidation, whether through direct physical contact or through the use of information or communication technology, resulting in bodily injury or other harm to person or property. This definition does not supersede or limit any definition of bullying developed by the Board of Education or the actual codes of student conduct adopted by school boards pursuant to Section 221-279.6. Bullying is punishable as a Class 1 misdemeanor.

Workplace bullying is repeated, health-harming mistreatment of one or more persons (the targets) by one or more perpetrators that takes one or more of the following forms:

- Verbal abuse
- Offensive conduct/behaviors (including nonverbal) which are threatening, humiliating, or intimidating
- Work interference (sabotage) which prevents work from getting done

Psychological Harassment

Psychological harassment is humiliating or abusive behavior that lowers a person's self-esteem or causes them torment. This can take the form of verbal comments, actions, or gestures. Workplace mobbing is considered psychological harassment.

Racial Harassment

Racial harassment is the targeting of an individual because of their race or ethnicity. The harassment includes words, deeds, and actions that are specifically designed to make the target feel degraded due to their race of origin or ethnicity.

Religious Harassment

Religious harassment is verbal, psychological, or physical harassment used against targets because they choose to practice a specific religion. Religious harassment can also include forced and involuntary conversions.

Stalking

Stalking is the unauthorized following and surveillance of an individual, to the extent that the person's privacy is unacceptably intruded upon and the victim fears for their safety.

Mobbing

Mobbing is violence committed directly or indirectly by a loosely affiliated and organized group of individuals to punish or even execute a person for an alleged offense without a lawful trial. The "offense" can range from a serious crime, like murder to simple expression of ethnic, cultural, or religious attitudes. The issue of the victim's actual guilt or innocence is often irrelevant to the mob, since the mob relies on contentions that are unverifiable, unsubstantiated, or completely fabricated.

Hazing
Hazing is persecuting, harassing, or torturing in a deliberate, calculated, planned manner. Typically the targeted individual is a subordinate, for example, a fraternity pledge, a first-year military cadet, or somebody who is considered "inferior" or an "outsider." Hazing is illegal in many instances.

Backlash

Backlash or "victim blaming" occurs when the harasser or other people in the environment blame the victim for the harassment or the resulting controversies and conflicts after the harassment is reported or discovered.

Backlash results when people erroneously believe the victim could stop the harassment if they really tried, or that the victim must have done something to cause the harassment. The victim may be accused of trying to get attention, covering for incompetence, or in cases where the harassment is proven, lying about the extent of the effects.

Outdated attitudes about certain kinds of harassment remain and there is often social pressure for victims to keep quiet about abuse or suffer the consequences.
Discrimination and Harassment Complaint Procedures
| Cosumnes River College

How to File a Complaint

To file a complaint, fill out a Discrimination Complaint Form (/lrccd/shared/doc/legal/discrimination-complaint-form.pdf) (PDF) and submit it to your equity officer. This form is not required and a complaint will not be rejected based on failure to use the form.

For more information or to file a complaint, contact the Cosumnes River College Equity Officer at equity@crc.losrios.edu (mailto:equity@crc.losrios.edu) or (916) 691-7740.

Complaint Resolution

If it is determined that misconduct occurred, then Cosumnes River College will take immediate steps to halt misconduct and remedy any effects of that misconduct.

An equity officer will hold an informal conference if the complainant wants to try and resolve the complaint informally. The equity officer will provide information about applicable laws and rules. If an informal resolution is not reached or if the complainant disagrees with the recommendation made, then the complainant may engage in a formal resolution process.
Graduation and Transfer
| Cosumnes River College

Make a Plan for Transfer Success

Students who plan to transfer to the California State University (CSU) system, the University of California (UC) system, or to a private or out-of-state college or university should make an education plan with a counselor. This will ensure you meet the requirements for the specific institution you plan to attend.

Transfer eligibility is based on transferable college units and/or high school records and test scores. Each institution has its own admission requirements. To prepare for transfer:

1. Decide where you want to transfer
2. Talk to a counselor about that school's specific requirements
3. Create an education plan

In This Section

Graduation Requirements (/2020-2021-catalog/graduation-and-transfer/graduation-requirements)
Learn about graduating from Cosumnes River College, including how to petition for a degree or certificate and annual commencement ceremonies.

Commencement (/2020-2021-catalog/graduation-and-transfer/commencement)
Cosumnes River College has one commencement ceremony in May of each year, at the end of the spring semester.

While You Are Here (/2020-2021-catalog/graduation-and-transfer/preparing-to-transfer)
Students who plan to transfer should make an education plan with a counselor to ensure they meet the requirements for the specific institution they plan to attend.
In This Section

Petition for a Certificate (/2020-2021-catalog/graduation-and-transfer/graduation-requirements/petition-for-a-certificate)
Learn how to petition for a certificate at Cosumnes River College.

Petition for a Degree (/2020-2021-catalog/graduation-and-transfer/graduation-requirements/petition-for-a-degree)
Learn how to petition for a degree at Cosumnes River College.

Associate Degree Graduation Requirements (/2020-2021-catalog/graduation-and-transfer/graduation-requirements/associate-degree-graduation-requirements)
See the requirements for graduating with an associate degree (AA or AS) from Cosumnes River College.
Petition for a Certificate  
| Cosumnes River College

How to Petition for a Certificate

Students can file a petition for a certificate using our online certificate petition form [https://resources.crc.losrios.edu/services/admissions/gradpetition], or they can meet with a counselor [https://crc.losrios.edu/counseling] to file a certificate petition. Cosumnes River College does not automatically confer certificates because requirements vary from program to program.

Requirements

To petition for a certificate, students must:

1. Know their catalog year*
2. Complete all certificate requirements with a minimum grade point average (GPA) of 2.0
3. Complete at least 12 units toward the certificate at Cosumnes River College (this does not apply to certificates that are less than 12 units)

* Usually, students follow the current catalog year. However, if you are following certificate requirements from an old catalog, then you must have maintained catalog rights ([/2020-2021-catalog/graduation-and-transfer/graduation-requirements/petition-for-a-certificate#catalog-rights]).

Required Documentation

The following must be on file in the Admissions and Records Office for a certificate petition to be processed:

- Official transcripts of all coursework completed at colleges outside of the Los Rios Community College District
- Official copies of AP/IB/CLEP test scores, if applicable
- A copy of DD214-military discharge papers, if veteran desires credit for military units
- List of courses in progress if attending another college
- Official final transcripts will be required at the end of the semester for final certificate evaluation
- Copy of any required competency tests, if applicable

Students must complete all certificate requirements by the end of the semester in which they petition for a certificate.

Petition Deadlines for 2020-2021

- Summer 2020: Friday, June 19, 2020
- Fall 2020: Friday, October 2, 2020
- Spring 2021: Friday, March 5, 2021

Approval or Denial

You will be notified via email if your petition is approved or denied.

If denied, then you will be notified of the missing requirements and advised to submit a new petition. If approved, then your certificate of achievement will be posted to your transcript at the end of the semester.

We mail certificates to the address listed on your petition, unless you choose to pick up your certificate. You will be notified when your certificate is available for pick-up.
<table>
<thead>
<tr>
<th>PETITION SEMESTER</th>
<th>PETITION DEADLINE</th>
<th>APPROVAL/DENIAL DATE</th>
<th>MAILED OR READY FOR PICK-UP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Summer</td>
<td>Third Friday in June</td>
<td>Mid-October</td>
<td>End of October</td>
</tr>
<tr>
<td>Fall</td>
<td>First Friday in October</td>
<td>End of March</td>
<td>Mid-April</td>
</tr>
<tr>
<td>Spring</td>
<td>First Friday in March</td>
<td>End of August</td>
<td>Early October</td>
</tr>
</tbody>
</table>

Catalog Rights

For the purpose of graduating or earning a certificate from any college in the Los Rios Community College District, a student who attends at least one session (whether quarter, semester, or summer) in each calendar year at any California community college, California State University, University of California, or any regionally accredited institution of higher education, may choose to meet the requirements in effect at the Los Rios college from which the student intends to graduate, as follows:

- Requirements that were in effect at the time the student was admitted to a Los Rios college
- Requirements that were in effect at the time the student originally enrolled in an accredited college
- Requirements that were in effect at the intended date of graduation from a Los Rios college

Certificate of Achievement vs. Certificate of Proficiency

A Certificate of Achievement requires 18 or more units, while a Certificate of Proficiency requires fewer than 18 units. In addition, a Certificate of Achievement is posted to a student's transcript, while a Certificate of Proficiency is not. A Certificate of Proficiency cannot be posted to a student's transcript unless it has been approved by the California Community College Chancellor's Office, per Title 5 Regulation 55070.b.
Petition for a Degree  
| Cosumnes River College

How to Petition for a Degree

Students can file a petition for a degree using our online degree petition form [here](https://resources.crc.losrios.edu/services/admissions/gradpetition), or they can meet with a counselor [here](https://crc.losrios.edu/counseling) to file a degree petition. Cosumnes River College does not automatically confer degrees because requirements vary from program to program.

Requirements

To petition for a degree, students must:

1. Know their catalog year*
2. Complete all degree requirements with a minimum grade point average (GPA) of 2.0
3. Complete at least 12 units toward the degree at Cosumnes River College

* Usually, students follow the current catalog year. However, if a student is following certificate requirements from an old catalog, then they must have maintained catalog rights ([2020-2021 catalog/graduation-and-transfer/graduation-requirements/petition-for-a-degree#catalog-rights](https://2020-2021-catalog/graduation-and-transfer/graduation-requirements/petition-for-a-degree#catalog-rights)).

Required Documentation

The following must be on file in the Admissions and Records Office for a degree petition to be processed:

- Official transcripts of all coursework completed at colleges outside of the Los Rios Community College District
- Official copies of AP/IB/CLEP test scores, if applicable
- A copy of DD214-military discharge papers, if veteran desires credit for military units
- List of courses in progress if attending another college
- Official final transcripts will be required at the end of the semester for final degree evaluation
- Copy of any required competency tests, if applicable

Students must complete all degree requirements by the end of the semester in which they petition for a degree.

Petition Deadlines for 2020-2021

- Summer 2020: Friday, June 19, 2020
- Fall 2020: Friday, October 2, 2020
- Spring 2021: Friday, March 5, 2021

Approval or Denial

You will be notified via email if your petition is approved or denied.

If denied, then you will be notified of the missing requirements and advised to submit a new petition. If approved, then your degree will be posted to your transcript at the end of the semester.

We mail degrees to the address listed on your petition, unless you choose to pick up your degree. You will be notified when your degree is available for pick-up.
<table>
<thead>
<tr>
<th></th>
<th>3rd Friday in June</th>
<th>Mid-October</th>
<th>End of October</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Summer</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Fall</strong></td>
<td>First Friday in October</td>
<td>End of March</td>
<td>Mid-April</td>
</tr>
<tr>
<td><strong>Spring</strong></td>
<td>First Friday in March</td>
<td>End of August</td>
<td>Early October</td>
</tr>
</tbody>
</table>

**Catalog Rights**

For the purpose of graduating or earning a certificate from any college in the Los Rios Community College District, a student who attends at least one session (whether quarter, semester, or summer) in each calendar year at any California community college, California State University, University of California, or any regionally accredited institution of higher education, may choose to meet the requirements in effect at the Los Rios college from which the student intends to graduate, as follows:

- Requirements that were in effect at the time the student was admitted to a Los Rios college
- Requirements that were in effect at the time the student originally enrolled in an accredited college
- Requirements that were in effect at the intended date of graduation from a Los Rios college
Students may graduate from Cosumnes River College with the Associate in Arts (AA) or the Associate in Science (AS) degree by fulfilling the following requirements:

1. Satisfactory completion of 60 units of collegiate work with a 'C' (2.0) grade point average (GPA) in a curriculum that the district accepts toward the degree. At least 12 of the 60 units must be earned at Cosumnes River College.

2. Major: Complete an AA or AS Major Program of Study offered at Cosumnes River College. Courses used to complete requirements for the major must be completed with a grade of 'C' or better.

3. Demonstration of competency in reading, written expression, and mathematics.

4. Completion of Cosumnes River College's general education requirements with a minimum GPA of 2.0 in courses used for general education (21 units minimum) or possession of a Baccalaureate Degree (BA/BS) or higher from a regionally accredited college or university in the US.*

5. Students are held to the graduation requirements established at the time they begin college as long as they maintain their catalog rights.

Note: Effective beginning summer 2004, students who possess a BA/BS or higher degree from a regionally accredited college or university in the United States are deemed to have met the General Education and Graduation Competency Requirements for an AA/AS degree.

* See District Policy P-7241 and Regulation R-7241.

Graduation Competency Requirements

Demonstrate college-level competence in reading, written expression, and mathematics by completing the following:

1. **Reading Competency** (one of the following) –
   - Completion of Cosumnes River College's General Education pattern
   - Completion and certification of the CSU GE Breadth pattern
   - Completion and certification of the IGETC pattern

2. **Written Expression Competency** (one of the following) –
   - Completion with a grade of 'C' or better of ENGWR 300, ENGWR 341, ENGWR 480, HONOR 375, or BUS 310
   - Completion with a grade of 'C' or better of an equivalent college writing course at a regionally accredited college in the US

3. **Mathematics Competency** (one of the following) –
   - Completion with a grade of 'C' or better in MATH 110, 120, 125, or 144; ECON 310; HONOR 393; POLS 382; or PSYC 330
   - Completion with a grade of 'C' or better of a designated higher-level mathematics/statistics course
   - Completion with a grade of 'C' or better of a college math course at a regionally accredited college
   - Obtain a satisfactory score on a mathematics competency examination used district-wide for graduation
General Education Requirements for AA/AS Degrees

I. Humanities

Choose one course for a minimum of three units.

<table>
<thead>
<tr>
<th>AREA</th>
<th>COURSES</th>
</tr>
</thead>
</table>

II. Language and Rationality

Choose two courses. Complete three units in each area.

<table>
<thead>
<tr>
<th>AREA</th>
<th>COURSES</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) English Composition</td>
<td>BUS 310; ENGED 310, 305; ENGRWR 300, 341, 480; HONOR 375</td>
</tr>
<tr>
<td>b) Communication and Analytical Thinking</td>
<td>ACCT 101, 301; CISC 310; CISP 300, 350, 360, 370, 400; COMM 301, 311, 315, 331, 361, 363; ECON 310; ENGCW 400, 410, 420, 430; ENGLT 488; ENGRD 310, 311; ENGRWR 302; HONOR 378, 393; JOUR 300; LIBR 324; MATH 110, 120, 125, 144, 300, 310, 335, 341, 343, 350, 351, 355, 356, 370, 400, 401, 402, 410, 420; PHIL 300, 320, 325; POLS 382; PSYC 330, 335; RTVF 306; SOC 305; STAT 300, 480</td>
</tr>
</tbody>
</table>

III. Living Skills

Choose two courses. Complete one course (three units minimum) in each area.

<table>
<thead>
<tr>
<th>AREA</th>
<th>COURSES</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Physical Education</td>
<td>ADAPT, DANCE, FITNS, PACT, SPORT, TMACT</td>
</tr>
<tr>
<td>b) Life Development Skills</td>
<td>ACCT 498; ADT 498, 498; AGB 498; AH 498; AMT 300, 498; ANSC 498; ANTH 498; ARCH 498; ASTR 498; BIOL 498; BIT 298; BUS 498; BUSTEC 302; CAM 498; CHEM 498; CISC 302, 310, 498; CMT 498; COMM 321, 498; CONST 298; ECE 312, 314, 322, 350, 415, 430, 498; EMT 298; ENGED 320; ENGR 498; FCS 324; FT 498; HCD 110, 112, 122, 132, 310, 340, 346, 382; HEED 300, 350; HIT 298; HORT 498; HRIT 298; HSER 302, 498; INDIS 313, 350; JOUR 330, 498; KINES 300, 301, 416, 498; LIBR 318, 324; MEDA 298; MGMT 498; MKT 498; MUSM 498; NUTRI 300, 303, 322, 331; PHARM 300; PHOTO 498; PHYS 498; PLTS 498; PSYC 340, 356, 371; RE 498; RTVF 498; SGVT 300, 315; SOC 310; TA 498; VT 298; WELD 298; WEXP 198, 298, 498</td>
</tr>
</tbody>
</table>

IV. Natural Sciences

Choose one course for a minimum of three units.
V. Social and Behavioral Sciences

Choose two courses. Complete a minimum of three units in each area.

<table>
<thead>
<tr>
<th>AREA</th>
<th>COURSES</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) American Institutions</td>
<td>HIST 310, 311, 314, 320, 321, 331, 371, 485; HONOR 366, 367; POLS 301, 481</td>
</tr>
<tr>
<td>b) Social/Behavioral Sciences</td>
<td>AGB 321; ANTH 321, 303, 310, 313, 316, 323, 324, 331, 332, 334, 336, 341, 374; BUS 320, 330, 345; COMM 325, 341, 480; ECE 321, 326, 430; ECON 100, 300, 302, 304, 306, 320; ETHNS 300, 320, 330, 340, 344; GEOG 302, 310, 320, 322; HIST 301, 302, 307, 308, 344, 360, 364, 365, 370, 373, 380; HONOR 340, 367; JOUR 310, 320; KINES 416, 460; NUTRI 310; PHIL 360; POLS 302, 304, 310, 312, 313, 314, 315, 317, 320, 481; PSYC 300, 320, 340, 368, 371; RTVF 300; SJS 300; SOC 300, 301, 302, 305, 321, 341</td>
</tr>
</tbody>
</table>

VI. Ethnic/Multicultural Studies

Choose a minimum of three units from the following courses.

<table>
<thead>
<tr>
<th>AREA</th>
<th>COURSES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethnic/Multicultural Studies</td>
<td>ANTH 310, 313, 316, 324, 331, 332, 334, 336; ARTH 324, 325, 328, 332; BUS 330; CAM 302; COMM 325; DANCE 386; ECE 430; ENGLT 336, 340, 343, 345, 360; ENGRD 200; ETHNS 300, 320, 330, 340, 344; GEOG 310, 320, 322; HIST 308, 344; HONOR 364; HUM 324, 331, 332; JOUR 320; MUFHL 330; NUTRI 310; PHIL 304, 352; PSYC 368; SJS 300; SOC 321; TA 306</td>
</tr>
</tbody>
</table>

Catalog Rights

For the purpose of graduating or earning a certificate from any college in the Los Rios Community College District, a student who attends at least one session (whether quarter, semester, or summer) in each calendar year at any California community college, California State University, University of California, or any regionally accredited institution of higher education, may choose to meet the requirements in effect at the Los Rios college from which the student intends to graduate, as follows:

- Requirements that were in effect at the time the student was admitted to a Los Rios college
- Requirements that were in effect at the time the student originally enrolled in an accredited college
- Requirements that were in effect at the intended date of graduation from a Los Rios college
Commencement
| Cosumnes River College

Cosumnes River College has one commencement ceremony in May of each year, at the end of the spring semester. Students who meet the graduation requirements during the prior summer semester (August), prior fall semester (December), or during the spring semester may participate in the graduation commencement exercise.

All students who are eligible for an associate degree must petition for graduation.
While You Are Here
| Cosumnes River College

Make a Plan for Transfer Success

Students who plan to transfer to the California State University (CSU) system, the University of California (UC) system, or to a private or out-of-state college or university should make an education plan with a counselor. This will ensure you meet the requirements for the specific institution you plan to attend.

Transfer eligibility is based on transferable college units and/or high school records and test scores. Each institution has its own admission requirements. To prepare for transfer:

1. Decide where you want to transfer
2. Talk to a counselor about that school's specific requirements
3. Create an education plan

In This Section

Transfer to California State University (/2020-2021-catalog/graduation-and-transfer/preparing-to-transfer/transfer-to-california-state-university)
Learn about transferring from Cosumnes River College to a California State University (CSU).

Transfer to University of California (/2020-2021-catalog/graduation-and-transfer/preparing-to-transfer/transfer-to-university-of-california)
Learn about transferring from Cosumnes River College to the University of California (UC) system.

Transfer to Private Colleges (/2020-2021-catalog/graduation-and-transfer/preparing-to-transfer/transfer-to-private-colleges)
Learn how to transfer from Cosumnes River College to a private or out-of-state college or university.

California State University General Education Requirements (/2020-2021-catalog/graduation-and-transfer/preparing-to-transfer/california-state-university-general-education-requirements)
See the California State University (CSU) general education/breadth requirements, for students who intend to transfer from Cosumnes River College to a CSU.

Intersegmental General Education Transfer Curriculum Requirements (/2020-2021-catalog/graduation-and-transfer/preparing-to-transfer/intersegmental-general-education-transfer-curriculum-requirements)
See the Intersegmental General Education Transfer Curriculum Requirements (IGETC) general education requirements, for students who intend to transfer from Cosumnes River College to a California State University (CSU) or University of California (UC).

Transfer Degree Requirements (/2020-2021-catalog/graduation-and-transfer/preparing-to-transfer/transfer-degree-requirements)
Learn about transfer degrees, which provide a clear pathway from Cosumnes River College to a California State University major and bachelor's degree.

Course Transferability and C-ID (/2020-2021-catalog/graduation-and-transfer/preparing-to-transfer/course-transferability-and-c-id)
Learn about the course identification numbering system (C-ID) and how to identify which courses are transferable.
Transfer Requirements

Students who plan to transfer to the California State University (CSU) system must meet certain requirements. The requirements differ based on whether you:

1. Were eligible for admission to a CSU directly after high school
2. Are only now eligible for admission through community college transfer

CSU accepts a maximum of 70 transferable semester units completed at a community college.

Eligible for Transfer After High School

High school eligibility is based on test scores, grade point averages, and completion of specific subject area requirements.

If you were eligible for admission to a CSU when you graduated from high school – but you decided to attend a community college first – then you can transfer to certain CSUs at any time, as long as you maintain a 2.0 grade point average for all transferable coursework.

Eligible for Transfer Through Community College

If you were not eligible for admission to a CSU when you graduated from high school, then you may be eligible for transfer after you complete the following at a California community college:

1. A minimum of 60 transferable units with a 2.0 grade point average*
2. Either of the following general education requirements:
   a. At least 30 units of CSU general education requirements, including:
      a. Area A1, A2, and A3
      b. Area B4
   b. Intersegmental General Education Transfer Curriculum (IGETC) requirements

In addition to general education and graduation requirements, we encourage you to complete lower-division preparatory courses for your major as required by the CSU to which you want to transfer. You can find lower-division major requirements at assist.org, the official state-wide repository for transfer and course articulation information.

* GPA requirements are higher for campuses or majors that are impacted or more competitive. The minimum GPA for international or non-resident students is 2.4 instead of 2.0.

Application Dates and Deadlines

Priority application deadlines for CSU:

- For fall admission, October 1 to November 30 of the prior year
- For spring admission, August 1 to 31 of the prior year
Transfer to University of California | Cosunmes River College

Transfer Requirements

Students who plan to transfer to the University of California (UC) system must meet certain requirements. The requirements are slightly different, based on whether you:

- Were eligible for admission to a UC directly after high school
- Are only now eligible through community college transfer

Eligible for Transfer After High School

If you were eligible for admission to a particular UC when you graduated from high school, then you are eligible to transfer at any time if you maintain a 2.0 grade point average in transferable coursework.

Eligible for Transfer Through Community College

Subject Requirement

If you met the scholarship requirement after high school – but not the subject requirement – then you must do all of the following to transfer to a UC:

1. Take transferable college courses in the missing subject areas
2. Earn a C or better in each required course
3. Have a 2.0 grade point average (GPA) in all transferable coursework

Examination Requirement

If you met the scholarship requirement – but not the examination requirement – then you must complete a minimum of 12 semester units of transferable work and maintain a 2.0 grade point average in transferable coursework.

Scholarship Requirement

If you did not meet the scholarship requirement, then you must do the following:

1. Complete 60 units of UC-transferable college credit with a grade point average of at least 2.4 (for California residents) or 2.8 (for non-residents)
2. Complete the following course pattern, earning a grade of C or better in each course:
   - Two transferable courses (3 units each) in English composition
   - One transferable course (3 units) in mathematical concepts and quantitative reasoning
   - Four transferable courses (3 units each) chosen from at least two of the following subject areas: the arts and humanities, the social and behavioral sciences, or the physical and biological sciences

   1 Students who satisfy the Intersegmental General Education Transfer Curriculum prior to transferring to UC will satisfy number 2 above.

Intersegmental General Education Transfer Curriculum (IGETC)

When you complete the IGETC pattern, you partially fulfill the 60-unit requirement for transfer to UC and complete the lower division general education breadth requirements. You should request your IGETC certification from the community college you last attended when your final transcript is sent to the UC campus.
The IGETC is best if you have not yet chosen a major or a campus. Once you have selected a major, it is important to begin fulfilling any required preparatory classes for that major. This is especially true for professional or "high-unit" majors. If you are preparing for an engineering or a high-unit science major at a UC campus, then it is not advisable to use the IGETC. Instead you should concentrate on fulfilling the 60-unit admission requirement by completing lower division major preparation courses as well as the basic admission requirements listed above.

Helpful Hints

- Connect with a counselor regularly to monitor your transfer progress.
- Many courses other than the ones listed in the IGETC will transfer to UC. The units from those other courses will count toward the 60 units required to transfer as a junior. Check the catalog for the transfer status of any course.
- Though transfers do not require an associate degree, it is easy to complete one while preparing to transfer. Learn about associate degree graduation requirements (https://crc.losrios.edu/2020-2021-catalog/graduation-and-transfer/graduation-requirements/associate-degree-graduation-requirements).
- Check with your counselor about other courses needed for your major. In many cases, it is to your advantage to complete all pre-major requirements as well as general education requirements before you transfer.
Even if Cosumnes River College does not have a transfer agreement with a private or out-of-state college to which you want to transfer, you can probably receive academic credit for most of your community college classes. Most four-year institutions give full credit for general education courses and other courses designated for transfer at community college.

In addition, many out-of-state colleges participate in the Western Undergraduate Exchange (WUE) (https://www.wiche.edu/WUE/students), which offers discounts to California students in certain majors.

Find Out Transfer Requirements

Many colleges require transfer students to have completed a certain number of units, so make sure you check the requirements of the college to which you want to transfer. Transfer requirements are generally outlined in a college's catalog.
The following Cosumnes River College courses fulfill California State University (CSU) lower-division general education requirements.

A. English Language Communication and Critical Thinking

Choose one course from each area for a minimum of nine units.

<table>
<thead>
<tr>
<th>AREA</th>
<th>COURSES</th>
</tr>
</thead>
<tbody>
<tr>
<td>A1</td>
<td>COMM 301, 331, 361</td>
</tr>
<tr>
<td>A2</td>
<td>ENGWR 300, 480; HONOR 375</td>
</tr>
<tr>
<td>A3</td>
<td>COMM 311, 315, 482; ENGRD 310, 311; ENGWR 301, 302; HONOR 341; PHIL 300, 320, 325; SOC 305</td>
</tr>
</tbody>
</table>

B. Scientific Inquiry and Quantitative Reasoning

Choose one course from each area for a minimum of nine units. Courses in area B3 may also be used in areas B1 or B2 where appropriate. Related lecture courses must be completed prior to or concurrently with lab courses.

<table>
<thead>
<tr>
<th>AREA</th>
<th>COURSES</th>
</tr>
</thead>
<tbody>
<tr>
<td>B1</td>
<td>ASTR 300; CHEM 300, 305, 306, 309, 321, 400, 401, 420, 421; ENGR 304; GEOG 300, 305, 306; GEOL 300, 305, 310, 330; HORT 302; PHYS 310, 350, 360, 370, 380, 411, 421, 431; PLTS 310</td>
</tr>
<tr>
<td>B2</td>
<td>ANTH 300, 303; BIOL 300, 307, 310, 342, 350, 352, 400, 410, 420, 430, 431, 440, 462, 485; HONOR 385; PSYC 312</td>
</tr>
<tr>
<td>B3</td>
<td>ANTH 301; ASTR 400; BIOL 307, 310, 400, 410, 420, 430, 431, 440; CHEM 300, 305, 306, 309, 322, 400, 401, 420, 421; ENGR 304; GEOG 301; GEOL 301, 306, 311; HORT 302; PHYS 350, 360, 370, 380, 411, 421, 431; PLTS 310; PSYC 312</td>
</tr>
<tr>
<td>B4</td>
<td>ECON 310; HONOR 393; MATH 300, 310, 335, 341, 343, 350, 351, 355, 356, 370, 400, 401, 402, 410, 420; PSYC 330; STAT 300, 480</td>
</tr>
</tbody>
</table>

C. Arts and Humanities

Choose one course from each area, plus an additional course from either area, for a minimum of nine units.

<table>
<thead>
<tr>
<th>AREA</th>
<th>COURSES</th>
</tr>
</thead>
</table>
### D. Social Sciences

Choose three courses from at least two different disciplines for a minimum of nine units.

<table>
<thead>
<tr>
<th>AREA</th>
<th>COURSES</th>
</tr>
</thead>
<tbody>
<tr>
<td>D</td>
<td>AGB 321; ANTH 310, 313, 316, 323, 324, 331, 332, 334, 336, 341, 374; BUS 330, 345; COMM 325, 341, 363, 480; DEAF 351, 352; ECE 312, 314; ECON 300, 302, 304, 306; ETHNS 300, 320, 330, 340, 344; GEOG 302, 310, 320, 322; HIST 301, 302, 307, 308, 310, 311, 314, 320, 321, 331, 344, 360, 364, 365, 370, 371, 373, 380, 485; HONOR 340, 366, 367; JOUR 310, 320; KINES 416; PHIL 360; POLS 301, 302, 304, 310, 311, 312, 313, 314, 315, 317, 318, 329, 330, 332, 348, 380, 381, 384, 386, 390, 406, 440, 441, 442, 443, 444, 495; PACT 310, 311, 390, 495, 499; RTFV 300; SOC 300, 301, 302, 305, 310, 321, 341; TA 306</td>
</tr>
</tbody>
</table>

### E. Lifelong Learning and Self Development

Choose at least one course for a minimum of three units.

<table>
<thead>
<tr>
<th>AREA</th>
<th>COURSES</th>
</tr>
</thead>
<tbody>
<tr>
<td>E1</td>
<td>COMM 321; ECE 312, 314; ENGED 320; FCS 324; HCD 310; HEED 300, 350; HSER 302; INDIS 313; KINES 300, 301; NUTRI 300; PSYC 340, 356, 371; SOC 310</td>
</tr>
</tbody>
</table>

* Consult a counselor or assist.org (https://assist.org) to see if a specific physical education activity course is appropriate for CSU general education Area E.

### F. US History, Constitution, and American Ideals

This is a CSU graduation requirement only – it is not required for CSU general education certification. Choose one course from each area for a total of two courses. These courses can also be used to satisfy Area D.

<table>
<thead>
<tr>
<th>AREA</th>
<th>COURSES</th>
</tr>
</thead>
<tbody>
<tr>
<td>F1</td>
<td>HIST 310, 320; HONOR 367; POLS 301, 481</td>
</tr>
<tr>
<td>F2</td>
<td>HIST 310, 311, 314, 320, 321, 331</td>
</tr>
</tbody>
</table>
Intersegmental General Education Transfer Curriculum Requirements
| Cosumnes River College

Completion of all the requirements in the Intersegmental General Education Transfer Curriculum (IGETC) meet lower-division general education requirements at either a California State University (CSU) or University of California (UC) without the need after transfer to take additional lower division general education courses. All courses must be completed with grades of "C" or better.

Students can also visit assist.org (https://assist.org) to see which courses will complete lower-division major preparation requirements. Students must see a counselor to have the IGETC pattern certified before transferring. Students who have selected a specific campus for transfer should consult with a counselor before following the IGETC pattern.

Advanced Placement (AP) and International Baccalaureate (IB) examinations are appropriate for inclusion on the IGETC pattern.

Area 1: English Communication
Choose one course from each area for a total of six to nine units.

<table>
<thead>
<tr>
<th>AREA</th>
<th>COURSES</th>
<th>NOTE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1A</td>
<td>ENGWR 300, 480; HONOR 375</td>
<td>For UC only: ENGWR 300 and 480 combined: maximum credit – one course.</td>
</tr>
<tr>
<td>1B</td>
<td>COMM 311, 315, 482; ENGWR 301, 302; HONOR 341</td>
<td>For UC only: ENGWR 301 and 481 combined: maximum credit – one course; or ENGWR 302 and 482 combined: maximum credit – one course.</td>
</tr>
<tr>
<td>1C</td>
<td>COMM 301, 331, 361</td>
<td>This is a CSU requirement only and is required for all associate degrees for transfers (ADTs).</td>
</tr>
</tbody>
</table>

Area 2: Mathematical Concepts and Quantitative Reasoning
Choose one course for a total of three units.

<table>
<thead>
<tr>
<th>AREA</th>
<th>COURSES</th>
</tr>
</thead>
<tbody>
<tr>
<td>2A</td>
<td>ECON 310; HONOR 393; MATH 300, 341, 350, 351, 355, 356, 370, 400, 401, 402, 410; PSYC 330; STAT 300, 480</td>
</tr>
</tbody>
</table>

Area 3: Arts and Humanities
Choose one course from each area, plus an additional course from either area, for a total of nine units.

<table>
<thead>
<tr>
<th>AREA</th>
<th>COURSES</th>
</tr>
</thead>
<tbody>
<tr>
<td>3A Arts</td>
<td>ARTH 300, 303, 307, 309, 311, 312, 324, 325, 328, 332, 333; DANCE 386; ENGLT 488; FMS 300, 305, 320; HONOR 378; MUFHL 300, 308, 310, 311, 315, 321, 330, 400, 416; PHOTO 420; RTVF 305; TA 300, 302, 303, 305, 306</td>
</tr>
</tbody>
</table>
Area 3: Arts and Humanities

Choose one course from each area, plus an additional course from either area, for a total of nine units.

<table>
<thead>
<tr>
<th>AREA</th>
<th>COURSES</th>
</tr>
</thead>
<tbody>
<tr>
<td>3B</td>
<td>ARTH 328, 333; DEAF 316; ENGLT 303, 310, 311, 320, 321, 330, 336, 340, 341, 343, 345, 360, 402, 488; ENGWR 301; FMS 488; HIST 364, 365, 380, 485; HONOR 350, 364, 366, 378; HUM 300, 301, 310, 320, 324, 331, 332; PHIL 300, 304, 310, 330, 331, 338, 350, 352, 356, 360, 485; RLST 301; SPAN 411, 412, 413, 415, 425, 426, 427; VIET 411, 412</td>
</tr>
</tbody>
</table>

Area 4: Social and Behavioral Sciences

Choose three courses from at least two different areas for a total of nine units.

<table>
<thead>
<tr>
<th>AREA</th>
<th>COURSES</th>
</tr>
</thead>
<tbody>
<tr>
<td>4A</td>
<td>ANTH 310, 313, 316, 323, 324, 331, 332, 334, 336, 341, 374; BUS 345; COMM 325, 480; DEAF 351; ECE 312, 314; ECON 300, 302, 304, 306; ETHNS 300, 320, 330, 340, 344; GEOG 300, 310, 320, 322; HIST 301, 302, 307, 308, 310, 311, 314, 320, 321, 331, 344, 360, 364, 365, 370, 371, 373, 380, 485; HONOR 340, 366, 367; JOUR 310, 320; POLS 301, 302, 304, 310, 311, 312, 313, 314, 315, 317, 318, 319, 320, 324, 380, 481; PSYC 300, 320, 335, 340, 356, 368, 371; RTVF 300; SOC 300, 301, 302, 310, 321, 341; TA 306</td>
</tr>
</tbody>
</table>

Area 5: Physical and Biological Sciences

Choose one course from each area for a total of seven to nine units. Lecture courses must be completed prior to or concurrently with labs. Courses used in 5C may also be used in 5A or 5B if listed in these areas.

<table>
<thead>
<tr>
<th>AREA</th>
<th>COURSES</th>
</tr>
</thead>
<tbody>
<tr>
<td>5A</td>
<td>ASTR 300; CHEM 300, 305, 306, 309, 321, 400, 401, 420, 421; GEOG 300, 305, 306; GEOL 300, 305, 310, 330; HORT 302; PHYS 310, 350, 360, 370, 380, 411, 421, 431; PLTS 310</td>
</tr>
<tr>
<td>5B</td>
<td>ANTH 300, 303; BIOL 300, 307, 310, 342, 352, 400, 410, 420, 430, 431, 440, 462, 485; HONOR 385; PSYC 312</td>
</tr>
<tr>
<td>5C</td>
<td>ANTH 301; ASTR 400; BIOL 307, 310, 400, 410, 420, 430, 431, 440; CHEM 300, 305, 306, 309, 322, 400, 401, 420, 421; GEOG 301; GEOL 301, 306, 311; HORT 302; PHYS 350, 360, 370, 380, 411, 421, 431; PLTS 310; PSYC 312</td>
</tr>
</tbody>
</table>

Area 6: Language Other Than English

This is a UC requirement only. Student must demonstrate proficiency equivalent to two years of high school study in a single language. The following courses also fulfill this requirement. Consult a counselor for more information on how to fulfill this requirement.

<table>
<thead>
<tr>
<th>AREA</th>
<th>COURSES</th>
</tr>
</thead>
<tbody>
<tr>
<td>6A</td>
<td>DEAF 310, 312, 314, 316; HMONG 401, 402; SPAN 401, 402, 411, 412; VIET 401, 402, 411, 412</td>
</tr>
</tbody>
</table>

US History, Constitution, and American Ideals
This is a CSU graduation requirement only – it is not required for IGETC certification. Choose one course from each group for a total of two courses.

<table>
<thead>
<tr>
<th>GROUP</th>
<th>COURSES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group 1</td>
<td><strong>POLS</strong> 301, 481</td>
</tr>
<tr>
<td>Group 2</td>
<td><strong>HIST</strong> 310, 311, 318, 320, 321, 323, 325, 327, 330, 483, 484</td>
</tr>
</tbody>
</table>
Transfer Degree Requirements  
| Cosumnes River College

Cosumnes River College offers associate degrees for transfer (AD-T) to the California State University (CSU) system. Transfer degrees provide a clear pathway to a CSU major and bachelor’s degree. Associate of arts for transfer (AA-T) and associate of science for transfer (AS-T) are types of transfer degrees.

Benefits of a Transfer Degree

Students who receive an AA-T or AS-T degree are guaranteed:

- Admission to a CSU with junior standing
- Priority admission consideration 1 to their local CSU campus or to a program that is similar to their community college major

1 This priority does not guarantee admission to specific majors or campuses.

Students who have been awarded an AA-T or AS-T are able to complete their remaining requirements for the 120-unit baccalaureate degree within 60 semester or 90 quarter units at a CSU campus.

Current and prospective community college students are encouraged to meet with a counselor to review their options for transfer and explore additional degrees which may be under development at this time.

Requirements for a Transfer Degree

AA-T or AS-T degrees require the following:

1. Complete 60 semester units or 90 quarter CSU-transferable units, including both of the following:
   a. One of the following GE patterns (check with your counselor to determine the appropriate pattern for the degree you are pursuing):
      - The Intersegmental General Education Transfer Curriculum (IGETC)
      - The Intersegmental General Education Transfer Curriculum (IGETC) for STEM (see counselor)
      - The CSU General Education Requirements
      - The CSU General Education Requirements for STEM (see counselor)
   b. A minimum of 18 semester or 27 quarter units in a major or area of emphasis, as determined by the college

2. Obtain a minimum grade point average of 2.0 in 60 CSU-transferable units. AD-T degrees also require that students must earn a C or better in all courses used in the major or area of emphasis. Pass grades can be used from colleges where Pass denotes a C or better.

Cosumnes River College offers the following Associate Degrees for Transfer:

- A.S. for Transfer (AS-T) Agricultural Business, AST
- Anthropology, AAT
- Art History, AAT
- Studio Arts, AAT
- Biology, AST
- Business Administration, AST
- Communication Studies, AAT
- Early Childhood Education for Transfer, AST
• Economics, AAT
• Elementary Teacher Education for Transfer, AAT
• English, AAT
• Spanish, AAT
• Geography, AAT
• Geology, AST
• History, AAT
• Journalism, AAT
• Kinesiology, AAT
• Mathematics, AST
• Music, AAT
• Nutrition and Dietetics, AST
• Physics, AST
• Political Science, AAT
• Psychology, AAT
• Film, Television and Electronic Media, AST
• Sociology, AAT
• Theatre Arts, AAT
Course Transferability and C-ID
| Cosumnes River College

Transfer Credit

Courses accepted for transfer by the University of California (UC) and/or California State University (CSU) systems are identified as such in the course details next to "Transferable." Students who have questions regarding transferability of credit for specific courses to specific institutions should consult a counselor.

Course Identification Numbering System (C-ID)

The C-ID system is a statewide numbering system designed to identify comparable courses and facilitate articulation. Any community college course that bears a C-ID number signifies that it is equivalent in content, rigor, and student learning outcomes. Any course with a C-ID number can be assured that it will be accepted at other participating community college or CSU campuses. For example: C-ID COMM 110 at Cosumnes River College will be accepted by any other college that has been approved for the same C-ID COMM 110 number.

Students should consult a counselor for specific information and help evaluating course transferability. In addition, students should visit assist.org to confirm how each college's course will be accepted for the following:

1. Majors at CSU and UC campuses
2. CSU general education requirements
3. IGETC general education requirements

Please consult a counselor to find out if your courses meet requirements at private and out-of-state colleges and universities. See an up-to-date listing of Cosumnes River College C-ID approved courses at www.c-id.net.
In This Section

Description of Courses (/2020-2021-catalog/programs-of-study/description-of-courses)
Learn more about course numbering, course prefixes, prerequisites, corequisites, advisories, course transferability, and more.

Course Prefixes (/2020-2021-catalog/programs-of-study/course-prefixes)
See an A to Z listing of course prefixes and the subjects they represent.

Cross-Listed Courses (/2020-2021-catalog/programs-of-study/cross-listed-courses)
When a course is listed under two different departments in the catalog, the course is referred to as "cross-listed." See all cross-listed courses offered at Cosumnes River College.

List of Programs (/2020-2021-catalog/programs-of-study/list-of-programs)
See all of the programs – including degrees, certificates, and courses – offered at Cosumnes River College.
Description of Courses
| Cosumnes River College

In This Section

Course Numbering (/2020-2021-catalog/programs-of-study/description-of-courses/course-numbering)
Cosumnes River College has a standardized course numbering system.

Prerequisites, Corequisites, and Advisories (/2020-2021-catalog/programs-of-study/description-of-courses/prerequisites-corequisites-and-advisories)
Learn about prerequisite courses, corequisite courses, advisory courses, and the challenge process.

To Be Arranged Scheduling (/2020-2021-catalog/programs-of-study/description-of-courses/to-be-arranged-scheduling)
Learn about courses scheduled as TBA, or To Be Arranged.
Cosumnes River College has a standardized course numbering system. The following numbers are designed to provide students with general information regarding the focus and intent of courses.

Course Number 1 to 99
Courses numbered 1 to 99 are credit courses that are considered developmental or basic skills and are not acceptable for the associate degree or transfer credit.

Course Number 100 to 299
Courses numbered 100 to 299 are applicable to an associate degree, but not transferable to a four-year institution.

Course Number 300 to 499
Courses numbered 300 to 499 are articulated for transfer with four-year institutions and are intended to meet major, general education, or elective credit requirements.
Enrollment Conditions

Many courses and educational programs have enrollment conditions, such as prerequisites, corequisites, or advisories on recommended preparation. These faculty-approved conditions are considered necessary and appropriate to ensure that students are adequately prepared to succeed in the course or educational program. It is the student's responsibility to meet any and all enrollment conditions.

Students may challenge a prerequisite requirement through the challenge process (/2020-2021-catalog/programs-of-study/description-of-courses/prerequisites-corequisites-and-advisories#challenge).

Prerequisite

A prerequisite is a course that a student is required to take to demonstrate current readiness for enrollment in another course or educational program. For example, in order to take ENGWR 301, a student must have already completed ENGWR 300 with a grade of C or better.

Corequisite

A corequisite is a course that a student is required to take during the same semester as another course, or prior to another course. For example, a student needs to take GEOL 300 at the same time as GEOL 301 (or before taking GEOL 301).

Advisory

An advisory is a condition of enrollment when a student is advised, but not required to meet before, or in conjunction with, enrollment in a course or educational program.

Verifying Prerequisites

Students enrolled in courses that have a prerequisite must provide verification to the instructor that they have met the prerequisite. Supporting evidence includes:

- A transcript that verifies the student has earned a C or better in the prerequisite course. Students can print an unofficial transcript in eServices (https://ps.losrios.edu/student/signon.html). Instructors have access to this information on their roster if the class was taken within Los Rios Community College District since 2003 (prior course information cannot be viewed).
- English and/or math placement results from Los Rios Community College District

If a student enrolls in a course and does not meet the prerequisite, then the instructor must drop the student from the course.

Verifying Corequisites

Your current class schedule provides verification of current enrollment in a corequisite course. Alternatively, if you took the corequisite previously, then your transcript shows prior completion of the corequisite course.

Challenge Process

If you do not have the supporting evidence to verify a prerequisite or corequisite but you believe that you should qualify to enroll in the course, then you may challenge a prerequisite or corequisite.

Criteria for challenging a prerequisite or corequisite include:

- You have knowledge or ability to succeed in the course with the prerequisite.
- The prerequisite course is not readily available.
- You believe that the prerequisite is discriminatory or being applied in a discriminatory manner.
• You believe that the prerequisite was established in violation of regulations and/or the established district-approved policy and procedures.

To challenge a prerequisite or corequisite:

1. Submit a Math Prerequisite Clearance/Challenge Form (/crc/main/doc/services/placement/math-clearance-challenge-form.pdf) (PDF) or English Prerequisite Clearance/Challenge Form (/crc/main/doc/services/placement/prerequisite-challenge-form.pdf) (PDF) – along with any supporting documentation – to the instructional department (locations are listed on form) at least one week prior to the start of instruction.

2. Your challenge will be reviewed by the department's prerequisite challenge committee.

3. You will be informed in writing of the committee's determination within five working days of the review.

Exception to the Prerequisite Process – English and Math

The prerequisite for all 300-level English courses (ENGWR, ENGED, and ENGCW) and mathematics courses (MATH and STAT) must be cleared prior to enrollment.

You will be automatically cleared to enroll in an English or math class if:

• You are currently enrolled in the appropriate prerequisite course at a Los Rios college (you must earn a C or better grade or you will be automatically dropped from the higher level course before the new semester begins).

• You have completed and passed the appropriate prerequisite course at a Los Rios college.

• You have been placed into the math or English course you want to add.

If you completed the equivalent prerequisite course with a grade of C or better at a college or university that is on the Approved Math External Equivalency List (/shared/doc/admissions-records/prerequisite/math-universal-transfer-credit-list.pdf) (PDF) or Approved English External Equivalency List (/shared/doc/admissions-records/prerequisite/english-universal-transfer-credit-list.pdf) (PDF) then:

• Submit unofficial or official transcripts (unless already on file with the Admissions and Records office) along with a Math Prerequisite Clearance/Challenge Form (/crc/main/doc/services/placement/math-clearance-challenge-form.pdf) (PDF) or English Prerequisite Clearance/Challenge Form (/crc/main/doc/services/placement/prerequisite-challenge-form.pdf) (PDF) to the Admissions and Records office. Please Note: In-progress coursework cannot be used.

• If verified through a transcript, then the external course will be posted as transfer credit on your unofficial transcript, which will clear enrollment for math courses. This process may take three to five business days, so plan ahead.

If you did not find your course on the approved equivalency lists above – but you believe you have the knowledge or ability to succeed in an English or math course through other college/university coursework (or other credentials) – then you may challenge the prerequisite via the challenge process.
Some or all of the class hours for courses may be offered using the "To Be Arranged" (TBA) course scheduling option. Please refer to the class schedule listing for sections of courses for specific TBA weekly or daily class hour requirements that may apply.
## Course Prefixes
| Cosumnes River College

### A

| PREFIX | SUBJECT NAME
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT</td>
<td>Accounting</td>
</tr>
<tr>
<td>ADAPT</td>
<td>Adapted Physical Fitness</td>
</tr>
<tr>
<td>ADT</td>
<td>Architectural Design Technology</td>
</tr>
<tr>
<td>AGB</td>
<td>Agriculture Business</td>
</tr>
<tr>
<td>AH</td>
<td>Allied Health</td>
</tr>
<tr>
<td>ANSC</td>
<td>Animal Science</td>
</tr>
<tr>
<td>ANTH</td>
<td>Anthropology</td>
</tr>
<tr>
<td>ARCH</td>
<td>Architecture</td>
</tr>
<tr>
<td>ART</td>
<td>Art</td>
</tr>
<tr>
<td>ARTH</td>
<td>Art History</td>
</tr>
<tr>
<td>ARTNM</td>
<td>Art New Media</td>
</tr>
<tr>
<td>ASTR</td>
<td>Astronomy</td>
</tr>
<tr>
<td>AMT</td>
<td>Automotive Mechanics Technology</td>
</tr>
</tbody>
</table>

### B

| PREFIX | SUBJECT NAME
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL</td>
<td>Biology</td>
</tr>
<tr>
<td>BIT</td>
<td>Business Inspection Technology</td>
</tr>
<tr>
<td>BUS</td>
<td>Business</td>
</tr>
<tr>
<td>BUSTEC</td>
<td>Business Technology</td>
</tr>
</tbody>
</table>

### C

| PREFIX | SUBJECT NAME
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM</td>
<td>Chemistry</td>
</tr>
<tr>
<td>COMM</td>
<td>Communication Studies</td>
</tr>
<tr>
<td>CISA</td>
<td>Computer Information Sciences - Applications</td>
</tr>
</tbody>
</table>
## Subject Name Table

<table>
<thead>
<tr>
<th>PREFIX</th>
<th>SUBJECT NAME</th>
</tr>
</thead>
<tbody>
<tr>
<td>CISC</td>
<td>Computer Information Sciences - Core</td>
</tr>
<tr>
<td>CISN</td>
<td>Computer Information Sciences - Network</td>
</tr>
<tr>
<td>CISP</td>
<td>Computer Information Sciences - Programming</td>
</tr>
<tr>
<td>CISS</td>
<td>Computer Information Sciences - Security</td>
</tr>
<tr>
<td>CISW</td>
<td>Computer Information Sciences - Web</td>
</tr>
<tr>
<td>CMT</td>
<td>Construction Management Technology</td>
</tr>
<tr>
<td>CAM</td>
<td>Culinary Arts Management</td>
</tr>
<tr>
<td>CONST</td>
<td>Construction</td>
</tr>
<tr>
<td>DANCE</td>
<td>Dance</td>
</tr>
<tr>
<td>DEAF</td>
<td>Deaf Culture and American Sign Language Studies</td>
</tr>
<tr>
<td>SONOG</td>
<td>Diagnostic Medical Sonography</td>
</tr>
<tr>
<td>ECE</td>
<td>Early Childhood Education</td>
</tr>
<tr>
<td>ECON</td>
<td>Economics</td>
</tr>
<tr>
<td>EMT</td>
<td>Emergency Medical Technology</td>
</tr>
<tr>
<td>ENGR</td>
<td>Engineering</td>
</tr>
<tr>
<td>ENGCW</td>
<td>English - Creative Writing</td>
</tr>
<tr>
<td>ENGED</td>
<td>English - Education</td>
</tr>
<tr>
<td>ENGLB</td>
<td>English - Laboratory</td>
</tr>
<tr>
<td>ENGLT</td>
<td>English - Literature</td>
</tr>
<tr>
<td>ENGRD</td>
<td>English - Reading</td>
</tr>
<tr>
<td>ENGWR</td>
<td>English - Writing</td>
</tr>
<tr>
<td>ESL</td>
<td>English as a Second Language</td>
</tr>
<tr>
<td>ESLG</td>
<td>English as a Second Language - Grammar</td>
</tr>
<tr>
<td>ESLL</td>
<td>English as a Second Language - Listening</td>
</tr>
<tr>
<td>ESLP</td>
<td>English as a Second Language - Pronunciation</td>
</tr>
<tr>
<td>ESLR</td>
<td>English as a Second Language - Reading</td>
</tr>
<tr>
<td>ESLW</td>
<td>English as a Second Language - Writing</td>
</tr>
<tr>
<td>ETHNS</td>
<td>Ethnic Studies</td>
</tr>
<tr>
<td>PREFIX</td>
<td>SUBJECT NAME</td>
</tr>
<tr>
<td>--------</td>
<td>------------------------------</td>
</tr>
<tr>
<td>FCS</td>
<td>Family &amp; Consumer Science</td>
</tr>
<tr>
<td>FMS</td>
<td>Film &amp; Media Studies</td>
</tr>
<tr>
<td>FT</td>
<td>Fire Technology</td>
</tr>
<tr>
<td>FIRE</td>
<td>Firefighter Training Center</td>
</tr>
<tr>
<td>FITNS</td>
<td>Fitness</td>
</tr>
<tr>
<td>GEOG</td>
<td>Geography</td>
</tr>
<tr>
<td>GEOL</td>
<td>Geology</td>
</tr>
<tr>
<td>HCD</td>
<td>Human/Career Development</td>
</tr>
<tr>
<td>HEED</td>
<td>Health Education</td>
</tr>
<tr>
<td>HIT</td>
<td>Health Information Technology</td>
</tr>
<tr>
<td>HIST</td>
<td>History</td>
</tr>
<tr>
<td>HMONG</td>
<td>Hmong</td>
</tr>
<tr>
<td>HONOR</td>
<td>Honors</td>
</tr>
<tr>
<td>HORT</td>
<td>Horticulture</td>
</tr>
<tr>
<td>HSER</td>
<td>Human Services</td>
</tr>
<tr>
<td>HUM</td>
<td>Humanities</td>
</tr>
<tr>
<td>INDIS</td>
<td>Interdisciplinary Studies</td>
</tr>
<tr>
<td>JOUR</td>
<td>Journalism</td>
</tr>
<tr>
<td>PREFIX</td>
<td>SUBJECT NAME</td>
</tr>
<tr>
<td>--------</td>
<td>---------------------------------------</td>
</tr>
<tr>
<td>KINES</td>
<td>Kinesiology</td>
</tr>
<tr>
<td>LIBR</td>
<td>Library</td>
</tr>
<tr>
<td>MAKR</td>
<td>Modern Making</td>
</tr>
<tr>
<td>MATH</td>
<td>Mathematics</td>
</tr>
<tr>
<td>MATHS</td>
<td>Mathematics Support</td>
</tr>
<tr>
<td>MAT</td>
<td>Mechanized Agriculture Technology</td>
</tr>
<tr>
<td>MEDA</td>
<td>Medical Assisting</td>
</tr>
<tr>
<td>MGMT</td>
<td>Management</td>
</tr>
<tr>
<td>MKT</td>
<td>Marketing</td>
</tr>
<tr>
<td>MUFHL</td>
<td>Music - History &amp; Literature</td>
</tr>
<tr>
<td>MUIVI</td>
<td>Music - Instrumental/Voice Instruction</td>
</tr>
<tr>
<td>MUP</td>
<td>Music - Performance</td>
</tr>
<tr>
<td>MUSM</td>
<td>Music - Specialization in Music</td>
</tr>
<tr>
<td>NUTRI</td>
<td>Nutrition</td>
</tr>
<tr>
<td>PACT</td>
<td>Personal Activity</td>
</tr>
<tr>
<td>PHARM</td>
<td>Pharmacy Technology</td>
</tr>
<tr>
<td>PHIL</td>
<td>Philosophy</td>
</tr>
<tr>
<td>PHOTO</td>
<td>Photography</td>
</tr>
<tr>
<td>PHYS</td>
<td>Physics</td>
</tr>
<tr>
<td>PLTS</td>
<td>Plant Science</td>
</tr>
<tr>
<td>PREFIX</td>
<td>SUBJECT NAME</td>
</tr>
<tr>
<td>--------</td>
<td>------------------------------</td>
</tr>
<tr>
<td>POLS</td>
<td>Political Science</td>
</tr>
<tr>
<td>PSYC</td>
<td>Psychology</td>
</tr>
<tr>
<td>RTVF</td>
<td>Radio, Television and Film</td>
</tr>
<tr>
<td>RE</td>
<td>Real Estate</td>
</tr>
<tr>
<td>REC</td>
<td>Recreation</td>
</tr>
<tr>
<td>RLST</td>
<td>Religious Studies</td>
</tr>
<tr>
<td>SGVT</td>
<td>Student Government</td>
</tr>
<tr>
<td>SJS</td>
<td>Social Justice Studies</td>
</tr>
<tr>
<td>SOCSC</td>
<td>Social Sciences</td>
</tr>
<tr>
<td>SOC</td>
<td>Sociology</td>
</tr>
<tr>
<td>SPAN</td>
<td>Spanish</td>
</tr>
<tr>
<td>SPORT</td>
<td>Sports</td>
</tr>
<tr>
<td>STAT</td>
<td>Statistics</td>
</tr>
<tr>
<td>SWHS</td>
<td>Social Work/Human Services</td>
</tr>
<tr>
<td>TA</td>
<td>Theatre Arts</td>
</tr>
<tr>
<td>TAP</td>
<td>Theatre Arts Performance</td>
</tr>
<tr>
<td>TMACT</td>
<td>Team Activities</td>
</tr>
<tr>
<td>VT</td>
<td>Veterinary Technology</td>
</tr>
<tr>
<td>VIET</td>
<td>Vietnamese</td>
</tr>
<tr>
<td>PREFIX</td>
<td>SUBJECT NAME</td>
</tr>
<tr>
<td>--------</td>
<td>------------------</td>
</tr>
<tr>
<td>WELD</td>
<td>Welding</td>
</tr>
<tr>
<td>WEXP</td>
<td>Work Experience</td>
</tr>
</tbody>
</table>
### Cross-Listed Courses

**Cosumnes River College**

When a course is listed under two (or more) different departments in the catalog, the course is referred to as “cross-listed,” “cross-referenced,” or “same as.” The cross-listed course has identical content under both departments' catalog listing.

If two (or more) courses are cross-listed, then a student can only earn credit for one of those courses. Students who are not sure which cross-listed they should enroll in are encouraged to consult with a counselor.

When a cross-listed course is repeatable, the course may be taken (under either name) the total number of times stated in the catalog descriptions of the cross-listed course.

<table>
<thead>
<tr>
<th>COURSE NUMBER</th>
<th>CROSS-LISTED COURSE</th>
<th>ADDITIONAL CROSS-LISTED COURSE</th>
<th>COURSE TITLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 485</td>
<td>HONOR 385</td>
<td>N/A</td>
<td>Honors Seminar in Genetics</td>
</tr>
<tr>
<td>BUS 320</td>
<td>ECON 320</td>
<td>N/A</td>
<td>Concepts in Personal Finance</td>
</tr>
<tr>
<td>BUS 345</td>
<td>SOCSC 360</td>
<td>N/A</td>
<td>Law and Society</td>
</tr>
<tr>
<td>BUSTEC 302</td>
<td>BUSTEC 306</td>
<td>N/A</td>
<td>Computer-Keyboarding</td>
</tr>
<tr>
<td>BUSTEC 303</td>
<td>BUSTEC 306</td>
<td>N/A</td>
<td>Computer-Keyboard Formatting</td>
</tr>
<tr>
<td>CISC 302</td>
<td>JOUR 330</td>
<td>N/A</td>
<td>Computer Familiarization</td>
</tr>
<tr>
<td>COMM 480</td>
<td>HONOR 340</td>
<td>N/A</td>
<td>Honors Seminar: Political Campaign Communication</td>
</tr>
<tr>
<td>COMM 482</td>
<td>HONOR 341</td>
<td>N/A</td>
<td>Honors Seminar: Persuasion within Social Issues</td>
</tr>
<tr>
<td>ECON 320</td>
<td>BUS 320</td>
<td>N/A</td>
<td>Concepts in Personal Finance</td>
</tr>
<tr>
<td>ENGLT 488</td>
<td>HONOR 378</td>
<td>N/A</td>
<td>Honors - Literature Adapted into Film</td>
</tr>
<tr>
<td>ENGRD 113</td>
<td>ENGWR 109</td>
<td>N/A</td>
<td>Reading and Writing Skills for College</td>
</tr>
<tr>
<td>ENGRD 19</td>
<td>ENGWR 42</td>
<td>N/A</td>
<td>Foundations of Reading and Writing Improvement</td>
</tr>
<tr>
<td>COURSE NUMBER</td>
<td>CROSS-LISTED COURSE</td>
<td>ADDITIONAL CROSS-LISTED COURSE</td>
<td>COURSE TITLE</td>
</tr>
<tr>
<td>---------------</td>
<td>---------------------</td>
<td>-------------------------------</td>
<td>--------------</td>
</tr>
<tr>
<td>ENGRD 59</td>
<td>ENGWR 58</td>
<td>N/A</td>
<td>Reading Development with Writing</td>
</tr>
<tr>
<td>ENGWR 109</td>
<td>ENGRD 113</td>
<td>N/A</td>
<td>Reading and Writing Skills for College</td>
</tr>
<tr>
<td>ENGWR 330</td>
<td>JOUR 340</td>
<td>N/A</td>
<td>Writing for Publication</td>
</tr>
<tr>
<td>ENGWR 480</td>
<td>HONOR 375</td>
<td>N/A</td>
<td>Honors College Composition</td>
</tr>
<tr>
<td>ENGWR 58</td>
<td>ENGRD 59</td>
<td>N/A</td>
<td>Writing Development with Reading</td>
</tr>
<tr>
<td>ETHNS 300</td>
<td>SOCSC 300</td>
<td>N/A</td>
<td>Introduction to Ethnic Studies</td>
</tr>
<tr>
<td>ETHNS 320</td>
<td>SOCSC 320</td>
<td>N/A</td>
<td>The African American Experience</td>
</tr>
<tr>
<td>ETHNS 330</td>
<td>SOCSC 325</td>
<td>N/A</td>
<td>The Asian American Experience in America</td>
</tr>
<tr>
<td>ETHNS 340</td>
<td>SOCSC 330</td>
<td>N/A</td>
<td>Chicanos/Mexican Americans in the U.S.</td>
</tr>
<tr>
<td>FMS 305</td>
<td>RTVF 305</td>
<td>N/A</td>
<td>Film History</td>
</tr>
<tr>
<td>FMS 488</td>
<td>HONOR 350</td>
<td>N/A</td>
<td>Honors Seminar: Introduction to Critical Theory</td>
</tr>
<tr>
<td>FMS 489</td>
<td>HONOR 352</td>
<td>N/A</td>
<td>Honors Seminar: The Films of Alfred Hitchcock</td>
</tr>
<tr>
<td>HEED 350</td>
<td>KINES 301</td>
<td>N/A</td>
<td>Personal Wellness</td>
</tr>
<tr>
<td>HIST 485</td>
<td>HONOR 366</td>
<td>N/A</td>
<td>Recent United States History - Honors</td>
</tr>
<tr>
<td>HONOR 340</td>
<td>COMM 480</td>
<td>N/A</td>
<td>Honors Seminar: Political Campaign Communication</td>
</tr>
<tr>
<td>HONOR 341</td>
<td>COMM 482</td>
<td>N/A</td>
<td>Honors Seminar: Persuasion within Social Issues</td>
</tr>
<tr>
<td>HONOR 350</td>
<td>FMS 488</td>
<td>N/A</td>
<td>Honors Seminar: Introduction to Critical Theory</td>
</tr>
<tr>
<td>COURSE NUMBER</td>
<td>CROSS-LISTED COURSE</td>
<td>ADDITIONAL CROSS-LISTED COURSE</td>
<td>COURSE TITLE</td>
</tr>
<tr>
<td>---------------</td>
<td>---------------------</td>
<td>-------------------------------</td>
<td>--------------</td>
</tr>
<tr>
<td>HONOR 352</td>
<td>FMS 489</td>
<td>N/A</td>
<td>Honors Seminar: The Films of Alfred Hitchcock</td>
</tr>
<tr>
<td>HONOR 364</td>
<td>PHIL 485</td>
<td>N/A</td>
<td>Honors Seminar: Philosophy of the Martial Arts</td>
</tr>
<tr>
<td>HONOR 366</td>
<td>HIST 485</td>
<td>N/A</td>
<td>Recent United States History - Honors</td>
</tr>
<tr>
<td>HONOR 367</td>
<td>POLS 481</td>
<td>N/A</td>
<td>Introduction to Government: United States – Honors</td>
</tr>
<tr>
<td>HONOR 375</td>
<td>ENGWR 480</td>
<td>N/A</td>
<td>Honors College Composition</td>
</tr>
<tr>
<td>HONOR 378</td>
<td>ENGLT 488</td>
<td>N/A</td>
<td>Honors - Literature Adapted into Film</td>
</tr>
<tr>
<td>HONOR 385</td>
<td>BIOL 485</td>
<td>N/A</td>
<td>Honors Seminar in Genetics</td>
</tr>
<tr>
<td>HONOR 391</td>
<td>MATH 483</td>
<td>N/A</td>
<td>Honors Seminar in Mathematics - Introduction to Mathematical Proof</td>
</tr>
<tr>
<td>HONOR 392</td>
<td>MATH 484</td>
<td>N/A</td>
<td>Honors Seminar in Mathematics - Topics in Number Theory</td>
</tr>
<tr>
<td>HONOR 393</td>
<td>STAT 480</td>
<td>N/A</td>
<td>Introduction to Probability and Statistics - Honors</td>
</tr>
<tr>
<td>HORT 302</td>
<td>PLTS 310</td>
<td>N/A</td>
<td>Soils, Soil Management, and Plant Nutrition</td>
</tr>
<tr>
<td>HORT 303</td>
<td>PLTS 332</td>
<td>N/A</td>
<td>Integrated Pest Management</td>
</tr>
<tr>
<td>JOUR 310</td>
<td>RTVF 300</td>
<td>N/A</td>
<td>Mass Media and Society</td>
</tr>
<tr>
<td>JOUR 330</td>
<td>CISC 302</td>
<td>N/A</td>
<td>Computer Familiarization</td>
</tr>
<tr>
<td>JOUR 335</td>
<td>CISA 330</td>
<td>N/A</td>
<td>Introduction to Desktop Publishing</td>
</tr>
<tr>
<td>JOUR 336</td>
<td>CISA 331</td>
<td>N/A</td>
<td>Intermediate Desktop Publishing</td>
</tr>
<tr>
<td>COURSE NUMBER</td>
<td>CROSS-LISTED COURSE</td>
<td>ADDITIONAL CROSS-LISTED COURSE</td>
<td>COURSE TITLE</td>
</tr>
<tr>
<td>---------------</td>
<td>---------------------</td>
<td>-------------------------------</td>
<td>--------------</td>
</tr>
<tr>
<td>JOUR 340</td>
<td>ENGWR 330</td>
<td>N/A</td>
<td>Writing for Publication</td>
</tr>
<tr>
<td>KINES 301</td>
<td>HEED 350</td>
<td>N/A</td>
<td>Personal Wellness</td>
</tr>
<tr>
<td>MATH 483</td>
<td>HONOR 391</td>
<td>N/A</td>
<td>Honors Seminar in Mathematics - Introduction to Mathematical Proof</td>
</tr>
<tr>
<td>MATH 484</td>
<td>HONOR 392</td>
<td>N/A</td>
<td>Honors Seminar in Mathematics - Topics in Number Theory</td>
</tr>
<tr>
<td>MKT 314</td>
<td>RTVF 376</td>
<td>N/A</td>
<td>Advertising</td>
</tr>
<tr>
<td>PHIL 352</td>
<td>RLST 301</td>
<td>N/A</td>
<td>Introduction to World Religions</td>
</tr>
<tr>
<td>PHIL 485</td>
<td>HONOR 364</td>
<td>N/A</td>
<td>Honors Seminar: Philosophy of the Martial Arts</td>
</tr>
<tr>
<td>PHOTO 301</td>
<td>ARTPH 301</td>
<td>N/A</td>
<td>Beginning Photography</td>
</tr>
<tr>
<td>PHOTO 310</td>
<td>ARTPH 310</td>
<td>N/A</td>
<td>Intermediate Photography</td>
</tr>
<tr>
<td>PHOTO 320</td>
<td>ARTPH 322</td>
<td>N/A</td>
<td>Color Photography</td>
</tr>
<tr>
<td>PHOTO 360</td>
<td>ARTPH 314</td>
<td>N/A</td>
<td>Large Format Photography</td>
</tr>
<tr>
<td>PHOTO 365</td>
<td>ARTPH 340</td>
<td>N/A</td>
<td>Alternative Process Photography</td>
</tr>
<tr>
<td>PHOTO 366</td>
<td>ARTPH 341</td>
<td>N/A</td>
<td>Advanced Alternative Process Photography</td>
</tr>
<tr>
<td>PHOTO 420</td>
<td>ARTPH 342</td>
<td>N/A</td>
<td>History of Photography</td>
</tr>
<tr>
<td>PLTS 310</td>
<td>HORT 302</td>
<td>N/A</td>
<td>Soils, Soil Management, and Plant Nutrition</td>
</tr>
<tr>
<td>PLTS 332</td>
<td>HORT 303</td>
<td>N/A</td>
<td>Integrated Pest Management</td>
</tr>
<tr>
<td>POLS 481</td>
<td>HONOR 367</td>
<td>N/A</td>
<td>Introduction to Government: United States - Honors</td>
</tr>
<tr>
<td>COURSE NUMBER</td>
<td>CROSS-LISTED COURSE</td>
<td>ADDITIONAL CROSS-LISTED COURSE</td>
<td>COURSE TITLE</td>
</tr>
<tr>
<td>---------------</td>
<td>---------------------</td>
<td>--------------------------------</td>
<td>---------------------------------------------------</td>
</tr>
<tr>
<td>RLST 301</td>
<td>PHIL 352</td>
<td>N/A</td>
<td>Introduction to World Religions</td>
</tr>
<tr>
<td>RTVF 300</td>
<td>JOUR 310</td>
<td>N/A</td>
<td>Mass Media and Society</td>
</tr>
<tr>
<td>RTVF 305</td>
<td>FMS 305</td>
<td>N/A</td>
<td>Film History</td>
</tr>
<tr>
<td>RTVF 376</td>
<td>MKT 314</td>
<td>N/A</td>
<td>Advertising</td>
</tr>
<tr>
<td>RTVF 378</td>
<td>TA 356</td>
<td>N/A</td>
<td>Acting for the Camera</td>
</tr>
<tr>
<td>STAT 480</td>
<td>HONOR 393</td>
<td>N/A</td>
<td>Introduction to Probability and Statistics - Honors</td>
</tr>
<tr>
<td>TA 356</td>
<td>RTVF 378</td>
<td>N/A</td>
<td>Acting for the Camera I</td>
</tr>
</tbody>
</table>
Cosumnes River College Programs

Accounting (/2020-2021-catalog/programs-of-study/list-of-programs/accounting)
Learn more about the Accounting program.

Advertising/Public Relations (/2020-2021-catalog/programs-of-study/list-of-programs/advertising/public-relations)
Learn more about the Advertising/Public Relations program.

Agriculture (/2020-2021-catalog/programs-of-study/list-of-programs/agriculture)
Learn more about the Agriculture program.

Agriculture Business (/2020-2021-catalog/programs-of-study/list-of-programs/agriculture-business)
Learn more about the Agriculture Business program.

Allied Health (/2020-2021-catalog/programs-of-study/list-of-programs/allied-health)
Learn more about the Allied Health program.

Animal Science (/2020-2021-catalog/programs-of-study/list-of-programs/animal-science)
Learn more about the Animal Science program.

Anthropology (/2020-2021-catalog/programs-of-study/list-of-programs/anthropology)
Learn more about the Anthropology program.

Architectural Design Technology (/2020-2021-catalog/programs-of-study/list-of-programs/architectural-design-technology)
Learn more about the Architectural Design Technology program.

Architecture (/2020-2021-catalog/programs-of-study/list-of-programs/architecture)
Learn more about the Architecture program.

Art (/2020-2021-catalog/programs-of-study/list-of-programs/art)
Learn more about the Art program.

Automotive Mechanics Technology (/2020-2021-catalog/programs-of-study/list-of-programs/automotive-mechanics-technology)
Learn more about the Automotive Mechanics Technology program.

Biology (/2020-2021-catalog/programs-of-study/list-of-programs/biology)
Learn more about the Biology program.

Broadcast Journalism (/2020-2021-catalog/programs-of-study/list-of-programs/broadcast-journalism)
Learn more about the Broadcast Journalism program.

Building Inspection Technology (/2020-2021-catalog/programs-of-study/list-of-programs/building-inspection-technology)
Learn more about the Building Inspection Technology program.
Learn more about the Business program.

Learn more about the Chemistry program.

Learn more about the Communication Studies program.

Learn more about the Computer Information Science program.

Learn more about the Construction program.

Learn more about the Construction Management Technology program.

Learn more about the Culinary Arts Management program.

Learn more about the Deaf Culture and American Sign Language Studies program.

Learn more about the Diagnostic Medical Sonography program.

Learn more about the Digital Media program.

Learn more about the Early Childhood Education program.

Learn more about the Economics program.

Learn more about the Education/Teaching program.

Learn more about the Emergency Medical Technology program.

Learn more about the Engineering program.

Learn more about the English program.

Learn more about the English as a Second Language program.

Learn more about the Ethnic Studies program.
Family and Consumer Science (/2020-2021-catalog/programs-of-study/list-of-programs/family-and-consumer-science)
Learn more about the Family and Consumer Science program.

Film and Media Studies (/2020-2021-catalog/programs-of-study/list-of-programs/film-and-media-studies)
Learn more about the Film and Media Studies program.

Film/Digital Cinema Production (/2020-2021-catalog/programs-of-study/list-of-programs/film/digital-cinema-production)
Learn more about the Film/Digital Cinema Production program.

Fire Technology (/2020-2021-catalog/programs-of-study/list-of-programs/fire-technology)
Learn more about the Fire Technology program.

Geography (/2020-2021-catalog/programs-of-study/list-of-programs/geography)
Learn more about the Geography program.

Geology (/2020-2021-catalog/programs-of-study/list-of-programs/geology)
Learn more about the Geology program.

Health Education (/2020-2021-catalog/programs-of-study/list-of-programs/health-education)
Learn more about the Health Education program.

Health Information Technology (/2020-2021-catalog/programs-of-study/list-of-programs/health-information-technology)
Learn more about the Health Information Technology program.

Health Records Information Technology (/2020-2021-catalog/programs-of-study/list-of-programs/health-records-information-technology)
Learn more about the Health Records Information Technology program.

History (/2020-2021-catalog/programs-of-study/list-of-programs/history)
Learn more about the History program.

Hmong (/2020-2021-catalog/programs-of-study/list-of-programs/hmong)
Learn more about the Hmong program.

Honors (/2020-2021-catalog/programs-of-study/list-of-programs/honors)
Learn more about the Honors program.

Horticulture (/2020-2021-catalog/programs-of-study/list-of-programs/horticulture)
Learn more about the Horticulture program.

Human Services (/2020-2021-catalog/programs-of-study/list-of-programs/human-services)
Learn more about the Human Services program.

Human/Career Development (/2020-2021-catalog/programs-of-study/list-of-programs/human/career-development)
Learn more about the Human/Career Development program.

Humanities (/2020-2021-catalog/programs-of-study/list-of-programs/humanities)
Learn more about the Humanities program.

Interdisciplinary Studies (/2020-2021-catalog/programs-of-study/list-of-programs/interdisciplinary-studies)
Learn more about the Interdisciplinary Studies program.

Journalism (/2020-2021-catalog/programs-of-study/list-of-programs/journalism)
Learn more about the Journalism program.

Kinesiology and Athletics (/2020-2021-catalog/programs-of-study/list-of-programs/kinesiology-and-athletics)
Learn more about the Kinesiology and Athletics program.
Learn more about the Liberal Arts program.

Learn more about the Library program.

Learn more about the Management program.

Learn more about the Marketing program.

Learn more about the Mathematics and Statistics program.

Learn more about the Medical Assisting program.

Learn more about the Music program.

Learn more about the Nutrition and Foods program.

Learn more about the Pharmacy Technology program.

Learn more about the Philosophy program.

Learn more about the Photography program.

Learn more about the Physics and Astronomy program.

Learn more about the Plant Science program.

Learn more about the Political Science program.

Learn more about the Psychology program.

Learn more about the Radio Production program.

Learn more about the Radio, Television and Film Production program.

Learn more about the Real Estate program.

Learn more about the Science program.
<table>
<thead>
<tr>
<th>Program</th>
<th>Link</th>
<th>Learn more about the program.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social Justice Studies</td>
<td><a href="https://example.edu/2020-2021-catalog/programs-of-study/list-of-programs/social-justice-studies">Fall 2020-2021 Catalog</a></td>
<td></td>
</tr>
<tr>
<td>Social Science</td>
<td><a href="https://example.edu/2020-2021-catalog/programs-of-study/list-of-programs/social-science">Fall 2020-2021 Catalog</a></td>
<td></td>
</tr>
<tr>
<td>Sociology</td>
<td><a href="https://example.edu/2020-2021-catalog/programs-of-study/list-of-programs/sociology">Fall 2020-2021 Catalog</a></td>
<td></td>
</tr>
<tr>
<td>Spanish</td>
<td><a href="https://example.edu/2020-2021-catalog/programs-of-study/list-of-programs/spanish">Fall 2020-2021 Catalog</a></td>
<td></td>
</tr>
<tr>
<td>Student Government</td>
<td><a href="https://example.edu/2020-2021-catalog/programs-of-study/list-of-programs/student-government">Fall 2020-2021 Catalog</a></td>
<td></td>
</tr>
<tr>
<td>Television Production</td>
<td><a href="https://example.edu/2020-2021-catalog/programs-of-study/list-of-programs/television-production">Fall 2020-2021 Catalog</a></td>
<td></td>
</tr>
<tr>
<td>Veterinary Technology</td>
<td><a href="https://example.edu/2020-2021-catalog/programs-of-study/list-of-programs/veterinary-technology">Fall 2020-2021 Catalog</a></td>
<td></td>
</tr>
<tr>
<td>Welding</td>
<td><a href="https://example.edu/2020-2021-catalog/programs-of-study/list-of-programs/welding">Fall 2020-2021 Catalog</a></td>
<td></td>
</tr>
<tr>
<td>Vietnamese</td>
<td><a href="https://example.edu/2020-2021-catalog/programs-of-study/list-of-programs/vietnamese">Fall 2020-2021 Catalog</a></td>
<td></td>
</tr>
<tr>
<td>Theatre Arts</td>
<td><a href="https://example.edu/2020-2021-catalog/programs-of-study/list-of-programs/theatre-arts">Fall 2020-2021 Catalog</a></td>
<td></td>
</tr>
<tr>
<td>Work Experience</td>
<td><a href="https://example.edu/2020-2021-catalog/programs-of-study/list-of-programs/work-experience">Fall 2020-2021 Catalog</a></td>
<td></td>
</tr>
</tbody>
</table>
Accounting | Cosumnes River College

The accounting program provides training for entry-level employment in private industry, government accounting or for self-employment as a provider of computer-based bookkeeping and/or tax services. In addition, those individuals already employed in accounting can work toward career advancement by taking additional courses. Generally, employment in this specialization also requires proficiency in computer applications and good communication skills.

Dean
Joel Powell

(916) 691-7427
PowellJ@crc.losrios.edu

Associate Degree

A.A. in Accounting

This program provides training for entry-level employment in private industry, government accounting, or for self-employment as a provider of computer-based bookkeeping and/or tax services. In addition, those individuals already employed in accounting can work toward career advancement by taking additional courses. Generally, employment in this specialization also requires proficiency in computer applications and good communication skills.

Highlights include:
* A traditional course of study in Accounting Fundamentals, Financial Reporting, Managerial Analytical Techniques, State and Federal Income Taxation, Cost Accounting, and Auditing
* State-of-the-art software and equipment to provide computerized accounting training
* Internships, work experience with local employers for college units, job shadowing, guest speakers from the accounting industry, field trips to accounting offices
* A lab with tutorial assistance

Note to Transfer Students:
If you are interested in transferring to a four-year college or university to pursue a bachelor's degree in this major, it is critical that you meet with a CRC counselor to select and plan the courses for your major. Schools vary widely in terms of the required preparation. The courses that CRC requires for an Associate's degree in this major may be different from the requirements needed for the Bachelor's degree.

Catalog Date: June 1, 2020

Degree Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>BUSINESS CORE:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ACCT 301</td>
<td>Financial Accounting</td>
<td>4</td>
</tr>
<tr>
<td>ACCT 311</td>
<td>Managerial Accounting</td>
<td>4</td>
</tr>
<tr>
<td>ACCT 341</td>
<td>Computerized Accounting</td>
<td>3</td>
</tr>
<tr>
<td>BUS 340</td>
<td>Business Law (3)</td>
<td>3</td>
</tr>
<tr>
<td>or BUS 345</td>
<td>Law and Society (3)</td>
<td></td>
</tr>
<tr>
<td>ACCT 103</td>
<td>Intermediate Accounting - Part I</td>
<td>4</td>
</tr>
<tr>
<td>ACCT 104</td>
<td>Intermediate Accounting - Part II</td>
<td>4</td>
</tr>
<tr>
<td>ACCT 111</td>
<td>Cost Accounting</td>
<td>3</td>
</tr>
</tbody>
</table>
A minimum of 4 units from the following:

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>CISA 315</td>
<td>Introduction to Electronic Spreadsheets (2)</td>
<td>4</td>
</tr>
<tr>
<td>CISA 316</td>
<td>Intermediate Electronic Spreadsheets (2)</td>
<td></td>
</tr>
<tr>
<td>CISA 320</td>
<td>Introduction to Database Management (1)</td>
<td></td>
</tr>
<tr>
<td>CISA 321</td>
<td>Intermediate Database Management (1)</td>
<td></td>
</tr>
</tbody>
</table>

A minimum of 7 units from the following:

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT 107</td>
<td>Auditing (3)</td>
<td></td>
</tr>
<tr>
<td>ACCT 121</td>
<td>Payroll Accounting (3)</td>
<td></td>
</tr>
<tr>
<td>ACCT 125</td>
<td>Federal and State Individual Taxation (4)</td>
<td></td>
</tr>
<tr>
<td>ACCT 128</td>
<td>Taxation of Corporations, Partnerships, Estates, and Trusts (4)</td>
<td></td>
</tr>
<tr>
<td>ACCT 153</td>
<td>Governmental Accounting (3)</td>
<td></td>
</tr>
<tr>
<td>ACCT 498</td>
<td>Work Experience in Accounting (1 - 4)</td>
<td></td>
</tr>
</tbody>
</table>

Total Units: 36

The Accounting Associate in Arts (A.A.) degree may be obtained by completion of the required program, plus general education requirements, plus sufficient electives to meet a 60-unit total. See CRC graduation requirements.

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- **SYNTHESIZE GENERAL ACCOUNTING THEORY AND PRACTICE INTO FINANCIAL RECORDS** This includes the ability to: A. Demonstrate a firm understanding and working knowledge of basic accounting terminology and the process by which transactions are analyzed and transformed into financial statements. B. Compute, classify, record, and verify numerical date, both manually and with computing equipment, in order to develop and maintain financial records.

- **ANALYZE BUSINESS INFORMATION AND INFER THE RESOLUTION OF KEY ISSUES (ANALYTICAL SKILLS)** This includes the ability to: A. Demonstrate intelligent interpretation and use of financial statements in managing and analyzing business operations. B. Demonstrate the ability to identify key issues, research relevant data, and think critically, and analytically about the possible solutions for the financial problem encountered.

- **COMPOSE EFFECTIVE ACCOUNTING INFORMATION DOCUMENTS AND COMMUNICATE THEM TO APPROPRIATE USERS (COMMUNICATION SKILLS)** This includes the ability to: A. Create accurate, professional, and appropriate accounting documents and reports for the business entity served. B. Receive and process written and oral financial information and prepare the appropriate response for management, investor, clients, or other fellow professionals. C. Work effectively, individually and as a member of a group.

- **INTEGRATE TECHNOLOGY INTO THE DEVELOPMENT OF ACCOUNTING INFORMATION (TECHNOLOGY SKILLS)** This includes the ability to: A. Demonstrate effective use of all technology applicable to the accounting field. B. Demonstrate proficiency in the use of accounting software, spreadsheets, and databases applicable to accounting practice and procedures.

- **ANALYZE, SUMMARIZE AND INTERPRET FINANCIAL INFORMATION (CRITICAL THINKING SKILLS)** This includes the ability to: A. Record, summarize, analyze, and interpret financial activities to permit individuals and organizations to make informed judgments and sensible business decisions. B. Comprehend an unrelated set of financial facts; identify and anticipate problems and find acceptable solutions for the business entity served.

- **EVALUATE ACTIONS FOR INTEGRITY AND HONESTY (ETHICS)** This includes the ability to: A. Practice high ethical standards in all contacts with employers, clients, co workers, and general public. B. Demonstrate the ability to act with integrity and honesty and choose an ethical course of action.

- **SUPPORT ACTIONS THAT IMPROVE THE ABILITY TO INTERACT EFFECTIVELY IN DIVERSE ENVIRONMENTS AND WITH DIVERSE PERSONS. (DIVERSITY)** This includes the ability to demonstrate the ability to relate and interact effectively in teams consisting of individuals with differing interest, gender, backgrounds, and professions.

Career Information

Account Clerk; Accounting Technician; Accountant Trainee; Auditor; Bank Employee/Examiner; Certified Public Accountant; Cost Accountant; Insurance Employment; Revenue Agent (FTB/IRS); Tax Preparer; Bookkeeper for: Accounts Receivable, Accounts Payable, General Ledger, Full-Charge Bookkeeper Some career options may require more than two years of college study.
Certificates of Achievement

Accounting Clerk Certificate

This Certificate is designed to provide the skills necessary for clerical level positions within an Accounting environment. These positions support Accounting professionals and para-professional positions.

Catalog Date: June 1, 2020

Certificate Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT 101</td>
<td>Fundamentals of College Accounting (3)</td>
<td>3 - 4</td>
</tr>
<tr>
<td>or ACCT 301</td>
<td>Financial Accounting (4)</td>
<td></td>
</tr>
<tr>
<td>ACCT 341</td>
<td>Computerized Accounting</td>
<td>3</td>
</tr>
<tr>
<td>ACCT 121</td>
<td>Payroll Accounting</td>
<td>3</td>
</tr>
<tr>
<td>CISA 315</td>
<td>Introduction to Electronic Spreadsheets</td>
<td>2</td>
</tr>
<tr>
<td>CISA 305</td>
<td>Beginning Word Processing</td>
<td>2</td>
</tr>
<tr>
<td>BUS 310</td>
<td>Business Communications (3)</td>
<td>3</td>
</tr>
<tr>
<td>or ENGWR 301</td>
<td>College Composition and Literature (3)</td>
<td></td>
</tr>
<tr>
<td>A minimum of 5 units from the following:</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>BUSTEC 101</td>
<td>Computer Keyboarding: 10-Key (1)</td>
<td></td>
</tr>
<tr>
<td>BUSTEC 302</td>
<td>Computer-Keyboarding (2)</td>
<td></td>
</tr>
<tr>
<td>BUS 105</td>
<td>Business Mathematics (3)</td>
<td></td>
</tr>
<tr>
<td>CISA 316</td>
<td>Intermediate Electronic Spreadsheets (2)</td>
<td></td>
</tr>
<tr>
<td>CISA 320</td>
<td>Introduction to Database Management (1)</td>
<td></td>
</tr>
<tr>
<td>ACCT 498</td>
<td>Work Experience in Accounting (1 - 4)</td>
<td></td>
</tr>
<tr>
<td>Total Units:</td>
<td>21 - 22</td>
<td></td>
</tr>
</tbody>
</table>

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- **COMPOSE EFFECTIVE ACCOUNTING INFORMATION DOCUMENTS AND COMMUNICATE THEM TO APPROPRIATE USERS (COMMUNICATION SKILLS)** This includes the ability to: A. Create accurate, professional, and appropriate accounting documents and reports for the business entity served. B. Receive and process written and oral financial information and prepare the appropriate response for management, investor, clients, or other fellow professionals. C. Work effectively, individually and as a member of a group.

- **INTEGRATE TECHNOLOGY INTO THE DEVELOPMENT OF ACCOUNTING INFORMATION (TECHNOLOGY SKILLS)** This includes the ability to: A. Demonstrate effective use of all technology applicable to the accounting field. B. Demonstrate proficiency in the use of accounting software, spreadsheets, and databases applicable to accounting practice and procedures.

- **EVALUATE ACTIONS FOR INTEGRITY AND HONESTY (ETHICS)** This includes the ability to: A. Practice high ethical standards in all contacts with employers, clients, co workers, and general public. B. Demonstrate the ability to act with integrity and honesty and choose an ethical course of action.

Accounting, Advanced Certificate

This program is designed for a student who wishes to develop advanced levels of Accounting skills but not earn a degree. These requirements match the major requirements of the Accounting Degree but do not include General Education.
## Certificate Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT 301</td>
<td>Financial Accounting</td>
<td>4</td>
</tr>
<tr>
<td>ACCT 311</td>
<td>Managerial Accounting</td>
<td>4</td>
</tr>
<tr>
<td>ACCT 341</td>
<td>Computerized Accounting</td>
<td>3</td>
</tr>
<tr>
<td>BUS 340</td>
<td>Business Law (3)</td>
<td>3</td>
</tr>
<tr>
<td>or BUS 345</td>
<td>Law and Society (3)</td>
<td></td>
</tr>
<tr>
<td>ACCT 103</td>
<td>Intermediate Accounting - Part I</td>
<td>4</td>
</tr>
<tr>
<td>ACCT 104</td>
<td>Intermediate Accounting - Part II</td>
<td>4</td>
</tr>
<tr>
<td>ACCT 111</td>
<td>Cost Accounting</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>A minimum of 4 units from the following:</td>
<td></td>
</tr>
<tr>
<td>CISA 315</td>
<td>Introduction to Electronic Spreadsheets (2)</td>
<td>4</td>
</tr>
<tr>
<td>CISA 316</td>
<td>Intermediate Electronic Spreadsheets (2)</td>
<td></td>
</tr>
<tr>
<td>CISA 320</td>
<td>Introduction to Database Management (1)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>A minimum of 7 units from the following:</td>
<td>7</td>
</tr>
<tr>
<td>ACCT 107</td>
<td>Auditing (3)</td>
<td></td>
</tr>
<tr>
<td>ACCT 121</td>
<td>Payroll Accounting (3)</td>
<td></td>
</tr>
<tr>
<td>ACCT 125</td>
<td>Federal and State Individual Taxation (4)</td>
<td></td>
</tr>
<tr>
<td>ACCT 128</td>
<td>Taxation of Corporations, Partnerships, Estates, and Trusts (4)</td>
<td></td>
</tr>
<tr>
<td>ACCT 153</td>
<td>Governmental Accounting (3)</td>
<td></td>
</tr>
<tr>
<td>ACCT 498</td>
<td>Work Experience in Accounting (1 - 4)</td>
<td></td>
</tr>
<tr>
<td>CISA 321</td>
<td>Intermediate Database Management (1)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total Units:</td>
<td>36</td>
</tr>
</tbody>
</table>

## Student Learning Outcomes

Upon completion of this program, the student will be able to:

- **SYNTHESIZE GENERAL ACCOUNTING THEORY AND PRACTICE INTO FINANCIAL RECORDS** This includes the ability to: A. Demonstrate a firm understanding and working knowledge of basic accounting terminology and the process by which transactions are analyzed and transformed into financial statements. B. Compute, classify, record, and verify numerical data, both manually and with computing equipment, in order to develop and maintain financial records.

- **ANALYZE BUSINESS INFORMATION AND INFERENCE THE RESOLUTION OF KEY ISSUES (ANALYTICAL SKILLS)** This includes the ability to: A. Demonstrate intelligent interpretation and use of financial statements in managing and analyzing business operations. B. Demonstrate the ability to identify key issues, research relevant data, and think critically, and analytically about the possible solutions for the financial problem encountered.

- **COMPOSE EFFECTIVE ACCOUNTING INFORMATION DOCUMENTS AND COMMUNICATE THEM TO APPROPRIATE USERS (COMMUNICATION SKILLS)** This includes the ability to: A. Create accurate, professional, and appropriate accounting documents and reports for the business entity served. B. Receive and process written and oral financial information and prepare the appropriate response for management, investor, clients, or other fellow professionals. C. Work effectively, individually and as a member of a group.

- **INTEGRATE TECHNOLOGY INTO THE DEVELOPMENT OF ACCOUNTING INFORMATION (TECHNOLOGY SKILLS)** This includes the ability to: A. Demonstrate effective use of all technology applicable to the accounting field. B. Demonstrate proficiency in the use of accounting software, spreadsheets, and databases applicable to accounting practice and procedures.
ANALYZE, SUMMARIZE AND INTERPRET FINANCIAL INFORMATION (CRITICAL THINKING SKILLS) This includes the ability to: A. Record, summarize, analyze, and interpret financial activities to permit individuals and organizations to make informed judgments and sensible business decisions. B. Comprehend an unrelated set of financial facts; identify and anticipate problems and find acceptable solutions for the business entity served.

EVALUATE ACTIONS FOR INTEGRITY AND HONESTY (ETHICS) This includes the ability to: A. Practice high ethical standards in all contacts with employers, clients, co workers, and general public. B. Demonstrate the ability to act with integrity and honesty and choose an ethical course of action.

SUPPORT ACTIONS THAT IMPROVE THE ABILITY TO INTERACT EFFECTIVELY IN DIVERSE ENVIRONMENTS AND WITH DIVERSE PERSONS. (DIVERSITY) This includes the ability to: A. Demonstrate the ability to relate and interact effectively in teams consisting of individuals with differing interest, gender, backgrounds, and professions.

Accounting, Taxation Certificate

This certificate acknowledges student achievement and proficiency in preparing and reviewing the income tax returns of individuals and business entities together with an understanding of necessary federal and state tax administration compliance requirements that are necessary in the policies of the Internal Revenue Service and the Franchise Tax Board.

Catalog Date: June 1, 2020

Certificate Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT 301</td>
<td>Financial Accounting</td>
<td>4</td>
</tr>
<tr>
<td>ACCT 341</td>
<td>Computerized Accounting</td>
<td>3</td>
</tr>
<tr>
<td>ACCT 121</td>
<td>Payroll Accounting</td>
<td>3</td>
</tr>
<tr>
<td>ACCT 125</td>
<td>Federal and State Individual Taxation</td>
<td>4</td>
</tr>
<tr>
<td>ACCT 128</td>
<td>Taxation of Corporations, Partnerships, Estates, and Trusts</td>
<td>4</td>
</tr>
<tr>
<td>ACCT 160</td>
<td>Volunteer Income Tax Assistance</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>A minimum of 2 units from the following:</td>
<td></td>
</tr>
<tr>
<td>CISA 315</td>
<td>Introduction to Electronic Spreadsheets (2)</td>
<td>2</td>
</tr>
<tr>
<td>CISA 316</td>
<td>Intermediate Electronic Spreadsheets (2)</td>
<td></td>
</tr>
<tr>
<td>CISA 320</td>
<td>Introduction to Database Management (1)</td>
<td></td>
</tr>
<tr>
<td>CISA 321</td>
<td>Intermediate Database Management (1)</td>
<td></td>
</tr>
<tr>
<td>Total Units:</td>
<td></td>
<td>22</td>
</tr>
</tbody>
</table>

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- ANALYZE BUSINESS INFORMATION AND INFER THE RESOLUTION OF KEY ISSUES (ANALYTICAL SKILLS) This includes the ability to: A. Demonstrate intelligent interpretation and use of financial statements in managing and analyzing business operations. B. Demonstrate the ability to identify key issues, research relevant data, and think critically, and analytically about the possible solutions for the financial problem encountered.

- COMPOSE EFFECTIVE ACCOUNTING INFORMATION DOCUMENTS AND COMMUNICATE THEM TO APPROPRIATE USERS (COMMUNICATION SKILLS) This includes the ability to: A. Create accurate, professional, and appropriate accounting documents and reports for the business entity served. B. Receive and process written and oral financial information and prepare the appropriate response for management, investor, clients, or other fellow professionals. C. Work effectively, individually and as a member of a group.

- ANALYZE, SUMMARIZE AND INTERPRET FINANCIAL INFORMATION (CRITICAL THINKING SKILLS) This includes the ability to: A. Record, summarize, analyze, and interpret financial activities to permit individuals and organizations to make informed judgments and sensible business decisions. B. Comprehend an unrelated set of financial facts; identify and anticipate problems and find acceptable solutions for the business entity served.
Accounting Certificate

Catalog Date: June 1, 2020

Certificate Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT 107</td>
<td>Auditing</td>
<td>3</td>
</tr>
<tr>
<td>ACCT 111</td>
<td>Cost Accounting</td>
<td>3</td>
</tr>
<tr>
<td>ACCT 301</td>
<td>Financial Accounting</td>
<td>4</td>
</tr>
<tr>
<td>ACCT 311</td>
<td>Managerial Accounting</td>
<td>4</td>
</tr>
<tr>
<td>ACCT 341</td>
<td>Computerized Accounting</td>
<td>3</td>
</tr>
<tr>
<td>BUS 340</td>
<td>Business Law (3)</td>
<td>3¹</td>
</tr>
</tbody>
</table>

Total Units: 20

¹Business 341 recommended for students intending to enter public accounting professions.

Accounting (ACCT)

ACCT 101 Fundamentals of College Accounting

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
General Education: AA/AS Area II(b)
Catalog Date: June 1, 2020

This course emphasizes a practical approach to the use of accounts, journals, ledgers, and financial statements. The course is recommended for students who intend to seek employment in a small service or merchandising business and is an excellent preparation course for further study in accounting and business.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO 1: ACCURATELY RECORD BUSINESS TRANSACTIONS COMMONLY ENCOUNTERED IN SERVICE AND MERCHANDISING BUSINESSES.
- analyze and make appropriate journal entries to record common financial transactions.
- post entries to the general ledger and prepare a trial balance.
- use specialized journals to record transactions.
- prepare a payroll register and make appropriate journal entries.
- prepare a bank reconciliation and record the entries necessary to update the accounts.
- SLO 2: ACCURATELY REPORT AND INTERPRET THE RESULTS OF BUSINESS ACTIVITY FOR A GIVEN FISCAL PERIOD.
- evaluate, prepare, and record adjusting, correcting, and closing entries.
- prepare financial statements for a service and merchandise business.
- evaluate and assess the effects of transactions on the accounting equation and net income.
ACCT 103 Intermediate Accounting - Part I

Units: 4
Hours: 72 hours LEC
Prerequisite: ACCT 301 with a grade of "C" or better
Catalog Date: June 1, 2020

This course provides a continuing study of the measurement and reporting of the results of operations and the financial condition of profit-directed business entities. Special emphasis will be given to the valuation of assets using both the Financial Accounting Standards (FASB) and International Financial Reporting Standards (IFRS) as authority. This course is not intended for transfer to a four-year college.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO #1: DEMONSTRATE AN UNDERSTANDING OF CONCEPTS, PRINCIPLES, AND PRACTICES OF FINANCIAL ACCOUNTING.
  Research, interpret and apply generally accepted accounting principles, procedures, and practices according to Generally Accepted Accounting Principles (GAAP) and International Financial Reporting Standards (IFRS).
  Prepare financial statements and identify related disclosures.

- SLO #2: ANALYZE AND ACCOUNT FOR COMPLEX BUSINESS TRANSACTIONS.
  Assess and apply the objectives and principles for managing cash, receivables, and inventories.
  Compute actual and estimated liabilities and disclose contingent liabilities.
  Account for depreciation, depletion, amortization, and disposal of assets.
  Compare future and present value of cash flows.

- SLO #3: IDENTIFY THE ETHICAL IMPLICATIONS INHERENT IN FINANCIAL ACCOUNTING AND REPORTING AND BE ABLE TO APPLY STRATEGIES FOR ADDRESSING THEM.

ACCT 104 Intermediate Accounting - Part II

Units: 4
Hours: 72 hours LEC
Prerequisite: ACCT 103 with a grade of "C" or better
Catalog Date: June 1, 2020

This course is a continuing study of the measurement and reporting of the results of operations and the financial position of business entities. An emphasis is placed on accounting for investments, stockholder's equity, long-term liabilities, leases and income taxes. This course is not intended for transfer to a four-year college.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO#1: DEMONSTRATE AN UNDERSTANDING OF CONCEPTS, PRINCIPLES, AND PRACTICES OF FINANCIAL ACCOUNTING.
  Research, interpret and apply generally accepted accounting principles, procedures, and practices according to Generally Accepted Accounting Principles (GAAP) and International Financial Reporting Standards (IFRS).
  Prepare financial statements and identify related disclosures.

- SLO#2: ANALYZE AND ACCOUNT FOR COMPLEX BUSINESS TRANSACTIONS.
  Demonstrate an understanding of the accounting and disclosure requirements for: current, contingent and long-term liabilities; stockholders equity; dilutive securities, earnings per share; investments; revenue recognition; income taxes; pension plans and post retirement benefits; leases; and accounting errors and changes.

- SLO#3: IDENTIFY THE ETHICAL IMPLICATIONS INHERENT IN FINANCIAL ACCOUNTING AND REPORTING AND BE ABLE TO APPLY STRATEGIES FOR ADDRESSING THEM.
ACCT 107 Auditing

The course focuses on procedures and practices used in the verification of financial statement balances and accounting records. External auditing functions are emphasized. The types of audits and auditing occupations, as well as the legal liabilities of the auditor are discussed.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO 1: DEMONSTRATE AN UNDERSTANDING OF PROFESSIONAL ETHICS AND AUDITOR LIABILITY.
  - assess professional standards and ethics, such as Generally Accepted Auditing Standards (GAAS), in the execution of audit procedures and in the preparation of audit reports.
  - assess the various components of audit risk.
- SLO 2: PREPARE AN AUDIT PROGRAM AND VARIOUS AUDITOR'S REPORTS
  - differentiate among financial, operational, and compliance type audits.
  - demonstrate use of the techniques for accumulation and documentation of audit evidence to substantiate amounts reported on corporate financial statements.
  - assess the circumstances causing departures from the standard audit report such as scope limitations, non-conformity with Generally Accepted Accounting Principles (GAAP), inconsistency in accounting principles, inadequate disclosure, and substantial doubt about the company's ability to continue as a "going concern''.
- SLO 3: DEMONSTRATE AN UNDERSTANDING OF THE COMPONENTS OF THE INTERNAL CONTROL.
  - demonstrate the analytical skills needed to document, assess the usefulness of, and test for the existence of internal controls normally found in large accounting systems.
  - incorporate sampling methodologies into audit procedures.

ACCT 111 Cost Accounting

This course is an introduction to cost accounting methods, including job order, process and standard cost systems. Special attention will be given to management uses of cost accounting. This course is not intended for transfer to a four-year college.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO 1: EVALUATE AND APPLY ACCOUNTING CONCEPTS MANAGERS USE FOR PLANNING, CONTROL, AND DECISION-MAKING
  - Explain the importance of having an effective cost accounting system in a business
  - Identify the major elements of manufacturing costs
  - Evaluate investment decisions, including whether to keep or replace equipment, drop or retain product lines or organizational segments, and make or buy a product
  - Describe standard costing and be able to compute and analyze resulting variances
  - Describe cost-volume-profit analysis and use it to determine break-even points and other measurements of profitability
• SLO 2: ACCOUNT FOR COSTS USED IN MANUFACTURING AND SERVICE OPERATIONS AND ANALYZE THE BEHAVIOR OF THE TYPES OF COSTS
• Differentiate between job-order, process costing and activity-based costing, and be able to determine which method would be most appropriate for a particular product or process
• Prepare journal entries for the flow of costs in a manufacturing business using several different methods of accounting for those costs
• Demonstrate how factory overhead costs are budgeted, accumulated, and applied to product cost
• Analyze capital investment alternatives using several quantitative tools
• SLO 3: DEMONSTRATE UNDERSTANDING OF ETHICAL PRACTICES OF MANAGEMENT ACCOUNTANTS

ACCT 121 Payroll Accounting

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Advisory: ACCT 101
Catalog Date: June 1, 2020

This is a study of payroll and personnel records, procedures and regulations. The course will include a study of the various California and Federal laws pertaining to the computation of earnings and withholdings. Payroll tax payment requirements and preparation of the employer's California and Federal payroll tax reports will be included. A comprehensive simulation project will be completed as part of the course. The project will include one quarterly payroll reporting cycle.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• SLO 1: DEMONSTRATE KNOWLEDGE AND UNDERSTANDING AND THE ABILITY TO APPLY THE VARIOUS FEDERAL AND STATE LAWS THAT AFFECT EMPLOYERS IN THEIR PAYROLL OPERATIONS, INCLUDING RECORD KEEPING AND REPORTING REQUIREMENTS.
• Determine how these various laws and regulations apply to a particular business.
• Outline the record keeping and reporting procedures of a typical payroll accounting system.
• Calculate the gross payroll, withholding amounts, and net pay for an employer's payroll period, using multiple wage rates and earnings calculation methods.
• Create and maintain payroll records as required by federal and state payroll taxing authorities.
• Create all required federal and state payroll tax returns including the Employer's Quarterly Federal and State Tax Returns, reports required by the Federal Unemployment Tax Act, and other federal and state payroll tax and information reports as required.
• SLO 2: DEMONSTRATE AN UNDERSTANDING OF AND BE ABLE TO APPLY PROFESSIONAL ETHICAL BEHAVIOR IN ACCOUNTING AND BUSINESS.

ACCT 125 Federal and State Individual Taxation

Units: 4
Hours: 72 hours LEC
Prerequisite: None.
Advisory: ACCT 101 and 301
Catalog Date: June 1, 2020

This course is a study of basic Federal and State Income Tax regulations with an emphasis on the skills necessary for the preparation of individual income tax returns. Included are filing requirements, determination of taxable income, allowable deductions, tax computation, tax credits, other taxes, payment methods, and audit procedures.

This course is a California Tax Education Council (CTEC) qualifying education course, and is offered to members of the community to enable them to become registered tax return preparers (CRTP) in the state of California.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

SLO1: DEMONSTRATE UNDERSTANDING OF CONSTITUTIONAL ORIGINS, STATUTORY REQUIREMENTS, AND OTHER LEGISLATIVE AND ADMINISTRATIVE UNDERPINNINGS OF THE INCOME TAX SYSTEMS OF THE UNITED STATES AND CALIFORNIA.

- Compute the federal and state tax formula for individuals: gross income, adjusted gross income, taxable income, and income tax.
- Demonstrate an understanding of what constitutes "substantial authority" with respect to a position taken on a tax return, and be able to locate substantial authority for such a position.
- Know where each item of income and deduction belongs on the federal and state income tax returns for individuals.
- Prepare intermediate-level federal and state individual income tax returns.
- Conduct basic tax research using publicly-available research tools.
- Understand the basics of income tax administration, including the audit process, reporting requirements, and taxpayer and preparer penalties, particularly California tax practitioner requirements.
- SLO2: CALCULATE STATE AND FEDERAL TAXES USING APPLICABLE LAWS AND STANDARD FORMS.
- Compute the federal and state tax formula for individuals including gross income, adjusted gross income, taxable income and income tax.
- Identify where each item of income and deduction belongs on the federal and state income tax forms for individuals.
- Identify and calculate tax credits a taxpayer is entitled to claim on their tax return.
- Prepare basic, intermediate and advanced level federal and California individual income tax returns.
- SLO3: DEMONSTRATE AN UNDERSTANDING OF AND BE ABLE TO APPLY PROFESSIONAL ETHICAL BEHAVIOR IN ACCOUNTING, TAXATION AND BUSINESS.

ACCT 128 Taxation of Corporations, Partnerships, Estates, and Trusts

**Units:** 4

**Hours:** 72 hours LEC

**Prerequisite:** ACCT 125 with a grade of "C" or better

**Catalog Date:** June 1, 2020

This course provides a continuing study of federal and state income tax compliance with an emphasis on the taxation of business entities including corporations, partnerships, limited liability companies, S corporations, estates and fiduciary trusts. Included is coverage of related party transactions, filing requirements, differences in book and taxable income, tax computation, available credits, tax elections, and working with the Internal Revenue Service on tax administration matters. This course is designed for persons seeking civil service advancement, those who are currently or will be involved with company accounting operations, and persons engaged in tax preparation. It is recommended for accounting majors.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO 1: STUDENTS WILL DEMONSTRATE UNDERSTANDING OF UNITED STATES AND CALIFORNIA INCOME TAX FILING REQUIREMENTS, PROCEDURES, AND TAX ELECTIONS OF C CORPORATIONS, PARTNERSHIPS, S CORPORATIONS, LLCS, ESTATES, AND TRUSTS.
- Demonstrate understanding of various tax issues unique to corporations including capital contributions, earnings and profits, dividend distributions, net operating losses, and affiliated groups.
- Demonstrate understanding of corporate AMT, AET, PHC tax, and various tax credits, and know when these may apply to the business.
- Demonstrate understanding of various tax issues unique to partnerships and S corporations including formation concepts, income allocation to partners/shareholders, inside and outside bases, capital accounts, and loss limitations.
- Demonstrate understanding of the tax and economic differences between the various forms of business (C corporation, partnership, S corporation, and LLC), and be able to recommend a suitable form of business upon its formation.
- Demonstrate understanding to identify a simple trust, complex trust, grantor trust and estate.
- SLO 2: STUDENTS WILL CALCULATE FEDERAL AND STATE INCOME TAXES USING APPLICABLE LAWS, STANDARD FORMS AND NECESSARY WORKING PAPERS.
- Compute the taxable income of a partnership or corporation when provided with the accounting information of the entity.
Compute trust accounting income and apply the rules of the Uniform Principal and Income Act.
Compute distributable net income and taxable income for a trust and an estate.
Complete basic income tax returns for C corporations, partnerships, S corporations, trusts, and estates, including working papers sufficient for manager review.
SLO 3: IDENTIFY THE ETHICAL IMPLICATIONS INHERENT IN TAXATION AND REPORTING AND BE ABLE TO APPLY STRATEGIES FOR ADDRESSING THEM.

ACCT 153 Governmental Accounting

Units: 3
Hours: 54 hours LEC
Prerequisite: ACCT 301 with a grade of "C" or better
Catalog Date: June 1, 2020

This course covers accounting and financial reporting for governmental units and institutions with emphasis on the principles of fund accounting and the comprehensive annual financial report as prescribed by the Governmental Accounting Standards Board. Additional topics include governmental budgeting and budgetary controls.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO 1: Apply the basic principles of fund accounting and their application to governmental and not-for-profit organizations
- Identify the authoritative bodies responsible for setting financial reporting standards for not-for-profit organizations, the federal government, and for state and local governments.
- Identify the minimum requirements for general purpose external financial reporting specified by the Governmental Accounting Standards Board (GASB) Statement Number 34.
- Practice working with common types of funds (general, special revenue, proprietary, debt service, capital projects, and permanent) used by a state or local governmental accounting system.
- SLO 2: Analyze and interpret financial and budgetary information for governmental and not-for-profit organizations
- Explain how budgetary accounting contributes to achieving control over governmental revenues and expenditures.
- Assess governmental financial performance using ratios and other outcome indicators.
- Understand the accounting, regulatory, taxation, and performance issues for not-for-profit organizations.
- SLO 3: Identify the ethical implications inherent in governmental accounting and reporting and be able to apply strategies for addressing them.

ACCT 160 Volunteer Income Tax Assistance

Units: 2
Hours: 24 hours LEC; 36 hours LAB
Prerequisite: None.
Advisory: ACCT 125
Catalog Date: June 1, 2020

This hands-on course provides training and a service learning opportunity in the preparation of federal and California individual income tax returns. After successfully completing 24 hours of IRS-approved training and passing the IRS individual income tax exam, the student volunteer will provide a minimum of 36 hours of free tax assistance to community clients who meet qualifying criteria for the service as set by the IRS.

This course is intended for the volunteer who will assist individual and family taxpayers with basic tax concerns.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO #1: LEARN AND APPLY CURRENT INDIVIDUAL FEDERAL AND CALIFORNIA TAX LAWS AND REGULATIONS.
- List the types of income that are taxable.
- Classify deductions as for or from adjusted gross income.
- Describe the rules for determining the deductibility of deductions for adjusted gross income.
- Determine whether a taxpayer should use the standard deduction or itemized deductions when calculating taxable income.
- Determine when taxpayers qualify for certain tax credits.
- Determine when the taxpayer is liable for certain other taxes.
- Follow the VITA rules and requirements.
- Interview taxpayers.
- Pass the BASIC exam required by the Internal Revenue Service to prepare basic VITA tax returns

**SLO #2: PREPARE ACCURATE FEDERAL AND STATE CURRENT YEAR INDIVIDUAL INCOME TAX RETURNS**

- Use the appropriate tax software to complete basic income tax returns for individuals.
- Prepare tax returns appropriately so they can be transmitted electronically to the Internal Revenue Service and to the California Franchise Tax Board.

**SLO #3: DEFINE AND BE ABLE TO APPLY PROFESSIONAL ETHICAL BEHAVIOR IN ACCOUNTING, TAXATION AND BUSINESS**

- Pass the Internal Revenue Service Volunteer Standards of Conduct (Ethics) test that is required for the VITA program.

---

**ACCT 161 Volunteer Income Tax Assistance II**

**Units:** 2  
**Hours:** 24 hours LEC; 36 hours LAB  
**Prerequisite:** ACCT 160 with a grade of "C" or better  
**Catalog Date:** June 1, 2020

This hands-on course provides training and a service learning opportunity in the preparation of federal and California individual income tax returns. After successfully completing 24 hours of IRS-approved training and passing the IRS individual income tax exams, the student volunteer will provide a minimum of 36 hours of free tax assistance to community clients who meet the qualifying criteria for the service as set by the IRS.

This course covers the Advanced level which is intended for the volunteer who will assist individual and family taxpayers with more complex tax concerns.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- SLO #1: UNDERSTAND CURRENT INDIVIDUAL FEDERAL AND CALIFORNIA TAX RETURNS LAWS AND REGULATIONS.
- List the types of income that are taxable.
- Classify deductions as for or from adjusted gross income.
- Describe the rules for determining the deductibility of deductions for adjusted gross income.
- Determine the difference between the standard deduction and itemized deductions.
- Describe the rules for determining the deductibility of itemized deductions.
- Determine when taxpayers qualify for certain tax credits.
- Determine when the taxpayer is liable for certain other taxes.
- Follow the VITA rules and requirements.
- Interview taxpayers.
- Pass the BASIC and ADVANCED exams required by the Internal Revenue Service to prepare advanced level VITA tax returns.

- SLO #2: PREPARE ACCURATE FEDERAL AND STATE CURRENT YEAR INDIVIDUAL INCOME TAX RETURNS.
- Use the appropriate tax software to complete advanced level income tax returns for individuals.
- Prepare tax returns in a manner for them to be transmitted electronically to the Internal Revenue Service and to the California Franchise Tax Board.
SLO #3: DEMONSTRATE AN UNDERSTANDING OF AND BE ABLE TO APPLY PROFESSIONAL ETHICAL BEHAVIOR IN ACCOUNTING, TAXATION AND BUSINESS.

Pass the Internal Revenue Service Volunteer Standards of Conduct (Ethics) test that is required for the program.

ACCT 162 Volunteer Income Tax Assistance III

Units: 2
Hours: 24 hours LEC; 36 hours LAB
Prerequisite: ACCT 161 with a grade of "C" or better
Catalog Date: June 1, 2020

This hands-on course provides training and a service learning opportunity in the preparation of federal and California individual income tax returns. After successfully completing 24 hours of IRS-approved training and passing the IRS individual income tax exams, the student volunteer will provide a minimum of 36 hours of free tax assistance to community clients who meet qualifying criteria for the service as set by the IRS.

This course covers tax law that pertains to military tax situations and situations involving rental properties and moving expenses. This level prepares the student to assist taxpayers not only across the full VITA spectrum but adds the additional assistance to military personnel and those taxpayers that own a rental property.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO #1: UNDERSTAND CURRENT FEDERAL AND CALIFORNIA TAX RETURNS LAWS AND REGULATIONS FOR INDIVIDUALS.
- List the types of income that are taxable.
- Understand the rules for rental properties.
- Describe the rules for determining the deductibility of deductions for adjusted gross income, including moving expenses.
- Understand and apply the rules for determining the deductibility of itemized deductions.
- Determine when taxpayers qualify for certain tax credits.
- Determine when the taxpayer is liable for certain other taxes.
- Follow the VITA rules and requirements.
- Interview taxpayers including those that own rental properties or who are in the military.
- Pass the BASIC, ADVANCED and MILITARY exams required by the Internal Revenue Service to prepare and review complex VITA tax returns.
- SLO #2: PREPARE ACCURATE FEDERAL AND STATE CURRENT YEAR INDIVIDUAL INCOME TAX RETURNS.
- Use the appropriate tax software to complete advanced level income tax returns for individuals.
- Review completed returns prepared by other students/volunteers.
- Transmit income tax returns electronically to the Internal Revenue Service and to the California Franchise Tax Board.
- SLO #3: DEMONSTRATE AN UNDERSTANDING OF AND BE ABLE TO APPLY PROFESSIONAL ETHICAL BEHAVIOR IN ACCOUNTING, TAXATION AND BUSINESS.
- Pass the Internal Revenue Service Volunteer Standards of Conduct (Ethics) test that is required for the program.

ACCT 295 Independent Studies in Accounting

Units: 1 - 3
Hours: 54 - 162 hours LAB
Prerequisite: None.
Catalog Date: June 1, 2020

An independent studies project involves an individual student or small group of students in study, research, or activities beyond the scope of regularly offered courses. See the current catalog section of “Special Studies” for full details of Independent Studies.

Student Learning Outcomes
Upon completion of this course, the student will be able to:

- **SLO #1:** Actively engage in intellectual inquiry beyond that required in order to pass a course of study (College Wide Learning Outcome – Area 4).
- Discuss and outline a proposal of study (that can be accomplished within one semester term) with a supervising instructor qualified within the discipline.
- Design an independent study (to be completed individually or by collaboration of a small group) to foster special knowledge, skills, and experience that are not available in any one regularly scheduled course.
- Use information resources to gather discipline-specific information.
- **SLO #2:** Utilize modes of analysis and critical thinking to apply theoretical perspectives and/or concepts in the major discipline of study to significant problems and/or educational activities (College Wide Learning Outcome – Area 3).
- Analyze and apply the knowledge, skills and experience that are involved in the independent study to theoretical perspectives and/or concepts in the major discipline of study.
- Explain the importance of the major discipline of study in the broader picture of society.
- **SLO #3:** Communicate a complex understanding of content matter of the major discipline of study (College Wide Outcome – Area 3).
- Demonstrate competence in the skills essential to mastery of the major discipline of study that are necessary to accomplish the independent study.
- **SLO #4:** Identify personal goals and pursue these goals effectively (College Wide Outcome – Area 4).
- Utilize skills from the "academic tool kit" including time management, study skills, etc., to accomplish the independent study within one semester term.

---

**ACCT 301 Financial Accounting**

**Units:** 4  
**Hours:** 72 hours LEC  
**Prerequisites:** None.  
**Advisory:** ACCT 101, BUS 105, MATH 120, or MATH 125  
**Transferable:** CSU; UC  
**General Education:** AA/AS Area II(b)  
**Catalog Date:** June 1, 2020  
**C-ID:** C-ID ACCT 110

This is the study of accounting as an information system. Emphasis is given to understanding the nature and purpose of accounting and its function in business. The principles and concepts underlying transaction analysis and recording; financial statement preparation, disclosures, and analysis; and ethical issues are addressed. The course includes units on inventories, internal control, cash and cash flows, receivables, fixed and intangible assets, current and long-term liabilities, stockholders' equity, income tax, and investments.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- **SLO 1:** APPLY ACCOUNTING CONCEPTS AND PRINCIPLES IN MAKING DECISIONS ABOUT BUSINESS OPERATIONS.
  - Interpret financial statements of corporate entities.
  - Use generally accepted accounting principles to develop and interpret financial information.
  - Explain the importance of operating, investing and financing activities reported in the Statement of Cash Flows.
  - Analyze and evaluate the use of accounting information for decision making by potential investors and creditors.
  - Analyze financial statements and financial condition using solvency and profitability analysis based on historical and current data.
- **SLO 2:** APPLY THE CONCEPTS AND PRINCIPLES UNDERLYING ACCOUNTING PROCEDURES.
  - Explain the nature and purpose of generally accepted accounting principles (GAAP) and International Financial Reporting Principles (IFRS).
  - Interpret the assumptions, concepts, and principles underlying generally accepted financial accounting procedures.
  - Prepare financial statements following generally accepted accounting principles.
  - Analyze the effect of financial transactions on the accounting equation.
ACCT 311 Managerial Accounting

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO 1: ANALYZE FINANCIAL STATEMENTS AND FINANCIAL CONDITION USING SOLVENCY AND PROFITABILITY ANALYSIS BASED ON HISTORICAL AND CURRENT DATA
- SLO 2: EVALUATE AND APPLY ACCOUNTING CONCEPTS MANAGERS USE FOR PLANNING, CONTROL, AND DECISION MAKING
  - Determine the profit-maximizing price; determine price based on absorption or variable cost; markup percentages; target costs; billing rates.
  - Analyze capital budgeting decisions using several quantitative tools including present value and net present value, internal rate of return, cost of capital, as well as incremental costs vs. total costs.
  - Evaluate investment decisions in order to determine whether to keep or replace equipment, drop or retain product line or organizational segment, and make or buy product.
- SLO 3: ACCOUNT FOR COSTS USED IN MANUFACTURING AND SERVICE OPERATIONS AND ANALYZE THE BEHAVIOR OF THE TYPES OF COST
  - Apply responsibility accounting; determining cost and profit centers; assigning revenues and costs to responsibility centers; evaluating managers of responsibility centers.
  - Prepare budgets for sales, production, direct materials, direct labor, overhead, inventory, selling/administrative expense, and cash.
  - Recall and use job order cost systems and process costing methods.
  - Prepare process cost journal entries; compute equivalent units of production.
  - Recognize and use Activity Based Costing and traditional costing systems; unit-level, batch-level, product-level, customer-level, and organization-sustaining costs; allocate costs to pools.
  - Allocate service department costs to other departments using the direct method and the step method.
- SLO 4: IDENTIFY THE ETHICAL IMPLICATIONS INHERENT IN MANAGERIAL ACCOUNTING AND REPORTING AND BE ABLE TO APPLY STRATEGIES FOR ADDRESSING THEM

ACCT 341 Computerized Accounting

Units: 4
Hours: 72 hours LEC
Prerequisite: ACCT 301 with a grade of "C" or better
Transferable: CSU; UC
C-ID: C-ID ACCT 120
Catalog Date: June 1, 2020

This course is the study of the use and reporting of accounting data for managerial planning, cost control, and decision making purposes. The course includes broad coverage of concepts, classifications, and behaviors of costs. Topics include cost systems, the analysis and use of cost information, cost-volume-profit analysis, contribution margin, profit planning, standard costs, relevant costs, capital budgeting, and statement analysis.
This is a course using the computer to prepare financial statements and other accounting reports used in business. This course emphasizes the areas of study: general ledger, accounts payable, accounts receivable, banking, bank reconciliations, depreciation, fixed assets, inventory, job order and payroll. This course provides practical experience using contemporary computerized accounting software. Consult the class schedule for specific software.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO #1: ANALYZE AND ACCURATELY RECORD TRANSACTIONS FOR SERVICE AND MERCHANDISING BUSINESS.
  - Analyze transactions, prepare and record the appropriate entries into the entity's books and records.
  - Post entries to the general ledger and prepare a trial balance.
  - Summarize and record entries using specialized accounting modules.
  - Prepare payroll and record the appropriate entries.
  - Prepare bank reconciliations and record the necessary journal entries.
- SLO #2: PREPARE AND INTERPRET FINANCIAL STATEMENTS AND OTHER ACCOUNTING REPORTS.
  - Complete the steps of the accounting cycle from transaction analysis through financial statement preparation.
  - Evaluate and assess the effects of the transactions to the operating activities of a service or merchandising business.
  - Prepare and analyze financial statements and other accounting reports.
- SLO 3: DEMONSTRATE AN UNDERSTANDING OF AND BE ABLE TO APPLY PROFESSIONAL ETHICAL BEHAVIOR IN THE USE OF TECHNOLOGY IN ACCOUNTING AND BUSINESS.

ACCT 495 Independent Studies in Accounting

Units: 1 - 3
Hours: 54 - 162 hours LAB
Prerequisite: None.
Transferable: CSU
Catalog Date: June 1, 2020

An independent studies project involves an individual student or small group of students in study, research, or activities beyond the scope of regularly offered courses. See the current catalog section of "Special Studies" for full details of Independent Studies.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO #1: Actively engage in intellectual inquiry beyond that required in order to pass a course of study (College Wide Learning Outcome - Area 4).
  - Discuss and outline a proposal of study (that can be accomplished within one semester term) with a supervising instructor qualified within the discipline.
  - Design an independent study (to be completed individually or by collaboration of a small group) to foster special knowledge, skills, and experience that are not available in any one regularly scheduled course.
  - Use information resources to gather discipline-specific information.
- SLO #2: Utilize modes of analysis and critical thinking to apply theoretical perspectives and/or concepts in the major discipline of study to significant problems and/or educational activities (College Wide Learning Outcome – Area 3).
  - Analyze and apply the knowledge, skills and experience that are involved in the independent study to theoretical perspectives and/or concepts in the major discipline of study.
  - Explain the importance of the major discipline of study in the broader picture of society.
ACCT 498 Work Experience in Accounting

Units: 1 - 4  
Hours: 60 - 300 hours LAB  
Prerequisite: None.  
Enrollment Limitation: Students must be in a paid or unpaid internship, volunteer position or job related to career goals in Accounting.  
Transferable: CSU  
General Education: AA/AS Area III(b)  
Catalog Date: June 1, 2020

This course provides students with opportunities to develop marketable skills in preparation for employment in their major field of study or advancement within their career. It is designed for students interested in work experience and/or internships in transfer level degree occupational programs. Course content includes understanding the application of education to the workforce; completion of required forms which document the student's progress and hours spent at the work site; and developing workplace skills and competencies. Appropriate level learning objectives are established by the student and the employer. During the semester, the student is required to participate in a weekly orientation and 75 hours of related paid work experience, or 60 hours of unpaid work experience for one unit. An additional 75 or 60 hours of related work experience is required for each additional unit. Work Experience may be taken for a total of 16 units when there are new or expanded learning objectives. Only one Work Experience course may be taken per semester.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO 1: DEMONSTRATE AN UNDERSTANDING AND APPLICATION OF PROFESSIONAL WORKPLACE BEHAVIOR IN A FIELD OF STUDY RELATED TO ONE'S CAREER.
  - Understand the effects time, stress, and organizational management have on performance.
  - Demonstrate an understanding of consistently practicing ethics and confidentiality in a workplace.
  - Examine the career/life planning process and relate its relevancy to the student.
  - Demonstrate an understanding of basic communication tools and their appropriate use.
  - Demonstrate an understanding of workplace etiquette.
- SLO 2: DESCRIBE THE CAREER/LIFE PLANNING PROCESS AND RELATE ITS RELEVANCY TO ONE'S CAREER.
  - Link personal goals to long term achievement.
  - Display an understanding of creating a professional first impression.
  - Understand how networking is a powerful job search tool.
  - Understand necessary elements of a résumé.
  - Understand the importance of interview preparation.
  - Identify how continual learning increases career success.
- SLO 3: DEMONSTRATE APPLICATION OF INDUSTRY KNOWLEDGE AND THEORETICAL CONCEPTS AS WRITTEN IN LEARNING OBJECTIVES IN PARTNERSHIP WITH THE EMPLOYER WORK SITE SUPERVISOR.
Advertising/Public Relations
| Cosumnes River College

This program is part of Cosumnes River College's offerings in Radio, Television and Film Production and is designed for students interested in careers in public relations and advertising. This program trains students in public relations and advertising theory and exposes them to production techniques for the Internet, radio, television and print media.

Dean
 (916) 691-7226
 PowellJ@crc.losrios.edu

Associate Degree

A.A. in Advertising/Public Relations

This CRC program is part of CRC's offerings in Radio, Television and Film Production and is designed for students interested in careers in public relations and advertising. This program trains students in public relations and advertising theory and exposes them to production techniques for the Internet, radio, television and print media.

Highlights include:
* Instruction and practice in desktop publishing and graphics applications in the department's Apple digital media laboratory or PC computer lab
* Opportunities for practical experience selling and designing ads for campus publications
* Introductory production experience in radio and television advertising, writing and production
* Internship opportunities working in local media including Advertising Agencies, Public Relations firms, TV and Radio stations, post-production houses, corporate and government employers.

Note to Transfer Students:
If you are interested in transferring to a four-year college or university to pursue a bachelor's degree in this major, it is critical that you meet with a CRC counselor to select and plan the courses for your major. Schools vary widely in terms of the required preparation. The courses that CRC requires for an Associate's degree in this major may be different from the requirements needed for the Bachelor's degree.

Catalog Date: June 1, 2020

Degree Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>CISC 302</td>
<td>Computer Familiarization (2)</td>
<td>2</td>
</tr>
<tr>
<td>or JOUR 330</td>
<td>Computer Familiarization (2)</td>
<td></td>
</tr>
<tr>
<td>RTVF 300</td>
<td>Mass Media and Society (3)</td>
<td>3</td>
</tr>
<tr>
<td>or JOUR 310</td>
<td>Mass Media and Society (3)</td>
<td></td>
</tr>
<tr>
<td>RTVF 330</td>
<td>Beginning Single Camera Production</td>
<td>3</td>
</tr>
<tr>
<td>RTVF 376</td>
<td>Advertising (3)</td>
<td>3</td>
</tr>
<tr>
<td>or MKT 314</td>
<td>Advertising (3)</td>
<td></td>
</tr>
<tr>
<td>RTVF 370</td>
<td>Broadcast Writing &amp; Announcing</td>
<td>3</td>
</tr>
<tr>
<td>JOUR 300</td>
<td>Newswriting and Reporting</td>
<td>3</td>
</tr>
<tr>
<td>COURSE CODE</td>
<td>COURSE TITLE</td>
<td>UNITS</td>
</tr>
<tr>
<td>-------------</td>
<td>--------------------------------------------------</td>
<td>-------</td>
</tr>
<tr>
<td>JOUR 351</td>
<td>Public Relations Writing and Media Techniques</td>
<td>3</td>
</tr>
<tr>
<td>MKT 310</td>
<td>Selling Professionally</td>
<td>3</td>
</tr>
<tr>
<td>COMM 341</td>
<td>Organizational Communication</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>A minimum of 6 units from the following:</td>
<td>6</td>
</tr>
<tr>
<td>RTVF 312</td>
<td>Beginning Radio Production (3)</td>
<td></td>
</tr>
<tr>
<td>RTVF 316</td>
<td>Introduction to Radio Workshop (3)</td>
<td></td>
</tr>
<tr>
<td>RTVF 331</td>
<td>Beginning Television Studio Production (3)</td>
<td></td>
</tr>
<tr>
<td>RTVF 360</td>
<td>Introduction to Motion Graphics: Adobe After Effects (3)</td>
<td></td>
</tr>
<tr>
<td>RTVF 380</td>
<td>Broadcast Journalism (3)</td>
<td></td>
</tr>
<tr>
<td>RTVF 498</td>
<td>Work Experience in Radio, Television and Film (1 - 4)</td>
<td></td>
</tr>
<tr>
<td>JOUR 335</td>
<td>Introduction to Desktop Publishing (2)</td>
<td></td>
</tr>
<tr>
<td>JOUR 340</td>
<td>Writing for Publication (3)</td>
<td></td>
</tr>
<tr>
<td>PHOTO 301</td>
<td>Beginning Photography (3)</td>
<td></td>
</tr>
<tr>
<td>PHOTO 320</td>
<td>Color Photography (3)</td>
<td></td>
</tr>
<tr>
<td>PHOTO 340</td>
<td>Careers in Photography (3)</td>
<td></td>
</tr>
<tr>
<td>COMM 301</td>
<td>Introduction to Public Speaking (3)</td>
<td></td>
</tr>
<tr>
<td>COMM 363</td>
<td>Introduction to Communication Theory (3)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total Units:</td>
<td>32</td>
</tr>
</tbody>
</table>

The Advertising/Public Relations Associate in Arts (A.A.) degree may be obtained by completion of the required program, plus general education requirements, plus sufficient electives to meet a 60-unit total. See CRC graduation requirements.

**Student Learning Outcomes**

Upon completion of this program, the student will be able to:

- write in clear, concise English. (SLO-1)
- research critically, filter the results and present them in a cogent manner. (SLO-2)
- analyze, interpret, and exercise critical judgment in the evaluation of media productions. (SLO-3)
- demonstrate through projects that with the power of a communicator, comes moral and ethical responsibility. (SLO-4)
- produce creative, persuasive messages for a specific target audience. (SLO-5)
- define the role of advertising and marketing communications in achieving organizational objectives, including traditional business practices. (SLO-6)
- plan a complete marketing communication program including situation analysis, research, objective-setting, target audience definition, creative development, media planning, budgeting, and program outcome evaluation. (SLO-7)
- describe and discuss both traditional and non-traditional media and their uses. (SLO-8)
- employ production skills in those areas important to functioning successfully as an entry-level professional. (SLO-9)

**Career Information**

Career Options: Public Information Officer; Community Relations Specialist; Media Consultant; Public Relations Firm Representative, Media Sales, Copy Writer

Some career options may require more than two years of college study.
Agriculture | Cosumnes River College

Agriculture is a vital component of our local, state, and national economies and offers many exciting employment opportunities. In addition to the production of a wide range of valuable agricultural commodities, the Sacramento region is home to numerous multinational agricultural corporations and statewide governmental agencies. It is also a center for international agricultural trade and commerce.

**Dean**
Nancy Reitz

**Department Chairs**
Dave Andrews

Phone: (916) 691-7391
Email: ReitzN@crc.losrios.edu

---

**Associate Degree**

A.S. in General Agriculture

Agriculture is a vital component of our local, state, and national economies and offers many exciting employment opportunities. In addition to the production of a wide range of valuable agricultural commodities, the Sacramento region is home to numerous multinational agricultural corporations and statewide governmental agencies. It is also a center for international agricultural trade and commerce. This program is designed for students majoring in Agriculture while also allowing the student to select courses that fit his/her individual needs and desires.

As a General Agriculture major, you will:

* Study a general agriculture curriculum representing all of the departments of the Cosumnes River College agriculture program including: agriculture business, horticulture, welding, veterinary technology and plant science.

* Develop your leadership and communication skills.

* Identify the agricultural career you are most interested in and build a course of study to better qualify you for a profession.

**HIGHLIGHTS**

* As the only community college agriculture program in the Sacramento region, the CRC General Agriculture program provides an excellent opportunity for individuals who wish to pursue a career in agriculture and receive a General Agriculture Associate of Science degree.

* The faculty in this program works closely with the five California agricultural degree offering universities to provide a quality program for students interested in agriculture business, management and economics.

* The Sacramento region is fortunate to have some of the best high school agriculture programs in California. The faculty in the CRC Ag program works closely with these feeder schools to articulate coursework and facilitate the successful transition of agriculture students from high school to the university.

* Internships in agriculture are available for students interested in work experience opportunities.

**NOTE TO TRANSFER STUDENTS:** If you are interested in transferring to a four-year college or university to pursue a bachelor's degree in this major, it is critical that you meet with a CRC counselor to select and plan the courses for your major. Schools vary widely in terms of the required preparation. The courses that CRC requires for an Associate's degree in this major may be different from the requirements needed for the Bachelor's degree.

---

**Catalog Date:** June 1, 2020

---

**Degree Requirements**
<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGB 310</td>
<td>Agriculture Computer Applications</td>
<td>3</td>
</tr>
<tr>
<td>AGB 320</td>
<td>Agriculture Accounting</td>
<td>3</td>
</tr>
<tr>
<td>AGB 321</td>
<td>Agriculture Economics</td>
<td>3</td>
</tr>
<tr>
<td>AMT 306</td>
<td>Small Engine Repair</td>
<td>3</td>
</tr>
<tr>
<td>HORT 300</td>
<td>Introduction to Horticulture</td>
<td>3</td>
</tr>
<tr>
<td>PLTS 310</td>
<td>Soils, Soil Management, and Plant Nutrition (3)</td>
<td>3</td>
</tr>
<tr>
<td>or HORT 302</td>
<td>Soils, Soil Management, and Plant Nutrition (3)</td>
<td>3</td>
</tr>
<tr>
<td>ANSC 300</td>
<td>Introduction to Animal Science</td>
<td>3</td>
</tr>
<tr>
<td>PLTS 300</td>
<td>Introduction to Plant Science</td>
<td>3</td>
</tr>
<tr>
<td>WELD 100</td>
<td>Introduction to Welding</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>A minimum of 2 units from the following:</td>
<td></td>
</tr>
<tr>
<td>WEXP 498</td>
<td>Work Experience in (Subject) (1 - 4)</td>
<td></td>
</tr>
<tr>
<td>Subtotal Units:</td>
<td></td>
<td>29</td>
</tr>
</tbody>
</table>

**Agriculture Business**

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGB 300</td>
<td>Introduction to Agriculture Business</td>
<td>3</td>
</tr>
<tr>
<td>AGB 330</td>
<td>Agriculture Sales and Communication</td>
<td>3</td>
</tr>
<tr>
<td>AGB 331</td>
<td>Agriculture Marketing</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Agriculture Business Units:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total Units:</td>
<td>38</td>
</tr>
</tbody>
</table>

**Horticulture**

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>HORT 305</td>
<td>Plant Identification-Fall Selections</td>
<td>3</td>
</tr>
<tr>
<td>HORT 312</td>
<td>Plant Propagation</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Horticulture Units:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total Units:</td>
<td>35</td>
</tr>
</tbody>
</table>

**Landscape**

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>HORT 320</td>
<td>Sustainable Landscape Construction</td>
<td>3</td>
</tr>
<tr>
<td>HORT 324</td>
<td>Sustainable Landscape Maintenance</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Landscape Units:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total Units:</td>
<td>35</td>
</tr>
</tbody>
</table>
The General Agriculture Associate in Science (A.S.) degree may be obtained by completion of the required program, plus general education requirements, plus sufficient electives to meet a 60-unit total. See CRC graduation requirements.

Upon completion of this program, the student will be able to:

- PSLO 1: Demonstrate knowledge and hands-on experience in the basic concepts of all aspects of agriculture.
- PSLO 2: Demonstrate the ability to logically breakdown aspects of a project/problem and be able to resolve an issue in the agriculture industry.
- PSLO 3: Demonstrate independent & group learning expressing effective communication skills, both orally & written.
- PSLO 4: Participate in leadership opportunities to develop life-long learning traits.

Career Information

Management; Supervision; Finance; Insurance; Government; Marketing; Distribution; International Trade; Sales and Service Nursing Management and Operations; Park Maintenance; Landscape Design, Teaching, Communication; Contracting & Maintenance; Fertilizer & Insecticide Application; Research; Retail/Wholesale; Estimator; Consultant; Government Agency employee; Welding Technician; Inspection; Welding Engineering; Sculpting; Home/Handicraft & Hobby; Construction; Trucking & Automotive. Some positions, however, require a four-year degree for which CRC’s program is a good base for transfer.

Certificates of Achievement

General Agriculture Certificate

This program is designed to prepare students for entry level employment in Agriculture.

Catalog Date: June 1, 2020

Certificate Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGB 300</td>
<td>Introduction to Agriculture Business</td>
<td>3</td>
</tr>
<tr>
<td>AGB 310</td>
<td>Agriculture Computer Applications</td>
<td>3</td>
</tr>
<tr>
<td>PLTS 310</td>
<td>Soils, Soil Management, and Plant Nutrition (3)</td>
<td>3</td>
</tr>
<tr>
<td>or HORT 302</td>
<td>Soils, Soil Management, and Plant Nutrition (3)</td>
<td>3</td>
</tr>
<tr>
<td>ANSC 300</td>
<td>Introduction to Animal Science</td>
<td>3</td>
</tr>
<tr>
<td>PLTS 300</td>
<td>Introduction to Plant Science</td>
<td>3</td>
</tr>
<tr>
<td>Total Units:</td>
<td></td>
<td>15</td>
</tr>
</tbody>
</table>
The Plant-Based Nutrition and Sustainable Agriculture Certificate Program brings farm-to-fork into the classroom. It provides the science that supports the benefits of whole plant-based foods to the health of the individual as well as the environment. Students will gain knowledge in the function of plant-based foods towards the treatment and prevention of chronic diseases. The program addresses the environmental and social concerns with strategies and principles of sustainable agriculture. Students will master the theories and skills of plant-based food preparation bringing the food to the fork and into everyday food choices.

Contact the CRC Nutrition and Foods, Horticulture, and/or Ag Counselor regarding transferable courses.

**Catalog Date:** June 1, 2020

### Certificate Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>NUTRI 303</td>
<td>Plant-Based Nutrition</td>
<td>3</td>
</tr>
<tr>
<td>NUTRI 331</td>
<td>Plant-Based Food Principles and Preparation</td>
<td>3</td>
</tr>
<tr>
<td>HORT 313</td>
<td>Sustainable Agriculture</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Total Units:</strong></td>
<td><strong>9</strong></td>
</tr>
</tbody>
</table>

### Student Learning Outcomes

Upon completion of this program, the student will be able to:

- **PSLO 1:** Demonstrate independent learning and effective communication skills.
- Demonstrate responsibility for personal action and choices.
- Communicate effectively both orally and in writing.
- **PSLO 2:** Explain the principles of nutrition and its effect on health.
- Relate the dietary causes of chronic diseases.
- Evaluate the role of plant-based foods on health and the environment.
- **PSLO 3:** Demonstrate a fundamental understanding of health behaviors on nutritional and health status.
- Schematize the effects of personal food choice on health, the environment and public policy.
- **PSLO 4:** Basic and advanced plant science/horticulture skills development and improvement.
- Demonstrate and apply the theories of sustainable and organic agriculture.
- Demonstrate a fundamental understanding of soils, soil development, soil building and preparation and sustainable soil management.
- Demonstrate a fundamental understanding of hydraulics and irrigation design, installation, and water management principles and practices.
- Create agriculture design concepts based on sound, sustainable soil management, water conservation, construction and maintenance, and integrated pest management best practices.
- **PSLO 5:** Effectively and accurately prepare and analyze raw ingredients and prepared foods.
- Evaluate food through sensory evaluation of texture, taste, color, presentation, smell and umami.
- Identify optimal cooking procedures/heat transfer to maximize nutrient content as well as the quality of the ingredients and dish as a whole.
- Analyze quality defects in cooked products and specify possible errors in techniques or ingredient selection.
- **PSLO 6:** Implement proper sanitary and safety techniques.
- Demonstrate appropriate food handling and sanitary techniques.
- Utilize kitchen tools/equipment appropriately.
Career Information

In restaurants, food service facilities, farms, urban farms, sustainable/organic farms, school garden, health education. Some of these career options may require more than the certificate and two years of college study. Classes beyond the associate degree may be required to fulfill some career options or for preparation for transfer to a university program.
Agriculture is a vital component of our local, state, and national economies and offers many exciting employment opportunities. In addition to the production of a wide range of valuable agricultural commodities, the Sacramento region is home to numerous multinational agricultural corporations and statewide governmental agencies. It is also a center for international agricultural trade and commerce.

**Dean**
Nancy Reitz

**Contact**
(916) 691-7391
ReitzN@crc.losrios.edu

---

**Associate Degrees for Transfer**

**A.S.-T. in A.S. for Transfer (AS-T) Agricultural Business**

The Associate in Science in Agricultural Business for Transfer degree fulfills the general requirements of the California State University for transfer. Students with this degree will receive priority admission with junior status to the California State University system, although not necessarily to a particular campus or major.

**Catalog Date:** June 1, 2020

**Degree Requirements**

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGB 321</td>
<td>Agriculture Economics</td>
<td>3</td>
</tr>
<tr>
<td>PLTS 310</td>
<td>Soils, Soil Management, and Plant Nutrition (3)</td>
<td>3 - 5</td>
</tr>
<tr>
<td>or CHEM 300</td>
<td>Beginning Chemistry (4)</td>
<td></td>
</tr>
<tr>
<td>or CHEM 305</td>
<td>Introduction to Chemistry (5)</td>
<td></td>
</tr>
<tr>
<td>or CHEM 400</td>
<td>General Chemistry I (5)</td>
<td></td>
</tr>
<tr>
<td>STAT 300</td>
<td>Introduction to Probability and Statistics</td>
<td>4</td>
</tr>
<tr>
<td>ECON 302</td>
<td>Principles of Macroeconomics</td>
<td>3</td>
</tr>
<tr>
<td>A minimum of 9 units from the following:</td>
<td>9</td>
<td></td>
</tr>
<tr>
<td>AGB 320</td>
<td>Agriculture Accounting (3)</td>
<td></td>
</tr>
<tr>
<td>AGB 330</td>
<td>Agriculture Sales and Communication (3)</td>
<td></td>
</tr>
<tr>
<td>AGB 310</td>
<td>Agriculture Computer Applications (3)</td>
<td></td>
</tr>
<tr>
<td><strong>Total Units:</strong></td>
<td><strong>22 - 24</strong></td>
<td></td>
</tr>
</tbody>
</table>

The Associate in Science in A.S. for Transfer (AS-T) Agricultural Business for Transfer (AS-T) degree may be obtained by completion of 60 transferable, semester units with a minimum 2.0 GPA, including (a) the major or area of emphasis described in the Required Program, and (b) either the Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education-Breadth Requirements.
Student Learning Outcomes

Upon completion of this program, the student will be able to:

- Demonstrate the ability to think critically and analyze problems and recommend a solution.
- Analyze, classify, examine, record, and interpret financial information to solve economic and accounting concerns.
- Examine and apply the concepts and principles underlying economic issues.
- Apply effective listening skills to comprehend spoken messages, analyze information critically and consider multiple perspectives.
- Explain the principles of management and how managers differentiate their leadership styles.
- Differentiate the various functions of marketing.
- Design a model plan to allocate resources for an agribusiness organization.

Career Information

Agriculture Business Management; Supervision; Finance; Insurance; Government; Marketing; Distribution; International Trade; Sales and Service. NOTE TO TRANSFER STUDENTS: The Associate Degree for Transfer program is designed for students who plan to transfer to a campus of the California State University (CSU). Other than the required core, the courses you choose to complete this degree will depend to some extent on the selected CSU for transfer. In addition, some CSU-GE Breadth or IGETC requirements can also be completed using courses required for this associate degree for transfer major (known as “double-counting”). Meeting with a counselor to determine the most appropriate course choices will facilitate efficient completion of your transfer requirements. For students wishing to transfer to other universities (UC System, private, or out-of-state), the Associate Degree for Transfer may not provide adequate preparation for upper-division transfer admissions, because many universities require more lower division courses than those in this degree. Even the CSUs that accept this transfer degree may likely require more lower division courses to achieve the Bachelor degree. Specifically, courses in general chemistry, differential equations, linear algebra, and computer programming may better prepare the transfer student for certain universities. It is critical that you meet with a CRC counselor to select and plan the courses for the major, as programs vary widely in terms of the required preparation.

Associate Degrees

A.S. in Agriculture Business

The program is designed to prepare students for transfer to a four-year college/university in agriculture business or immediate employment in an entry-level agriculture business related career.

HIGHLIGHTS

* As the only community college agriculture program in the Sacramento region, the CRC Agriculture Business program provides an excellent opportunity for individuals who wish to pursue a career in agriculture, receive an Agriculture Business Associate in Science degree, or transfer to CSU or UC.

* The faculty in this program works closely with the five California agricultural degree offering universities to provide a quality transfer program for students interested in agriculture business, management and economics.

* The Sacramento region is fortunate to have some of the best high school agriculture programs in California. The faculty in the CRC Ag Business program works closely with these feeder schools to articulate coursework and facilitate the successful transition of agriculture students from high school to the university.

* Internships in Ag Business are available for students interested in work experience opportunities.

Catalog Date: June 1, 2020

Degree Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGB 300</td>
<td>Introduction to Agriculture Business</td>
<td>3</td>
</tr>
<tr>
<td>AGB 310</td>
<td>Agriculture Computer Applications</td>
<td>3</td>
</tr>
<tr>
<td>AGB 320</td>
<td>Agriculture Accounting</td>
<td>3</td>
</tr>
<tr>
<td>AGB 321</td>
<td>Agriculture Economics</td>
<td>3</td>
</tr>
<tr>
<td>AGB 330</td>
<td>Agriculture Sales and Communication</td>
<td>3</td>
</tr>
<tr>
<td>COURSE CODE</td>
<td>COURSE TITLE</td>
<td>UNITS</td>
</tr>
<tr>
<td>-------------</td>
<td>------------------------------------------------------------------</td>
<td>-------</td>
</tr>
<tr>
<td>PLTS 310</td>
<td>Soils, Soil Management, and Plant Nutrition (3)</td>
<td>3</td>
</tr>
<tr>
<td>or HORT 302</td>
<td>Soils, Soil Management, and Plant Nutrition (3)</td>
<td>3</td>
</tr>
<tr>
<td>ANSC 300</td>
<td>Introduction to Animal Science</td>
<td>3</td>
</tr>
<tr>
<td>PLTS 300</td>
<td>Introduction to Plant Science</td>
<td>3</td>
</tr>
<tr>
<td>ACCT 301</td>
<td>Financial Accounting</td>
<td>4</td>
</tr>
<tr>
<td>BUS 340</td>
<td>Business Law</td>
<td>3</td>
</tr>
<tr>
<td>ECON 302</td>
<td>Principles of Macroeconomics</td>
<td>3</td>
</tr>
<tr>
<td>COMM 301</td>
<td>Introduction to Public Speaking</td>
<td>3</td>
</tr>
<tr>
<td>Total Units:</td>
<td></td>
<td>37</td>
</tr>
</tbody>
</table>

The Agriculture Business Associate in Science (A.S.) degree may be obtained by completion of the required program, plus general education requirements, plus sufficient electives to meet a 60-unit total. See CRC graduation requirements.

Career Information

Agriculture Business Management; Supervision; Finance; Insurance; Government; Marketing; Distribution; International Trade; Sales and Service. Some positions require a four-year degree for which CRC’s program is a good base for transfer.

Certificate of Achievement

Agriculture Business Certificate

This program is designed to prepare students for entry level employment in agriculture business.

Catalog Date: June 1, 2020

Certificate Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGB 300</td>
<td>Introduction to Agriculture Business</td>
<td>3</td>
</tr>
<tr>
<td>AGB 310</td>
<td>Agriculture Computer Applications</td>
<td>3</td>
</tr>
<tr>
<td>AGB 320</td>
<td>Agriculture Accounting</td>
<td>3</td>
</tr>
<tr>
<td>AGB 321</td>
<td>Agriculture Economics</td>
<td>3</td>
</tr>
<tr>
<td>AGB 330</td>
<td>Agriculture Sales and Communication</td>
<td>3</td>
</tr>
<tr>
<td>AGB 331</td>
<td>Agriculture Marketing</td>
<td>3</td>
</tr>
<tr>
<td>PLTS 310</td>
<td>Soils, Soil Management, and Plant Nutrition (3)</td>
<td>3</td>
</tr>
<tr>
<td>or HORT 302</td>
<td>Soils, Soil Management, and Plant Nutrition (3)</td>
<td>3</td>
</tr>
<tr>
<td>ANSC 300</td>
<td>Introduction to Animal Science</td>
<td>3</td>
</tr>
<tr>
<td>PLTS 300</td>
<td>Introduction to Plant Science</td>
<td>3</td>
</tr>
<tr>
<td>ACCT 301</td>
<td>Financial Accounting</td>
<td>4</td>
</tr>
<tr>
<td>BUS 340</td>
<td>Business Law</td>
<td>3</td>
</tr>
<tr>
<td>ECON 302</td>
<td>Principles of Macroeconomics</td>
<td>3</td>
</tr>
<tr>
<td>COMM 301</td>
<td>Introduction to Public Speaking</td>
<td>3</td>
</tr>
<tr>
<td>Total Units:</td>
<td></td>
<td>40</td>
</tr>
</tbody>
</table>
### AGB 300 Introduction to Agriculture Business

<table>
<thead>
<tr>
<th>Units:</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hours:</td>
<td>54 hours LEC</td>
</tr>
<tr>
<td>Prerequisite:</td>
<td>None.</td>
</tr>
<tr>
<td>Transferable:</td>
<td>CSU; UC</td>
</tr>
<tr>
<td>C-ID:</td>
<td>C-ID AG - AB 104</td>
</tr>
<tr>
<td>Catalog Date:</td>
<td>June 1, 2020</td>
</tr>
</tbody>
</table>

This course provides a survey to the business and economics of the agriculture industry; and, an introduction to the economic aspects of agriculture including the agricultural producer, consumer and food system. The management principles encountered in the day-to-day operation of an agricultural enterprise are stressed as they relate to the decision making process.

### Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO #1 Analyze and account for complex issues in agricultural business
- examine how economic principles relate to commodity marketing sub sectors in agriculture
- analyze agriculture business organizations, and the principles and functions involved in their organization and operation
- SLO #2 Examine and demonstrate appropriate responses to key diversity issues in the workplace.
- examine people behavior in organization
- examine and assess nature of leadership and the role of the manager as a leader
- solve problems in the areas of personnel, ethics and planning
- SLO #3 Demonstrate an understanding of concepts, principles, and practices of management, planning and allocation of resources
- examine the four functions of management and how to relate to the agribusiness organization
- design a model plan to allocate resources for an agribusiness organization using a variety of computer software programs
- identify the basic laws, regulations, and agencies that interact with the agriculture community

### AGB 310 Agriculture Computer Applications

<table>
<thead>
<tr>
<th>Units:</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hours:</td>
<td>36 hours LEC; 54 hours LAB</td>
</tr>
<tr>
<td>Prerequisite:</td>
<td>None.</td>
</tr>
<tr>
<td>Transferable:</td>
<td>CSU; UC</td>
</tr>
<tr>
<td>C-ID:</td>
<td>C-ID AG - AB 108L</td>
</tr>
<tr>
<td>Catalog Date:</td>
<td>June 1, 2020</td>
</tr>
</tbody>
</table>

This course introduces computer use in the workplace with emphasis on agribusiness situations. Computer applications including word processing, spreadsheets, databases, and presentation managers will be covered. Also included will be accessing information through the Internet and World Wide Web, telecommunications, an introduction to web page design and other software appropriate to agribusiness.

### Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO #1: Create professional looking business documents and presentation materials.
- Operate proficiently in software used in agriculture including word processors, presentation managers, web browsers, and other specific agricultural software programs.
- SLO #2: Create a professional looking spreadsheet that includes accurate formulas, functions, and formatting.
- Design and apply proficient spreadsheet applications for agriculture.
- SLO #3: Develop and analyze database functions and use analytical tools to summarize data.
- Operate computer programs such as databases.
- Utilize telecommunications to access agricultural networks and other networks useful to agricultural applications
- SLO #4: Employ computer usage with a fundamental in agriculture.
- Evaluate computer applications as a management tool for agricultural businesses and recommend courses of action to address specific needs or problem areas.
- SLO #5: Demonstrate critical thinking and analyze problems.
- Identify and solve problems using computers to complete specific agricultural projects.
- Evaluate and select computer hardware and software appropriate to agricultural business applications.

AGB 320 Agriculture Accounting

This course introduces the principles of agriculture accounting systems and types of records, their use and how to compute and use measures of earnings and cost of production to improve agribusiness efficiency. Also included are farm income tax, Social Security, and employee payroll records.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO #1: Apply accounting concepts and principles in making decisions about agricultural business operations.
- SLO #2: Apply the concepts and principles underlying accounting procedures.
- SLO #3: Analyze, classify, record, and interpret financial information.
- SLO #4: Employ computer usage with a fundamental in agriculture.
- SLO #5: Demonstrate critical thinking and analyze problems.
AGB 321 Agriculture Economics

This course introduces the analysis of economic principles of resource allocation, production, cost analysis, and market price equilibrium with primary application to the agricultural sector; supply and demand in commodity pricing under perfect and imperfect competition; and agricultural credit, marketing and policy issues.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO #1: Apply various economical principles in agriculture.
  - compare and contrast the role of agriculture in the economic structure of the country and the world
  - contrast and criticize the different economic systems
  - describe the monetary system in this country
- SLO #2: Demonstrate the ability to think critically critical thinking and analyze problems
  - interpret factors of production
  - define economic terms
  - analyze market conditions and predict price
- SLO #3: Apply the concepts and principles underlying economic issues.
  - differentiate legislation affecting the farm system
  - explain the country's fiscal policy
  - solve supply and demand schedules
  - construct graphs to utilize given data on cost factors

AGB 330 Agriculture Sales and Communication

This course involves the study of principles and practices of the selling process: selling strategies and approaches, why and how people buy, prospecting, territory management, and customer service. Self-management, communication, and interpersonal skills necessary in developing managerial abilities, leadership qualities, and facilitating teamwork within the agribusiness sector will be explored. Students will gain experience through role-play, formal sales presentations, and job shadowing. The course content is organized to give students an in-depth understanding of the factors and influences that affect the agribusiness industry on a day-to-day basis. Communication, leadership, and management skills are basic tools necessary for future career development within the agribusiness sector, as well as other aspects of life.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO #1: Explain and interpret the history of agriculture sales industry.
  - discuss the history and development of the agribusiness sales industry including its scope, variety, historical perspective, relationship to other industries, and current and future role U.S economy
- SLO #2: Design and relate effective sales messages.
- analyze and apply the component parts and dynamics of the sales process
- recognize and understand the characteristics needed to be a successful agribusiness salesperson
- SLO #3: Develop a sales philosophy and relationship strategy that connects with customers
- identify the major sources for agricultural sales prospects and the methods used to secure sales commitments from potential buyers
- explain the benefits of providing post-sales customer service
- SLO #4: Apply effective listening skills to comprehend spoken messages, analyze information critically and consider multiple perspectives
- demonstrate interpersonal and organizational communication skills, with particular emphasis on the uniqueness of the agribusiness sector. Become familiar with the principles of good listening, overcoming barriers in communication, and effective verbal and non-verbal communication
- SLO #5: Demonstrate a fundamental understanding of public speaking
- explore and demonstrate characteristics of a good public speaker through role-play situations, utilization computer presentation software, and delivering formal sales presentations
- SLO #6: Explain the principles of management and how managers adopt leadership styles.
- understand the nature of management.
- discuss the importance of teamwork in organizations. Understanding teams, becoming a team, team leadership, and team performance
- define leadership and the characteristics of successful leadership. Explain current theories of leadership and influences on choice of leadership
- SLO #7: Demonstrate individual responsibility and influence to ethically, effectively and appropriately communicate with diverse settings and people
- Recognize and apply social responsibility and ethics, in terms of factors affecting ethical choices, criteria for ethical decision-making, and managing company ethics

AGB 331 Agriculture Marketing

Units: 3  
Hours: 54 hours LEC  
Prerequisite: None.  
Transferable: CSU  
Catalog Date: June 1, 2020

This course is a survey of marketing aspects of the agriculture industry. Students will acquire an overview of the structure and institutional aspects of the marketing system including global agricultural markets. Student projects will include industry studies of the marketing of selected locally grown commodities.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO # 1 Define the function of marketing, where and how they are performed and implement them into a scenario that is provided by the instructor.
- SLO # 2 Identify general problems in the marketing system and develop a solution for a locally grown commodity.
- Identify and explain the problems of marketing specific commodities in local area.
- Diagram how to use marketing channels in our area.
- Analyze and evaluate current trends in marketing.
- SLO #3 Evaluate the role of government in agricultural marketing and summarize their effectiveness.
- Explain the role of marketing cooperatives.
- Analyze risk and develop plans for reducing risk in an agricultural company.
- Compare and contrast the marketing alternatives available to individual firms.
- Collect and analyze marketing information.
**AGB 495 Independent Studies in Agriculture Business**

**Units:** 1 - 3  
**Hours:** 54 - 162 hours LAB  
**Prerequisite:** None.  
**Transferable:** CSU  
**Catalog Date:** June 1, 2020

An independent studies project involves an individual student or small group of students in study, research, or activities beyond the scope of regularly offered courses. See the current catalog section of "Special Studies" for full details of Independent Studies.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- **SLO #1:** Actively engage in intellectual inquiry beyond that required in order to pass a course of study (College Wide Learning Outcome – Area 4).
- **SLO #2:** Discuss and outline a proposal of study (that can be accomplished within one semester term) with a supervising instructor qualified within the discipline.
- **SLO #3:** Design an independent study (to be completed individually or by collaboration of a small group) to foster special knowledge, skills, and experience that are not available in any one regularly scheduled course.
- **SLO #4:** Use information resources to gather discipline-specific information.

**AGB 498 Work Experience in Agriculture Business**

**Units:** 1 - 4  
**Hours:** 60 - 300 hours LAB  
**Prerequisite:** None.  
**Enrollment Limitation:** Students must be in a paid or unpaid internship, volunteer position or job related to career goals in Agriculture Business.  
**Transferable:** CSU  
**General Education:** AA/AS Area III(b)  
**Catalog Date:** June 1, 2020

This course provides students with opportunities to develop marketable skills in preparation for employment in their major field of study or advancement within their career. It is designed for students interested in work experience and/or internships in transfer level degree occupational programs. Course content includes understanding the application of education to the workforce; completion of required forms which document the student’s progress and hours spent at the work site; and developing workplace skills and competencies. Appropriate level learning objectives are established by the student and the employer. During the semester, the student is required to participate in a weekly orientation and 75 hours of related paid work experience, or 60 hours of unpaid work experience for one unit. An additional 75 or 60 hours of related work experience is required for each additional unit. Work Experience may be taken for a total of 16 units when there are new or expanded learning objectives. Only one Work Experience course may be taken per semester.
Student Learning Outcomes

Upon completion of this course, the student will be able to:

- DEMONSTRATE AN UNDERSTANDING AND APPLICATION OF PROFESSIONAL WORKPLACE BEHAVIOR IN A FIELD OF STUDY RELATED ONE’S CAREER (SLO 1)
  - Understand the effects time, stress, and organizational management have on performance.
  - Demonstrate an understanding of consistently practicing ethics and confidentiality in a workplace.
  - Examine the career/life planning process and relate its relevancy to the student.
  - Demonstrate an understanding of basic communication tools and their appropriate use.
  - Demonstrate an understanding of workplace etiquette.

- DESCRIBE THE CAREER/LIFE PLANNING PROCESS AND RELATE ITS RELEVANCY TO ONE’S CAREER (SLO 2)
  - Link personal goals to long term achievement.
  - Display an understanding of creating a professional first impression.
  - Understand how networking is a powerful job search tool.
  - Understand necessary elements of a résumé.
  - Understand the importance of interview preparation.
  - Identify how continual learning increases career success.

- DEMONSTRATE APPLICATION OF INDUSTRY KNOWLEDGE AND THEORETICAL CONCEPTS AS WRITTEN IN LEARNING OBJECTIVES IN PARTNERSHIP WITH THE EMPLOYER WORK SITE SUPERVISOR (SLO 3)
Allied Health | Cosumnes River College

This program offers core courses designed for students enrolled in the Health Information Technology, Medical Assisting, Pharmacy Technician, and other Allied Health programs.

Dean
Nancy Reitz

(916) 691-7390
reitzn@crc.losrios.edu

Associate Degree

A.S. in Pre-Health Occupations

This degree prepares students interested in a variety of Allied Health occupations. The degree will prepare students with a rigorous course of study prior to selecting the program of their chosen career. Students will complete coursework with an emphasis on basic science, healthcare delivery and culturally competent patient care. Students completing the degree will be prepared to enter programs for careers in Diagnostic Medical Sonography, Medical Assisting, Health Information Technology, Nursing and others. Students may also choose to complete this degree in preparation for transfer to a Health Sciences Baccalaureate degree program. Completion of the degree does not guarantee enrollment in any health occupation program.

Catalog Date: June 1, 2020

Degree Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>AH 108</td>
<td>Introduction to Health Occupations</td>
<td>2</td>
</tr>
<tr>
<td>AH 110</td>
<td>Medical Language for Health-Care Providers</td>
<td>3</td>
</tr>
<tr>
<td>AH 120</td>
<td>Human Disease</td>
<td>3</td>
</tr>
<tr>
<td>ANTH 313</td>
<td>Introduction to Cultural Anthropology: Medical Focus (3)</td>
<td>3</td>
</tr>
<tr>
<td>or COMM 325</td>
<td>Intercultural Communication (3)</td>
<td></td>
</tr>
<tr>
<td>[ BIOL 430</td>
<td>Anatomy and Physiology (5)</td>
<td>3 - 10</td>
</tr>
<tr>
<td>and BIOL 431</td>
<td>Anatomy and Physiology (5)</td>
<td></td>
</tr>
<tr>
<td>or [ BIOL 100</td>
<td>Introduction to Concepts of Human Anatomy and Physiology (3)</td>
<td></td>
</tr>
<tr>
<td>or BIOL 102</td>
<td>Essentials of Human Anatomy and Physiology (4)</td>
<td></td>
</tr>
<tr>
<td>COMM 301</td>
<td>Introduction to Public Speaking (3)</td>
<td>3</td>
</tr>
<tr>
<td>or COMM 321</td>
<td>Interpersonal Communication (3)</td>
<td></td>
</tr>
<tr>
<td>or COMM 331</td>
<td>Group Discussion (3)</td>
<td></td>
</tr>
<tr>
<td>ENGWR 341</td>
<td>Introduction to Technical and Professional Writing</td>
<td>3</td>
</tr>
<tr>
<td>FCS 324</td>
<td>Human Development: A Life Span (3)</td>
<td>3</td>
</tr>
<tr>
<td>or PSYC 371</td>
<td>Life Span Developmental Psychology (3)</td>
<td></td>
</tr>
<tr>
<td>COURSE CODE</td>
<td>COURSE TITLE</td>
<td>UNITS</td>
</tr>
<tr>
<td>-------------</td>
<td>-------------------------------</td>
<td>-------</td>
</tr>
<tr>
<td>NUTRI 300</td>
<td>Nutrition</td>
<td>3</td>
</tr>
<tr>
<td>PHYS 310</td>
<td>Conceptual Physics</td>
<td>3</td>
</tr>
<tr>
<td>AH 498</td>
<td>Work Experience in Allied Health</td>
<td>1-4</td>
</tr>
<tr>
<td></td>
<td>Total Units:</td>
<td>30 - 40</td>
</tr>
</tbody>
</table>

The Pre-Health Occupations Associate in Science (A.S.) degree may be obtained by completion of the required program, plus general education requirements, plus sufficient electives to meet a 60-unit total. See CRC graduation requirements.

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- ARTICULATE CAREER OPTIONS AND NECESSARY EDUCATIONAL PATHWAYS (PSLO #1)
- DESCRIBE THE STRUCTURE AND FUNCTION OF EACH BODY SYSTEM (PSLO #2)
- DEMONSTRATE A WORKABLE KNOWLEDGE OF MEDICAL LANGUAGE (PSLO #3)
- DEMONSTRATE PROFESSIONALISM IN A RANGE OF CLINICAL INTERACTIONS AND SETTINGS (PSLO #4)
- DESCRIBE THE PRINCIPLES OF NUTRITION AND THEIR EFFECT ON HEALTH (PSLO #5)
- DESCRIBE THE ROLE THAT CULTURE AND DIVERSITY PLAY IN PATIENT CARE (PSLO #6)

Allied Health (AH)

AH 108 Introduction to Health Occupations

| Units: | 2 |
| Hours: | 36 hours LEC |
| Prerequisite: | None. |
| Catalog Date: | June 1, 2020 |

This course provides an introduction to the health care field and to the core foundational skills needed by all health care workers. Topics include types of health care delivery systems and careers, history and trends of health care, law and ethics pertaining to health care, personal qualities of health care workers, confidentiality and reportable incidents, and infection control and safety procedures for health care settings. Students will be introduced to research tools in the campus library and on the Internet. Students will use these tools to research health care careers and relate them to their own interests, values, and abilities. This course is open to all students wishing to explore the health care industry. A field trip to a local health care facility may be required.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- ASSESS THE IMPORTANCE OF THE HISTORY OF MEDICINE AND EVOLUTION OF THE HEALTH CARE DELIVERY SYSTEM (SLO #1)
- Differentiate between the various health care agencies and facilities, their delivery systems, organizational structure, and major services provided.
- COMPARE AND CONTRAST THE ROLES, RESPONSIBILITIES, AND EDUCATIONAL REQUIREMENTS OF DIFFERENT HEALTH CARE CAREERS (SLO #2)
- Evaluate their own interests and abilities and utilize various research resources to match these to potential health care careers.
- Demonstrate usage of reference materials in public and medical libraries (hard copy and Internet) to research health occupations.
- IDENTIFY AND APPLY LEGAL, ETHICAL AND INFECTION CONTROL PRINCIPLES TO COMMON SITUATIONS ENCOUNTERED IN THE HEALTH CARE SETTING (SLO #3)
- Identify and recognize the breadth and limitations within an occupational scope of practice.
- Understand the basic principles and procedures for controlling the spread of infections and promoting safety in the health care setting.
EXAMINE THE PERSONAL AND PROFESSIONAL CHARACTERISTICS, ATTITUDES, AND APPEARANCE OF HEALTHCARE WORKERS (SLO #4)

- Recognize the importance of cultural sensitivity and humility required of health care providers.
- Accurately spell and pronounce common medical terms and abbreviations used in health occupations.
- Adhere to professional appearance and behavioral standards expected of a health care worker.

AH 110 Medical Language for Health-Care Providers

| Units: | 3 |
| Hours: | 54 hours LEC |
| Prerequisite: | None. |
| Catalog Date: | June 1, 2020 |

This course is an orientation to medical language: basic structure of medical terms and their components: prefixes, suffixes, roots, and combining forms with emphasis on analysis, meaning, spelling, and pronunciation. The course builds a medical vocabulary applicable to the specialties of medicine, the systems of the body, names of major diseases, and terms used in physical examination, diagnosis, and treatment.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- POSSESS A BASIC WORKABLE KNOWLEDGE OF MEDICAL VOCABULARY – SLO #1
- Utilize medical terms correctly as they apply to the systems of the body, anatomy, physiology, disease, diagnosis, and treatment
- Revise health care reports into clear, non-medical terms
- Define medical abbreviations and translate into non-medical language.
- ANALYZE THE STRUCTURAL DESIGN OF MEDICAL TERMS - SLO #2
- Compose medical words with correct spelling and pronunciation
- Identify component parts of a medical word including prefixes, suffixes and combining forms.

AH 120 Human Disease

| Units: | 3 |
| Hours: | 54 hours LEC |
| Prerequisite: | None. |
| Corequisite: | AH 110 and BIOL 102 (Corequisites may be taken previously. BIOL 100 or 430/431 are also acceptable) |
| Catalog Date: | June 1, 2020 |

This course is a study of pathological processes imparting basic knowledge to paramedical personnel. The student will study the basic concepts, terminology, etiology and characteristics of pathological processes. Diseases are classified according to both causative agent and the body system to which they relate.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- EVALUATE THE BASIC CONCEPT AND CHARACTERISTICS OF THE DISEASE PROCESS IN THE HUMAN BODY – SLO #1
- Assess how the systems of the body work together to maintain health
- Examine the effects of disease on all related systems
- DISCUSS THE COMMON DISEASES OF EACH BODY SYSTEM - SLO #2
- Relate patient signs and/or symptoms to the potential disease process occurring within the body.
- Determine the possible etiology of a disease given the clinical manifestations
- Discuss diagnostic tools and potential treatment options for a given disease based on a patient’s clinical history.
AH 124 Pharmacology for the Health Care Professional

This course introduces pharmacology, the knowledge of basic pharmacological terminology and concepts, administration, common generic and trade name medications, with an emphasis on the clinical application of pharmacology of the treatment of disease.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- ANALYZE AND DEFINE PHARMACOLOGICAL TERMS – SLO #1
  - Demonstrate the correct spelling and pronunciation of commonly prescribed generic and proprietary drugs for each medical specialty
  - Select the correct definition of various drug abbreviations
  - Determine the correct definition of common terms used in pharmacology including routes of drug administration, drug interactions, adverse effects and reactions
- ASSESS COMMON MEDICATIONS AND THE CLASSIFICATION OF DRUGS USED TO TREAT MAJOR BODY SYSTEMS AND DISEASES – SLO #2
  - Given the generic name of a commonly prescribed drug, select its proprietary name, drug category, and the disease it is used to treat
  - Analyze healthcare records and correlate symptoms, diagnoses, and tests performed with drugs administered
  - Master the use of a drug guide to locate and understand the effects and usage of pharmacological agents and the drug names including chemical name, brand name, and generic name
  - Evaluate the process of approval of drugs for use in the United States
  - Examine the principles of drug dosage and the interpretation of prescriptive terms

AH 295 Independent Studies in Allied Health

An independent studies project involves an individual student or small group of students in study, research, or activities beyond the scope of regularly offered courses. See the current catalog section of "Special Studies" for full details of Independent Studies.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO #1: Actively engage in intellectual inquiry beyond that required in order to pass a course of study (College Wide Learning Outcome – Area 4).
  - Discuss and outline a proposal of study (that can be accomplished within one semester term) with a supervising instructor qualified within the discipline.
  - Design an independent study (to be completed individually or by collaboration of a small group) to foster special knowledge, skills, and experience that are not available in any one regularly scheduled course.
  - Use information resources to gather discipline-specific information.
- SLO #2: Utilize modes of analysis and critical thinking to apply theoretical perspectives and/or concepts in the major discipline of study to significant problems and/or educational activities (College Wide Learning Outcome – Area 3).
  - Analyze and apply the knowledge, skills and experience that are involved in the independent study to theoretical perspectives and/or concepts in the major discipline of study.
**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- **SLO 1: DEMONSTRATE AN UNDERSTANDING AND APPLICATION OF PROFESSIONAL WORKPLACE BEHAVIOR IN A FIELD OF STUDY RELATED TO ONE'S CAREER.**
  - Understand the effects of time, stress, and organizational management on performance.
  - Demonstrate an understanding of consistently practicing ethics and confidentiality in a workplace.
  - Examine the career/life planning process and relate its relevance to the student.
  - Demonstrate an understanding of basic communication tools and their appropriate use.
  - Demonstrate an understanding of workplace etiquette.

- **SLO 2: DESCRIBE THE CAREER/LIFE PLANNING PROCESS AND RELATE ITS RELEVANCY TO ONE'S CAREER.**
  - Link personal goals to long term achievement.
  - Display an understanding of creating a professional first impression.
  - Understand how networking is a powerful job search tool.
  - Understand necessary elements of a résumé.
  - Understand the importance of interview preparation.
  - Identify how continual learning increases career success.

- **SLO 3: DEMONSTRATE APPLICATION OF INDUSTRY KNOWLEDGE AND THEORETICAL CONCEPTS AS WRITTEN IN LEARNING OBJECTIVES IN PARTNERSHIP WITH THE EMPLOYER WORK SITE SUPERVISOR.**
Animal Science
| Cosumnes River College

This program offers courses designed for students in the Agriculture Business, Veterinary Technology, and Equine Science programs.

Dean
Nancy Reitz

(916) 691-7391
ReitzN@crc.losrios.edu

Associate Degree

A.S. in Equine Science

Equine Science is the study of the principles behind the biology, function, and management of the horse. This program prepares students to develop the skills and knowledge that will help them gain a strong and competitive position in the equine industry.

Catalog Date: June 1, 2020

Degree Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANSC 300</td>
<td>Introduction to Animal Science</td>
<td>3</td>
</tr>
<tr>
<td>ANSC 301</td>
<td>Introduction to Equine Science</td>
<td>3</td>
</tr>
<tr>
<td>ANSC 302</td>
<td>Equine Reproduction</td>
<td>2</td>
</tr>
<tr>
<td>ANSC 303</td>
<td>Equine Business Management</td>
<td>3</td>
</tr>
<tr>
<td>ANSC 304</td>
<td>Livestock Feeding and Nutrition</td>
<td>3</td>
</tr>
<tr>
<td>ANSC 305</td>
<td>Equine Health</td>
<td>3</td>
</tr>
<tr>
<td>ANSC 306</td>
<td>Basic Equine Handling</td>
<td>1</td>
</tr>
<tr>
<td>ANSC 307</td>
<td>Farrier Science</td>
<td>3</td>
</tr>
<tr>
<td>AGB 310</td>
<td>Agriculture Computer Applications</td>
<td>3</td>
</tr>
<tr>
<td>AGB 320</td>
<td>Agriculture Accounting (3)</td>
<td>3</td>
</tr>
<tr>
<td>AGB 330</td>
<td>Agriculture Sales and Communication (3)</td>
<td>3</td>
</tr>
<tr>
<td>or AGB 331</td>
<td>Agriculture Marketing (3)</td>
<td></td>
</tr>
<tr>
<td>ANSC 498</td>
<td>Work Experience in Animal Science</td>
<td>1 - 4</td>
</tr>
</tbody>
</table>

Total Units: 31 - 34

The Equine Science Associate in Science (A.S.) degree may be obtained by completion of the required program, plus general education requirements, plus sufficient electives to meet a 60-unit total. See CRC graduation requirements.

Student Learning Outcomes
Upon completion of this program, the student will be able to:

- Describe the processes involved and outline major events in the evolution and domestication of the horse.
- Formulate a disease and parasite prevention program for equine.
- Describe career opportunities and requirements for successful employment in the equine industry.
- Relate basic genetic principles to techniques in breeding selection and mating programs.
- Identify anatomy and describe physiology of the male and female equine reproductive tract.
- List and explain the correct use of specialized insemination tools.
- Develop and maintain bookkeeping and record systems.
- Develop a ranch plan for an equine facility, incorporating legal requirements and regulations.
- Identify parts of the equine gastrointestinal system and describe the function of each.
- Implement a sound feeding program based on the type and amount of work performed.
- Assess the function and importance of each nutrient as it pertains to equine nutrition.
- Demonstrate basic handling of the horse including catching, haltering, leading and tying.

Career Information

Many Equine Science graduates aim for a future in horse farm management at breeding facilities, lesson barns, and race and show training stables. Students may also qualify for employment as technologists, consultants, show and race facility managers and staff, high school and community or junior college riding and equine science instructors, government agents, journalists, and sales or service representatives for companies promoting horse feed, health, and care products. Other career opportunities are available through breed associations, humane organizations, agriculture extension services, recreational services, horse publications, and more. Many of these options require more than two years of college study. Classes beyond the associate degree may be required for career options or to fully prepare students for transfer to a university program.

Animal Science (ANSC)

ANSC 300 Introduction to Animal Science

| Units: | 3 |
| Hours: | 54 hours LEC |
| Prerequisite: | None |
| Transferable: | CSU; UC |
| General Education: | AA/AS Area IV |
| C-ID: | C-ID AG - AS 104 |
| Catalog Date: | June 1, 2020 |

This course provides a survey of the livestock industry, including the supply of animal products and their uses. A special emphasis is placed on the origin, characteristics, adaptation and contributions of farm animals to the agriculture industry. Students analyze the economic trends and career opportunities in animal agriculture.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO #1: Explain the importance of animal production financially, socially and environmentally.
- identify economically significant beef cattle, sheep, and swine breeds and areas of production
- evaluate animal contributions to human need
- SLO #2: Explain the basic physiology of each body systems and relate that knowledge to the overall function of the animal body.
- appraise livestock body conformation and how it relates to function
- examine life cycles and biotechnological principles of animal production
- identify basic nutritional needs and feeding practices of scientific livestock production
Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO #1 Describe the processes involved and outline major events in the evolution and domestication of the horse.
- Identify and describe the instinctive behaviors of the horse.
- Evaluate cultural contributions to and ethnic influences on the horse industry.
- SLO #2 Identify a minimum of eight common breeds of horses and describe their differences.
- Formulate sound management practices pertaining to equine reproduction.
- Describe unique adaptations of the equine's digestive system and implement a sound feeding program.
- SLO #3 Formulate a disease and parasite prevention program for equines.
- Design an equine handling facility, incorporating the basic housing requirements.
- Handle horses properly, applying ground safety practices.
- Successfully manage horses on a limited scale.
- SLO #4 Describe career opportunities and requirements for successful employment in the equine industry.

ANSC 301 Introduction to Equine Science

| Units: | 3 |
| Hours: | 54 hours LEC |
| Prerequisite: | None. |
| Transferable: | CSU; UC |
| General Education: | AA/AS Area IV |
| Catalog Date: | June 1, 2020 |

A survey of the equine industry including equine evolution, selection, nutrition and feeding, breeding, facilities, handling and health management. Emphasis on sound management practices. This course may include field trips and the instructor may or may not provide transportation.

ANSC 302 Equine Reproduction

| Units: | 2 |
| Hours: | 32 hours LEC; 12 hours LAB |
| Prerequisite: | None. |
| Transferable: | CSU |
| Catalog Date: | June 1, 2020 |

This course combines the study of basic genetic principles with the study of the anatomical and physiological aspects of reproduction as they relate to equine reproduction, emphasizing genetic principles and reproductive aspects. Artificial insemination, embryo manipulation, and current innovations in productive biotechnology will also be examined. This course may include field trips and off-site laboratories and the instructor may or may not provide transportation.
Upon completion of this course, the student will be able to:

- SLO #1 Relate basic genetic principles to techniques in breeding selection and mating programs.
- Evaluate advantages and disadvantages of common mating systems.
- Compile the possible genetic and phenotypic ratios for two traits.
- SLO #2 Analyze the impact of natural versus artificial insemination.
- SLO #3 Identify anatomy and describe physiology of the male and female equine reproductive tract.
- Describe the origin and functions of the major hormones, both male and female, and explain the role of each in reproduction.
- Describe the correct fetal position, delivery process, approximate timeline and maternal behaviors for a normal parturition.
- Distinguish the signs of gestation and the stages of parturition.
- SLO #4 Analyze the advantages and disadvantages of artificial insemination.
- Determine motility concentration and volume of semen in a given specimen.
- SLO #5 Critique various methods of semen storage.
- List and explain the correct use of specialized insemination tools.
- Summarize latest developments in reproductive technology.
- Examine and interpret latest regulations by breed associations regarding registration of foals.

**ANSC 303 Equine Business Management**

**Units:** 3  
**Hours:** 54 hours LEC  
**Prerequisite:** None.  
**Transferable:** CSU  
**Catalog Date:** June 1, 2020

Fundamentals of equine business operations, including taxes, liability, insurance, software, and facility design. The class will emphasize the skills necessary to manage a ranch, barn, stable, boarding, breeding, or training facility. This course may include field trips and the instructor may or may not provide transportation.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- SLO #1 Manage legal and tax aspects of an equine business establishment.
- SLO #2 Describe and implement practices and behaviors consistent with professionalism in the workplace.
- SLO #3 Differentiate between appropriate and inappropriate job behavior and conversation.
- Assess liability issues at the workplace and determine appropriate insurance coverage.
- Summarize contracts and write invoices.
- Develop and maintain bookkeeping and record systems.
- SLO #4 Develop a ranch plan for an equine facility, incorporating legal requirements and regulations.
- Evaluate a variety of office machines and software used in the equine industry.

**ANSC 304 Livestock Feeding and Nutrition**
The fundamentals of digestion and absorption in both ruminants and non-ruminants are discussed. The nutritive value of feeds as they relate to the formulation of livestock rations will be emphasized including by-product feeding. Includes proper selection, evaluation, and utilization of feeds. This course may include field trips and off-site laboratories and the instructor may or may not provide transportation.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO #1 Identify the role of livestock feeding and its part in human nutrition.
- SLO #2 Identify career requirements and potential opportunities leading to successful employment.
- Identify cultural inputs that have shaped the livestock nutrition industry.
- SLO #3 Apply changing nutritional requirements based upon animal physiological development.
- Comprehend differences in digestive anatomy that contrast feeding practices.
- Demonstrate and comprehend animal behavior as it relates to feeding practices.
- SLO #4 Explain in a verbal and written format the role of nutrition an animal health and ultimately food safety.
- Collect and calculate data used in ration formulation.
- Formulate rations with economic feasibility.
- Define and recall biological and inorganic factors that impact feeding and nutrition industry.
- SLO #5 Evaluate economic factors and trends in feeding.
- Identify various primary and by-product feeds, forms and processing techniques.
- Analyze and comprehend various procurement strategies for feed stuff purchases.

ANSC 305 Equine Health

This course introduces the major organ systems of the horse. Emphasis is on preventive maintenance and necessary managerial practices needed to keep the equine athlete, broodmare or family horse in good health.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO #1 Describe the general anatomy of the equine.
- SLO #2 Identify and describe common dental problems and abnormalities.
- Age an equine by dental eruption and dentition.
- SLO #3 Identify, describe, and recognize infectious and non-infectious diseases, their clinical signs, treatment options and prognosis.
- Identify and describe common environmental factors that may cause health problems.
- Identify and describe common internal and external parasites and describe the symptoms they produce.
- Develop effective worming and vaccination schedules.
- Identify and describe the factors that can cause colic and describe the prognosis associated with each factor.
- Identify and describe the various types of wounds, and describe how to effectively manage each type.
- SLO #4-Describe the pathogenesis of Navicular Disease and the related foot problems that are differentials and identify and describe common methods of treatment.
- Identify and describe major types of fore and hind limb lameness and indicate how they relate to usability.
- Identify and describe the major factors responsible for laminitis and outline methods for its prevention and treatment.
- SLO #5 Identify and describe the normal reproductive patterns of the mare and the stallion.
- Identify and describe normal foaling behavior and presentation, and outline procedures for the proper care of the neonate.

**ANSC 306 Basic Equine Handling**

| Units: | 1 |
| Hours: | 54 hours LAB |
| Prerequisite: | None. |
| Transferable: | CSU; UC |
| Catalog Date: | June 1, 2020 |

This course offers an introduction to the fundamentals of horse handling, with an emphasis on safety. Course covers identification of equine behavioral patterns, handling skills such as catching, haltering, tying, lunging and round-pen training, and recognizing how human/horse interactions affect equine behavior.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- SLO #1-Identify and explain basic equine behavior as it relates to riding situations.
- Identify and explain the parts, use, and proper care and storage of essential riding equipment.
- SLO #2-Demonstrate basic handling of the horse including catching, haltering, leading and tying.
- Groom the horse properly before and after riding.
- Saddle and bridle the horse properly.
- Mount and dismount the horse properly and safely.
- SLO #3-Recognize and practice basic horse handling safety skills while on the ground and when mounted.
- Demonstrate basic control of the horse in a round-pen situation at the walk and trot (jog) and recognize the footfall sequence for each gait.
- Safely load and unload a horse from a trailer.
- SLO #4-Demonstrate use of new and innovative techniques in equine handling.
- Demonstrate effective horse restraint.

**ANSC 307 Farrier Science**

| Units: | 3 |
| Hours: | 54 hours LEC |
| Prerequisite: | None. |
| Transferable: | CSU |
| Catalog Date: | June 1, 2020 |

This course covers horseshoeing principles and practices, including basic anatomy and physiology of the horse's limbs and feet, horseshoeing terminology, and guidelines for assessing a proper horseshoeing job. This course focuses on causes, treatment and prevention of common lameness problems.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- SLO #1-Identify all bones, major ligaments, and tendons of the front and hind limbs and explain their physiological function.
- Diagram the internal and external parts of the hoof and analyze the function of each.
- Analyze the motion of various horses and appraise applicable trimming or shoeing techniques for maximum horse benefit.
- Assess a sample hoof and evaluate measures to gain proper balance.
- Analyze young horse potential foot problems.
- SLO #2-Design a plan to restore proper balance of the hoof.
- Diagnose unsoundness of hoof, appraise causes, and recommend remedies.
- Compare and contrast the different types and fitting of a horseshoe.
- Discuss alternatives for corrective shoeing.
- SLO #3-Evaluate a horseshoeing job for balance, symmetry, and correct angles.
- Compare and contrast various horseshoeing jobs for accuracy of placement, size and angle.

ANSC 495 Independent Study in Animal Science

<table>
<thead>
<tr>
<th>Units:</th>
<th>1 - 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hours:</td>
<td>54 - 162 hours LAB</td>
</tr>
<tr>
<td>Prerequisite:</td>
<td>None.</td>
</tr>
<tr>
<td>Transferable:</td>
<td>CSU</td>
</tr>
<tr>
<td>Catalog Date:</td>
<td>June 1, 2020</td>
</tr>
</tbody>
</table>

An independent studies project involves an individual student or small group of students in study, research, or activities beyond the scope of regularly offered courses. See the current catalog section of "Special Studies" for full details of Independent Studies.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO #1: Actively engage in intellectual inquiry beyond that required in order to pass a course of study (College Wide Learning Outcome – Area 4).
- Discuss and outline a proposal of study (that can be accomplished within one semester term) with a supervising instructor qualified within the discipline.
- Design an independent study (to be completed individually or by collaboration of a small group) to foster special knowledge, skills, and experience that are not available in any one regularly scheduled course.
- Use information resources to gather discipline-specific information.
- SLO #2: Utilize modes of analysis and critical thinking to apply theoretical perspectives and/or concepts in the major discipline of study to significant problems and/or educational activities (College Wide Learning Outcome – Area 3).
- Analyze and apply the knowledge, skills and experience that are involved in the independent study to theoretical perspectives and/or concepts in the major discipline of study.
- Explain the importance of the major discipline of study in the broader picture of society.
- SLO #3: Communicate a complex understanding of content matter of the major discipline of study (College Wide Outcome – Area 3).
- Demonstrate competence in the skills essential to mastery of the major discipline of study that are necessary to accomplish the independent study.
- SLO #4: Identify personal goals and pursue these goals effectively (College Wide Outcome – Area 4).
- Utilize skills from the "academic tool kit" including time management, study skills, etc., to accomplish the independent study within one semester term.

ANSC 498 Work Experience in Animal Science
This course provides students with opportunities to develop marketable skills in preparation for employment in their major field of study or advancement within their career. It is designed for students interested in work experience and/or internships in transfer level degree occupational programs. Course content includes understanding the application of education to the workforce; completion of required forms which document the student’s progress and hours spent at the work site; and developing workplace skills and competencies. Appropriate level learning objectives are established by the student and the employer. During the semester, the student is required to participate in a weekly orientation and 75 hours of related paid work experience, or 60 hours of unpaid work experience for one unit. An additional 75 or 60 hours of related work experience is required for each additional unit. Work Experience may be taken for a total of 16 units when there are new or expanded learning objectives. Only one Work Experience course may be taken per semester.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- **DEMONSTRATE AN UNDERSTANDING AND APPLICATION OF PROFESSIONAL WORKPLACE BEHAVIOR IN A FIELD OF STUDY RELATED ONE’S CAREER (SLO 1)**
  - Understand the effects of time, stress, and organizational management on performance.
  - Demonstrate an understanding of consistently practicing ethics and confidentiality in a workplace.
  - Examine the career/life planning process and relate its relevance to the student.
  - Demonstrate an understanding of basic communication tools and their appropriate use.
  - Demonstrate an understanding of workplace etiquette.

- **DESCRIBE THE CAREER/LIFE PLANNING PROCESS AND RELATE ITS RELEVANCY TO ONE’S CAREER (SLO 2)**
  - Link personal goals to long-term achievement.
  - Display an understanding of creating a professional first impression.
  - Understand how networking is a powerful job search tool.
  - Understand necessary elements of a résumé.
  - Understand the importance of interview preparation.
  - Identify how continual learning increases career success.

- **DEMONSTRATE APPLICATION OF INDUSTRY KNOWLEDGE AND THEORETICAL CONCEPTS AS WRITTEN IN LEARNING OBJECTIVES IN PARTNERSHIP WITH THE EMPLOYER WORK SITE SUPERVISOR (SLO 3)**

Units: 1 - 4
Hours: 60 - 300 hours LAB
Prerequisite: None.
Enrollment Limitation: Students must be in a paid or unpaid internship, volunteer position or job related to career goals in Animal Science.
Transferable: CSU
General Education: AA/AS Area III(b)
Catalog Date: June 1, 2020
Anthropology | Cosumnes River College

Anthropology is the study of humans. Anthropologists study our species throughout time; focusing on our diverse modern culture and cultural adaptations, our biological classification as a species and our inclusion in the Order Primates, and our species past developments, including our first steps to our first civilizations. The goal of Anthropology is to study the similarities and differences in biological and cultural adaptations and features across the globe throughout our human history.

Dean

 (916) 691-7142
 WilliaL3@crc.losrios.edu

Associate Degrees for Transfer

A.A.-T. in Anthropology

The Associate in Arts in Anthropology for Transfer Degree (AA-T) is designed to meet common lower-division requirements for a major in Anthropology at California State University (CSU) campuses by completion of 60 transferable semester units with a minimum 2.0 GPA, to include either the California State University General Education Breadth pattern or the Intersegmental General Education Transfer Curriculum; students must earn a grade of C or better in all the courses for the major as described in the Required Program.

Anthropology is the study of humans. Anthropologists study our species throughout time; focusing on our diverse modern culture and cultural adaptations, our biological classification as a species and our inclusion in the Order Primates, and our species' past developments, including our first steps to our first civilizations. The goal of Anthropology is to study the similarities and differences in biological and cultural adaptations and features across the globe throughout our human history.

Anthropology is a holistic discipline, which means that anthropologists study all aspects of humans and our behavior. The field of Anthropology has been broken up into four main sub-fields: Cultural Anthropology, Biological Anthropology, Archaeology and Linguistics. Cultural Anthropology is concerned with the study of human culture and its variations across time and space. Biological Anthropologists aim to study our species from a biological perspective- examining our DNA, relationship to our closest animal relatives, the primates and the fossil evidence of our earliest human ancestors. Archaeology is the study of our past, focused specifically on reconstructing past behavior by looking at objects used by past people. Linguistic Anthropologists study human language and communication.

This degree offers courses that satisfy lower division General Education requirements in both the physical and social sciences, providing students with a solid foundation in anthropology as well as the standard prerequisites for upper division coursework leading to the baccalaureate degree. Students planning to transfer to a four-year school with a major in Anthropology should consult the lower division requirements at the university they plan to attend.

Catalog Date: June 1, 2020

Degree Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Core:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ANTH 300</td>
<td>Biological Anthropology</td>
<td>3</td>
</tr>
<tr>
<td>ANTH 301</td>
<td>Biological Anthropology Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>ANTH 310</td>
<td>Cultural Anthropology (3)</td>
<td>3</td>
</tr>
<tr>
<td>or ANTH 313</td>
<td>Introduction to Cultural Anthropology: Medical Focus (3)</td>
<td></td>
</tr>
<tr>
<td>ANTH 323</td>
<td>Introduction to Archaeology</td>
<td>3</td>
</tr>
<tr>
<td>STAT 300</td>
<td>Introduction to Probability and Statistics (4)</td>
<td>3 - 4</td>
</tr>
<tr>
<td>COURSE CODE</td>
<td>COURSE TITLE</td>
<td>UNITS</td>
</tr>
<tr>
<td>-------------</td>
<td>--------------</td>
<td>-------</td>
</tr>
<tr>
<td>or PSYC 330</td>
<td>Introductory Statistics for the Behavioral Sciences (3)</td>
<td></td>
</tr>
</tbody>
</table>

**Anthropology Electives:**

A minimum of 3 units from the following: 3

- ANTH 303  Introduction to Forensic Anthropology (3)
- ANTH 316  Global Forces in Culture Change (3)
- ANTH 324  World Prehistory (3)
- ANTH 331  The Anthropology of Religion (3)
- ANTH 332  Native Peoples of California (3)
- ANTH 334  Native Peoples of North America (3)
- ANTH 341  Introduction to Linguistics (3)
- ANTH 374  Birth to Death: The Anthropology of Primate Culture and Behavior (3)
- ANTH 336  Anthropology of Sex, Sexuality and Gender (3)

**Science Electives:**

- [[GEOL 300  Physical Geology (3)] and GEOL 301  Physical Geology Laboratory (1)]
- or [ GEOL 305  Earth Science (3)] and GEOL 306  Earth Science Laboratory (1)
- or GEOG 335  Introduction to Geographic Information Systems Applications (3)
- or PSYC 335  Research Methods in Psychology (3)

Total Units: 19 - 21

The Associate in Arts in Anthropology for Transfer (AA-T) degree may be obtained by completion of 60 transferable, semester units with a minimum 2.0 GPA, including (a) the major or area of emphasis described in the Required Program, and (b) either the Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education-Breadth Requirements.

**Student Learning Outcomes**

Upon completion of this program, the student will be able to:

  - Recognize the way in which research leads to generally accepted conclusions and the integration of new research data with the building of a body of scientific knowledge.
  - Recognize that the information presented in science textbooks and other established "authorities" is the result of research conducted in the field or the lab and is based on an accumulation of data.
  - Design a scientific inquiry.

- **CLEARLY EXPRESS SELF WHEN WRITING OR SPEAKING ABOUT ANTHROPOLOGY DEMONSTRATING KNOWLEDGE OF BASIC ANTHROPOLOGICAL TERMINOLOGY AND UNDERSTANDING MAJOR ANTHROPOLOGICAL CONCEPTS. (PSLO 2)**
  - Produce laboratory exercises or field projects which address background information, procedures, results and analysis of data developed during the event of activity.
  - Write essays explaining anthropological processes in clear and concise terms

- **DEMONSTRATE BOTH CONTENT KNOWLEDGE AND TEST TAKING SKILLS WHEN COMPLETING ESSAY, OBJECTIVE AND MULTIPLE CHOICE EXAMS. (PSLO 3)**
- Demonstrate problem solving abilities in major content areas of Anthropology including evolution, genetics, culture, archaeology and human evolution.
- Analyze the logic of multiple choice questions and choose the correct response from among related items.
- Write clear responses to essay question prompts without including extraneous information or omitting information necessary to provide a clear answer.
- Demonstrate content knowledge in the broad areas of anthropology including evolution, culture, genetics, archaeology and human evolution.
- UTILIZE APPROPRIATE FIELDWORK TECHNIQUES FOR ANTHROPOLOGY. (PSLO 4)
  - Conduct participation observation studies.
  - Take appropriate field notes while conducting participant observation studies.
  - Gather data in an appropriate, non-judgmental manner.
  - Perform skeletal measurements.
  - Identify major bones and features of both human and non-human primates.
- Design an anthropological experiment.
- Use diagrams, sketches and maps appropriately in field write-ups.
- EVALUATE ANTHROPOLOGICAL DATA, DRAW REASONABLE CONCLUSIONS, RECOGNIZE ETHICAL IMPLICATIONS OF THESE CONCLUSIONS AND APPLY THESE CONCLUSIONS TO PERSONAL, COMMUNITY AND SCIENTIFIC PROBLEMS. (PSLO 5)
  - Choose appropriate data to collect in order to address a specific hypothesis.
  - Collect data and keep organized records.
  - Use basic graphical and statistical analysis of data.
  - Reach and express logical conclusions drawn on anthropological data.
  - Present data in the form of posters, presentations, and/or written reports how anthropological information is relevant to personal and community issues.
  - Recognize the ethical implications of research on human subjects.
- EMPLOY INFORMATION GATHERING TOOLS TO INVESTIGATE ANTHROPOLOGICAL IDEAS. (PSLO 6)
  - Use the Internet in order to gather scientific information, including the ability to recognize the relevance and scientific validity (or lack thereof) of information when found.
  - Use the library in order to gather scientific information, including the ability to recognize the relevance and scientific validity (or lack thereof) of information when found.

Career Information

Anthropologists with baccalaureate or graduate degrees work as archaeological technicians or project directors for private, state or federal organizations, museum management, forensic specialists in police departments and crime labs, primatology and zoo curation, teaching, consultant or analyst for private, government or educational institutions, non-profit organizations, information technologies, tourism, public health services, and social work. NOTE TO TRANSFER STUDENTS: The Associate Degree for Transfer program is designed for students who plan to transfer to a campus of the California State University (CSU). Other than the required core, the courses you choose to complete this degree will depend to some extent on the selected CSU for transfer. In addition, some CSU-GE Breadth or IGETC requirements can also be completed using courses required for this associate degree for transfer major (known as "double-counting"). Meeting with a counselor to determine the most appropriate course choices will facilitate efficient completion of your transfer requirements. For students wishing to transfer to other universities (UC System, private, or out-of-state), the Associate Degree for Transfer may not provide adequate preparation for upper-division transfer admissions, because many universities require more lower division courses than those in this degree. Even the CSUs that accept this transfer degree may likely require more lower division courses to achieve the Bachelor degree. It is critical that you meet with a CRC counselor to select and plan the courses for the major, as programs vary widely in terms of the required preparation.

Associate Degrees

A.S. in Anthropology

Anthropology is the study of humans. Anthropologists study our species throughout time; focusing on our diverse modern culture and cultural adaptations, our biological classification as a species and our inclusion in the Order Primates, and our species past developments, including our first steps to our first civilizations. The goal of Anthropology is to study the similarities and differences in biological and cultural adaptations and features across the globe throughout our human history.
Anthropology is a holistic discipline, which means that anthropologists study all aspects of humans and our behavior. The field of Anthropology has been broken up into four main sub-fields: Cultural Anthropology, Physical Anthropology, Archaeology and Linguistics. Cultural Anthropology is concerned with the study of human culture and its variations across time and space. Physical Anthropologists aim to study our species from a biological perspective - examining our DNA, relationship to our closest animal relatives, the primates and the fossil evidence of our earliest human ancestors. Archaeology is the study of our past, focused specifically on reconstructing past behavior by looking at objects used by past people. Linguistic Anthropologists study human language and communication.

The CRC Anthropology program offers courses that satisfy lower division General Education requirements in both the physical and social sciences. In addition, the program offers an Associate Degree in Anthropology that provides students with a solid foundation in anthropology as well as the standard prerequisites for upper division coursework leading to the baccalaureate degree. Students planning to transfer to a four-year school with a major in Anthropology should consult the lower division requirements at the university they plan to attend.

Catalog Date: June 1, 2020

Degree Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall, Spring or Summer Term:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ANTH 300</td>
<td>Biological Anthropology</td>
<td>3</td>
</tr>
<tr>
<td>Fall, Spring or Summer Term:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ANTH 301</td>
<td>Biological Anthropology Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>Fall, Spring or Summer Term:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ANTH 310</td>
<td>Cultural Anthropology (3)</td>
<td>3</td>
</tr>
<tr>
<td>or ANTH 313</td>
<td>Introduction to Cultural Anthropology: Medical Focus (3)</td>
<td></td>
</tr>
<tr>
<td>Spring Semester:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ANTH 323</td>
<td>Introduction to Archaeology</td>
<td>3</td>
</tr>
<tr>
<td>Check with department for schedule:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PSYC 330</td>
<td>Introductory Statistics for the Behavioral Sciences (3)</td>
<td>3 - 4</td>
</tr>
<tr>
<td>or STAT 300</td>
<td>Introduction to Probability and Statistics (4)</td>
<td></td>
</tr>
<tr>
<td>Check with department for schedule:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A minimum of 6 units from the following:</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>ANTH 303</td>
<td>Introduction to Forensic Anthropology (3)</td>
<td></td>
</tr>
<tr>
<td>ANTH 316</td>
<td>Global Forces in Culture Change (3)</td>
<td></td>
</tr>
<tr>
<td>ANTH 324</td>
<td>World Prehistory (3)</td>
<td></td>
</tr>
<tr>
<td>ANTH 331</td>
<td>The Anthropology of Religion (3)</td>
<td></td>
</tr>
<tr>
<td>ANTH 332</td>
<td>Native Peoples of California (3)</td>
<td></td>
</tr>
<tr>
<td>ANTH 334</td>
<td>Native Peoples of North America (3)</td>
<td></td>
</tr>
<tr>
<td>ANTH 341</td>
<td>Introduction to Linguistics (3)</td>
<td></td>
</tr>
<tr>
<td>ANTH 374</td>
<td>Birth to Death: The Anthropology of Primate Culture and Behavior (3)</td>
<td></td>
</tr>
<tr>
<td>ANTH 495</td>
<td>Independent Studies in Anthropology (1 - 3)</td>
<td></td>
</tr>
<tr>
<td>A minimum of 3 units from the following:</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Any other Anthropology course listed above</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BIOL 350</td>
<td>Environmental Biology (3)</td>
<td></td>
</tr>
<tr>
<td>BIOL 430</td>
<td>Anatomy and Physiology (5)</td>
<td></td>
</tr>
<tr>
<td>COURSE CODE</td>
<td>COURSE TITLE</td>
<td>UNITS</td>
</tr>
<tr>
<td>-------------</td>
<td>------------------------------------------------------------------------------</td>
<td>--------</td>
</tr>
<tr>
<td>BIOL 462</td>
<td>Genetics in Contemporary Human Society (3)</td>
<td></td>
</tr>
<tr>
<td>COMM 325</td>
<td>Intercultural Communication (3)</td>
<td></td>
</tr>
<tr>
<td>GEOG 310</td>
<td>Human Geography: Exploring Earth's Cultural Landscapes (3)</td>
<td></td>
</tr>
<tr>
<td>GEOG 331</td>
<td>Exploring Maps and Geographic Technologies (3)</td>
<td></td>
</tr>
<tr>
<td>GEOG 335</td>
<td>Introduction to Geographic Information Systems Applications (3)</td>
<td></td>
</tr>
<tr>
<td>MUFHL 330</td>
<td>World Music (3)</td>
<td></td>
</tr>
<tr>
<td>NUTRI 310</td>
<td>Cultural Foods of the World (3)</td>
<td></td>
</tr>
<tr>
<td>PHIL 352</td>
<td>Introduction to World Religions (3)</td>
<td></td>
</tr>
<tr>
<td>PSYC 368</td>
<td>Cross Cultural Psychology (3)</td>
<td></td>
</tr>
<tr>
<td>SOC 321</td>
<td>Race, Ethnicity and Inequality in the United States (3)</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Total Units:</strong> 22 - 23</td>
<td></td>
</tr>
</tbody>
</table>

The Anthropology Associate in Science (A.S.) degree may be obtained by completion of the required program, plus general education requirements, plus sufficient electives to meet a 60-unit total. See CRC graduation requirements.

Student Learning Outcomes

Upon completion of this program, the student will be able to:


- Recognize the way in which research leads to generally accepted conclusions and the integration of new research data with the building of a body of scientific knowledge.

- Recognize that the information presented in science textbooks and other established “authorities” is the result of research conducted in the field or the lab and is based on an accumulation of data.

- Design a scientific inquiry.

- CLEARLY EXPRESS SELF WHEN WRITING OR SPEAKING ABOUT ANTHROPOLOGY DEMONSTRATING KNOWLEDGE OF BASIC ANTHROPOLOGICAL TERMINOLOGY AND UNDERSTANDING MAJOR ANTHROPOLOGICAL CONCEPTS. (PSLO 2)

- Produce laboratory exercises or field projects which address background information, procedures, results and analysis of data developed during the event of activity.

- Write essays explaining anthropological processes in clear and concise terms.

- DEMONSTRATE BOTH CONTENT KNOWLEDGE AND TEST TAKING SKILLS WHEN COMPLETING ESSAY, OBJECTIVE AND MULTIPLE CHOICE EXAMS. (PSLO 3)

- Demonstrate problem solving abilities in major content areas of Anthropology including evolution, genetics, culture, archaeology and human evolution.

- Analyze the logic of multiple choice questions and choose the correct response from among related items.

- Write clear responses to essay question prompts without including extraneous information or omitting information necessary to provide a clear answer.

- Demonstrate content knowledge in the broad areas of anthropology including evolution, culture, genetics, archaeology and human evolution.

- UTILIZE APPROPRIATE FIELDWORK TECHNIQUES FOR ANTHROPOLOGY. (PSLO 4)

- Conduct participation observation studies.

- Take appropriate field notes while conducting participant observation studies.

- Gather data in an appropriate, non-judgmental manner.

- Perform skeletal measurements.

- Identify major bones and features of both human and non-human primates.
• Design an anthropological experiment.
• Use diagrams, sketches and maps appropriately in field write-ups.
• EVALUATE ANTHROPOLOGICAL DATA, DRAW REASONABLE CONCLUSIONS, RECOGNIZE ETHICAL IMPLICATIONS OF THESE CONCLUSIONS AND APPLY THESE CONCLUSIONS TO PERSONAL, COMMUNITY AND SCIENTIFIC PROBLEMS. (PSLO 5)
• Choose appropriate data to collect in order to address a specific hypothesis.
• Collect data and keep organized records.
• Use basic graphical and statistical analysis of data.
• Reach and express logical conclusions drawn on anthropological data.
• Present data in the form of posters, presentations, and/or written reports how anthropological information is relevant to personal and community issues.
• Recognize the ethical implications of research on human subjects.
• EMPLOY INFORMATION GATHERING TOOLS TO INVESTIGATE ANTHROPOLOGICAL IDEAS. (PSLO 6)
• Use the Internet in order to gather scientific information, including the ability to recognize the relevance and scientific validity (or lack thereof) of information when found.
• Use the library in order to gather scientific information, including the ability to recognize the relevance and scientific validity (or lack thereof) of information when found.
• STUDENTS WILL EMBRACE CULTURAL DIVERSITY. (PSLO 7)
• Apply the concept of cultural relativism to real world situations.
• Develop the perspective of “global citizen” to encourage respect for the world's people and environment.
• Recognize factors of human biological and cultural variation.
• Celebrate the varied trajectory of our species from prehistory and into the future.

Career Information
Anthropologists with baccalaureate or graduate degrees work as archaeological technicians or project directors for private, state or federal organizations, museum management, forensic specialists in police departments and crime labs, primatology and zoo curation, teaching, consultant or analyst for private, government or educational institutions, non-profit organizations, information technologies, tourism, public health services, and social work.

A.S. in General Science
Areas of Study include:
• Physical Anthropology
• Astronomy
• Biology
• Chemistry
• Engineering
• Physical Geography
• Geology
• Physics

Eighteen (18) units of transfer level course work in science is required. Two laboratory courses must be included: one in the physical sciences and one in the biological sciences. Courses may be selected from astronomy, biology, chemistry, geology, physical geography, physical anthropology, and physics. The student, in consultation with a counselor, should choose science courses to meet his or her program, transfer, or general education requirements.

Students interested in transferring to a four-year university with a science major are encouraged to complete a science AS or AS-T degree such as Anthropology, Biology, Chemistry, Engineering, Geography, Geology, or Physics. This General Science degree may not include the majors-level transfer courses needed for many science majors. Students are strongly recommended to see a counselor for guidance.

Catalog Date: June 1, 2020

Degree Requirements
<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Life Science with Lab:</td>
<td>A minimum of 4 units from the following:</td>
<td>4</td>
</tr>
<tr>
<td>ANTH 300</td>
<td>Biological Anthropology (3)</td>
<td></td>
</tr>
<tr>
<td>and ANTH 301</td>
<td>Biological Anthropology Laboratory (1)</td>
<td></td>
</tr>
<tr>
<td>BIOL 307</td>
<td>Biology of Organisms (4)</td>
<td></td>
</tr>
<tr>
<td>BIOL 310</td>
<td>General Biology (4)</td>
<td></td>
</tr>
<tr>
<td>BIOL 400</td>
<td>Principles of Biology (5)</td>
<td></td>
</tr>
<tr>
<td>BIOL 410</td>
<td>Principles of Botany (5)</td>
<td></td>
</tr>
<tr>
<td>BIOL 420</td>
<td>Principles of Zoology (5)</td>
<td></td>
</tr>
<tr>
<td>BIOL 430</td>
<td>Anatomy and Physiology (5)</td>
<td></td>
</tr>
<tr>
<td>BIOL 431</td>
<td>Anatomy and Physiology (5)</td>
<td></td>
</tr>
<tr>
<td>BIOL 440</td>
<td>General Microbiology (4)</td>
<td></td>
</tr>
<tr>
<td>B. Physical Science with Lab:</td>
<td>A minimum of 3 units from the following:</td>
<td>3</td>
</tr>
<tr>
<td>ASTR 400</td>
<td>Astronomy Laboratory (1)</td>
<td></td>
</tr>
<tr>
<td>and ASTR 300</td>
<td>Introduction to Astronomy (3)</td>
<td></td>
</tr>
<tr>
<td>CHEM 300</td>
<td>Beginning Chemistry (4)</td>
<td></td>
</tr>
<tr>
<td>CHEM 305</td>
<td>Introduction to Chemistry (5)</td>
<td></td>
</tr>
<tr>
<td>CHEM 306</td>
<td>Introduction to Organic and Biological Chemistry (5)</td>
<td></td>
</tr>
<tr>
<td>CHEM 309</td>
<td>Integrated General, Organic, and Biological Chemistry (5)</td>
<td></td>
</tr>
<tr>
<td>CHEM 322</td>
<td>Environmental Chemistry Laboratory (1)</td>
<td></td>
</tr>
<tr>
<td>and CHEM 321</td>
<td>Environmental Chemistry (3)</td>
<td></td>
</tr>
<tr>
<td>CHEM 400</td>
<td>General Chemistry I (5)</td>
<td></td>
</tr>
<tr>
<td>CHEM 401</td>
<td>General Chemistry II (5)</td>
<td></td>
</tr>
<tr>
<td>CHEM 420</td>
<td>Organic Chemistry I (5)</td>
<td></td>
</tr>
<tr>
<td>CHEM 421</td>
<td>Organic Chemistry II (5)</td>
<td></td>
</tr>
<tr>
<td>GEOG 301</td>
<td>Physical Geography Laboratory (1)</td>
<td></td>
</tr>
<tr>
<td>and GEOG 300</td>
<td>Physical Geography: Exploring Earth's Environmental Systems (3)</td>
<td></td>
</tr>
<tr>
<td>GEOL 301</td>
<td>Physical Geology Laboratory (1)</td>
<td></td>
</tr>
<tr>
<td>and GEOL 300</td>
<td>Physical Geology (3)</td>
<td></td>
</tr>
<tr>
<td>GEOL 306</td>
<td>Earth Science Laboratory (1)</td>
<td></td>
</tr>
<tr>
<td>and GEOL 305</td>
<td>Earth Science (3)</td>
<td></td>
</tr>
<tr>
<td>GEOL 311</td>
<td>Historical Geology Laboratory (1)</td>
<td></td>
</tr>
<tr>
<td>and GEOL 310</td>
<td>Historical Geology (3)</td>
<td></td>
</tr>
<tr>
<td>ENGR 304</td>
<td>How Things Work (3)</td>
<td></td>
</tr>
<tr>
<td>PHYS 350</td>
<td>General Physics (4)</td>
<td></td>
</tr>
<tr>
<td>PHYS 360</td>
<td>General Physics (4)</td>
<td></td>
</tr>
<tr>
<td>COURSE CODE</td>
<td>COURSE TITLE</td>
<td>UNITS</td>
</tr>
<tr>
<td>-------------</td>
<td>-------------------------------------------------------------------------------</td>
<td>----------------------------</td>
</tr>
<tr>
<td>PHYS 370</td>
<td>Introductory Physics - Mechanics and Thermodynamics (5)</td>
<td></td>
</tr>
<tr>
<td>PHYS 380</td>
<td>Introductory Physics - Electricity and Magnetism, Light and Modern Physics (5)</td>
<td></td>
</tr>
<tr>
<td>PHYS 411</td>
<td>Mechanics of Solids and Fluids (4)</td>
<td></td>
</tr>
<tr>
<td>PHYS 421</td>
<td>Electricity and Magnetism (4)</td>
<td></td>
</tr>
<tr>
<td>PHYS 431</td>
<td>Heat, Waves, Light and Modern Physics (4)</td>
<td></td>
</tr>
</tbody>
</table>

**C. Additional Science Courses:**

A minimum of 11 units from the following:

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANTH 300</td>
<td>Biological Anthropology (3)</td>
<td></td>
</tr>
<tr>
<td>ANTH 301</td>
<td>Biological Anthropology Laboratory (1)</td>
<td></td>
</tr>
<tr>
<td>ASTR 300</td>
<td>Introduction to Astronomy (3)</td>
<td></td>
</tr>
<tr>
<td>ASTR 400</td>
<td>Astronomy Laboratory (1)</td>
<td></td>
</tr>
<tr>
<td>BIOL 300</td>
<td>The Foundations of Biology (3)</td>
<td></td>
</tr>
<tr>
<td>BIOL 307</td>
<td>Biology of Organisms (4)</td>
<td></td>
</tr>
<tr>
<td>BIOL 310</td>
<td>General Biology (4)</td>
<td></td>
</tr>
<tr>
<td>BIOL 342</td>
<td>The New Plagues: New and Ancient Infectious Diseases Threating World Health (3)</td>
<td></td>
</tr>
<tr>
<td>BIOL 350</td>
<td>Environmental Biology (3)</td>
<td></td>
</tr>
<tr>
<td>BIOL 352</td>
<td>Conservation Biology (3)</td>
<td></td>
</tr>
<tr>
<td>BIOL 390</td>
<td>Natural History Field Study (0.5 - 4)</td>
<td></td>
</tr>
<tr>
<td>BIOL 400</td>
<td>Principles of Biology (5)</td>
<td></td>
</tr>
<tr>
<td>BIOL 410</td>
<td>Principles of Botany (5)</td>
<td></td>
</tr>
<tr>
<td>BIOL 420</td>
<td>Principles of Zoology (5)</td>
<td></td>
</tr>
<tr>
<td>BIOL 430</td>
<td>Anatomy and Physiology (5)</td>
<td></td>
</tr>
<tr>
<td>BIOL 431</td>
<td>Anatomy and Physiology (5)</td>
<td></td>
</tr>
<tr>
<td>BIOL 440</td>
<td>General Microbiology (4)</td>
<td></td>
</tr>
<tr>
<td>BIOL 462</td>
<td>Genetics in Contemporary Human Society (3)</td>
<td></td>
</tr>
<tr>
<td>CHEM 300</td>
<td>Beginning Chemistry (4)</td>
<td></td>
</tr>
<tr>
<td>CHEM 305</td>
<td>Introduction to Chemistry (5)</td>
<td></td>
</tr>
<tr>
<td>CHEM 306</td>
<td>Introduction to Organic and Biological Chemistry (5)</td>
<td></td>
</tr>
<tr>
<td>CHEM 309</td>
<td>Integrated General, Organic, and Biological Chemistry (5)</td>
<td></td>
</tr>
<tr>
<td>CHEM 321</td>
<td>Environmental Chemistry (3)</td>
<td></td>
</tr>
<tr>
<td>CHEM 322</td>
<td>Environmental Chemistry Laboratory (1)</td>
<td></td>
</tr>
<tr>
<td>CHEM 400</td>
<td>General Chemistry I (5)</td>
<td></td>
</tr>
<tr>
<td>CHEM 401</td>
<td>General Chemistry II (5)</td>
<td></td>
</tr>
<tr>
<td>CHEM 420</td>
<td>Organic Chemistry I (5)</td>
<td></td>
</tr>
<tr>
<td>CHEM 421</td>
<td>Organic Chemistry II (5)</td>
<td></td>
</tr>
<tr>
<td>ENGR 304</td>
<td>How Things Work (3)</td>
<td></td>
</tr>
<tr>
<td>COURSE CODE</td>
<td>COURSE TITLE</td>
<td>UNITS</td>
</tr>
<tr>
<td>-------------</td>
<td>-------------------------------------------------------------------------------</td>
<td>-------</td>
</tr>
<tr>
<td>GEOG 300</td>
<td>Physical Geography: Exploring Earth's Environmental Systems (3)</td>
<td></td>
</tr>
<tr>
<td>GEOG 301</td>
<td>Physical Geography Laboratory (1)</td>
<td></td>
</tr>
<tr>
<td>GEOG 305</td>
<td>Global Climate Change (3)</td>
<td></td>
</tr>
<tr>
<td>GEOG 306</td>
<td>Weather and Climate (3)</td>
<td></td>
</tr>
<tr>
<td>GEOL 300</td>
<td>Physical Geology (3)</td>
<td></td>
</tr>
<tr>
<td>GEOL 301</td>
<td>Physical Geology Laboratory (1)</td>
<td></td>
</tr>
<tr>
<td>GEOL 305</td>
<td>Earth Science (3)</td>
<td></td>
</tr>
<tr>
<td>GEOL 306</td>
<td>Earth Science Laboratory (1)</td>
<td></td>
</tr>
<tr>
<td>GEOL 310</td>
<td>Historical Geology (3)</td>
<td></td>
</tr>
<tr>
<td>GEOL 311</td>
<td>Historical Geology Laboratory (1)</td>
<td></td>
</tr>
<tr>
<td>GEOL 330</td>
<td>Introduction to Oceanography (3)</td>
<td></td>
</tr>
<tr>
<td>GEOL 390</td>
<td>Field Studies in Geology (1 - 4)</td>
<td></td>
</tr>
<tr>
<td>PHYS 310</td>
<td>Conceptual Physics (3)</td>
<td></td>
</tr>
<tr>
<td>PHYS 350</td>
<td>General Physics (4)</td>
<td></td>
</tr>
<tr>
<td>PHYS 360</td>
<td>General Physics (4)</td>
<td></td>
</tr>
<tr>
<td>PHYS 370</td>
<td>Introductory Physics - Mechanics and Thermodynamics (5)</td>
<td></td>
</tr>
<tr>
<td>PHYS 380</td>
<td>Introductory Physics - Electricity and Magnetism, Light and Modern Physics (5)</td>
<td></td>
</tr>
<tr>
<td>PHYS 411</td>
<td>Mechanics of Solids and Fluids (4)</td>
<td></td>
</tr>
<tr>
<td>PHYS 421</td>
<td>Electricity and Magnetism (4)</td>
<td></td>
</tr>
<tr>
<td>PHYS 431</td>
<td>Heat, Waves, Light and Modern Physics (4)</td>
<td></td>
</tr>
<tr>
<td><strong>Total Units:</strong></td>
<td></td>
<td><strong>18</strong></td>
</tr>
</tbody>
</table>

1Courses used in A or B above will not count towards C, except units exceeding the 4 or 3 unit minimum in A and B. For example, a student completing the 5 unit CHEM 309 under B could apply 2 of those units towards C. A total of 18 science units is required.

*The General Science Associate in Science (A.S.) degree may be obtained by completion of the required program, plus general education requirements, plus sufficient electives to meet a 60-unit total. See CRC graduation requirements.*

**Student Learning Outcomes**

Upon completion of this program, the student will be able to:

- explain the core perspectives of the scientific method and apply it to at least one scientific discipline. (SLO 1)
- solve introductory problems of a conceptual and/or numerical nature of at least one scientific discipline. (SLO 2)
- accurately apply the basic vocabulary and concepts of at least one scientific discipline verbally and in writing. (SLO 3)
- recognize the use and misuse of scientific concepts in society including politics and the media. (SLO 4)

**Anthropology (ANTH)**

**ANTH 300 Biological Anthropology**
This course is an introduction to the science of biological anthropology, and analyzes the human place in nature. Applying principles of genetics and evolution, this course will explore modern human variation and how we evolved, including the unique role of culture. The course also covers the classification and distribution of living and extinct human populations, how we determine the geological age of our ancestors, and our relationship to non-human primates such as monkeys and apes. Topics covered in this course include: the scientific method, principles and mechanisms of genetics and heredity, geological dating methods, classification of humans and our near relatives, social organization and behavior of living primates, comparative skeletal anatomy of humans and non-human primates. Local field trips may be required.

### Student Learning Outcomes

Upon completion of this course, the student will be able to:

- **APPLY GENERAL PRINCIPLES OF BIOLOGY, ANTHROPOLOGY AND GENERAL SCIENCE AS IT RELATES TO BIOLOGICAL ANTHROPOLOGY.**
  
  SLO 1
  
  - Describe the steps of scientific inquiry, including the formulation of scientific hypotheses and research design.
  
  - Describe the history of evolutionary thought and the mechanisms of evolution.
  
  - Define basic cellular and DNA components and functions.
  
  - Articulate concepts of transmission genetics (Mendelian inheritance) and solve problems using Punnett squares and pedigrees.
  
  - Explain how human physical variation is a result of both biology and adaptation to environmental conditions.
  
- **DESCRIBE THE CLASSIFICATION OF NON-HUMAN AND HUMAN PRIMATES IN A TAXONOMIC RELATIONSHIP FOCUSING ON THEIR EVOLUTIONARY ORIGINS AND SHARED BEHAVIOR.**
  
  SLO 2
  
  - Recognize and identify key features of primate classification, including defining physical characteristics of different taxonomic groups.
  
  - Discuss the classification of primates to illustrate evolutionary history.
  
  - Compare and contrast non-human primate and human behavior in areas such as conflict, cooperation, mating strategies and mate selection, feeding ecology, and use of the environment, utilizing socio-biological principles.
  
  - Compare and contrast anatomical features and structures of non-human primates and their relationship to behavior and environmental adaptation.
  
- **HYPOTHESIZE ABOUT A TRAJECTORY OF HUMAN EVOLUTION BASED ON KEY FOSSIL FINDS.**
  
  SLO 3
  
  - Summarize types of scientific dating methods and their applications to fossils
  
  - Construct a probable phylogeny for extinct hominids including evolutionary descent.
  
  - Evaluate current evidence of hominid fossils, genetic data and artifacts for their validity to understanding human evolution.
  
  - Recognize problems when evaluating fossil evidence.
This course is an introductory laboratory course designed to provide students with an opportunity to become familiar with the methods of the science of biological anthropology while investigating topics in laboratory and field situations. Topics covered in the course are: the scientific method, sources of biological variation and forces of evolution, human osteology (bone identification), human variation, taxonomy and comparative osteology of the primates, comparative behavior, and the fossil evidence for human evolution. A field trip to the local zoo will be included. This course is designed as a companion course to Anthropology 300 - Biological Anthropology.

### Student Learning Outcomes

Upon completion of this course, the student will be able to:

- **ARTICULATE GENERAL PRINCIPLES OF BIOLOGY, ANTHROPOLOGY AND GENERAL SCIENCE AS THEY RELATE TO PHYSICAL ANTHROPOLOGY.** (SLO 1)
  - Identify the steps of scientific inquiry and formulate basic scientific hypotheses.
  - Demonstrate knowledge of the basic principles of Mendelian and population genetics by solving Punnett squares and pedigrees.
  - Define basic cellular and DNA components and functions.
  - Explore the mechanisms of evolution.
  - **DEMONSTRATE KNOWLEDGE OF OSTEOLOGY, ANALYZE MEASUREMENTS OF BONES AND APPLY FORENSIC TECHNIQUES.** (SLO 2)
    - Identify bones and significant features of bones of the human skeleton.
    - Perform measurements to describe age and sex related variability in skeletal remains.
    - Analyze skeletal remains to determine probable cause of death and life history events.
  - DEVELOP UNDERSTANDING OF THE CLASSIFICATION OF PRIMATES AND HUMANS IN A TAXONOMIC RELATIONSHIP, THEIR EVOLUTIONARY ORIGINS AND SHARED BEHAVIOR. (SLO 3)
    - Recognize characteristics of living primates that are useful for identification and interpretation of non-human primate and human fossils.
    - Compare and contrast skeletons of prosimians, monkeys, apes, and humans to elucidate patterns of locomotion and dietary adaptation.
    - Compare and contrast behaviors of living primates as they relate to environmental adaptation.
    - UNDERSTAND A TRAJECTORY OF HUMAN EVOLUTION BASED ON KEY FOSSIL FINDS. (SLO 4)
    - Identify significant anthropoid, hominoid, and hominid fossils.
    - Evaluate alternative interpretations of fossil evidence.
    - Recognize specific characteristics used to differentiate hominid fossil species and how they relate to patterns of adaptation and evolution of the species.
    - Analyze the material cultural adaptations (artifacts) and the roles they have played in human evolution.
    - Describe the biological and behavioral adaptations of the genus Homo.

### ANTH 303 Introduction to Forensic Anthropology

| Units: | 1 |
| Hours: | 54 hours LAB |
| Prerequisite: | None. |
| Corequisite: | ANTH 300 |
| Advisory: | MATH 100, or placement through the assessment process. |
| Transferable: | CSU; UC |
| General Education: | CSU Area B3; IGETC Area 5C |
| C-ID: | C-ID ANTH 115L |
| Catalog Date: | June 1, 2020 |

This course is an introductory laboratory course designed to provide students with an opportunity to become familiar with the methods of the science of biological anthropology while investigating topics in laboratory and field situations. Topics covered in the course are: the scientific method, sources of biological variation and forces of evolution, human osteology (bone identification), human variation, taxonomy and comparative osteology of the primates, comparative behavior, and the fossil evidence for human evolution. A field trip to the local zoo will be included. This course is designed as a companion course to Anthropology 300 - Biological Anthropology.

### Student Learning Outcomes

Upon completion of this course, the student will be able to:

- **ARTICULATE GENERAL PRINCIPLES OF BIOLOGY, ANTHROPOLOGY AND GENERAL SCIENCE AS THEY RELATE TO PHYSICAL ANTHROPOLOGY.** (SLO 1)
  - Identify the steps of scientific inquiry and formulate basic scientific hypotheses.
  - Demonstrate knowledge of the basic principles of Mendelian and population genetics by solving Punnett squares and pedigrees.
  - Define basic cellular and DNA components and functions.
  - Explore the mechanisms of evolution.
  - **DEMONSTRATE KNOWLEDGE OF OSTEOLOGY, ANALYZE MEASUREMENTS OF BONES AND APPLY FORENSIC TECHNIQUES.** (SLO 2)
    - Identify bones and significant features of bones of the human skeleton.
    - Perform measurements to describe age and sex related variability in skeletal remains.
    - Analyze skeletal remains to determine probable cause of death and life history events.
  - DEVELOP UNDERSTANDING OF THE CLASSIFICATION OF PRIMATES AND HUMANS IN A TAXONOMIC RELATIONSHIP, THEIR EVOLUTIONARY ORIGINS AND SHARED BEHAVIOR. (SLO 3)
    - Recognize characteristics of living primates that are useful for identification and interpretation of non-human primate and human fossils.
    - Compare and contrast skeletons of prosimians, monkeys, apes, and humans to elucidate patterns of locomotion and dietary adaptation.
    - Compare and contrast behaviors of living primates as they relate to environmental adaptation.
    - UNDERSTAND A TRAJECTORY OF HUMAN EVOLUTION BASED ON KEY FOSSIL FINDS. (SLO 4)
    - Identify significant anthropoid, hominoid, and hominid fossils.
    - Evaluate alternative interpretations of fossil evidence.
    - Recognize specific characteristics used to differentiate hominid fossil species and how they relate to patterns of adaptation and evolution of the species.
    - Analyze the material cultural adaptations (artifacts) and the roles they have played in human evolution.
    - Describe the biological and behavioral adaptations of the genus Homo.
This course provides an overview of forensic anthropology, which is an applied field of biological anthropology. Forensic anthropologists answer questions of medicolegal significance by applying techniques designed for the analysis of human skeletal remains. This course will focus on the introductory techniques used for human skeletal identification and trauma analysis. This identification will provide understanding of the broader aspects of applied anthropology and its role working with law enforcement agencies, human rights issues as well as ethical considerations.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- DESCRIBE THE SCIENTIFIC METHODS AND THEORIES USED BY ANTHROPOLOGISTS WITHIN A FORENSIC CONTEXT (SLO 1)
- Recall and apply anatomical terminology to identify human skeletal anatomy (Objective 1a)
- Recognize accepted methodology to estimate sex, age, stature and ancestry to human skeletal remains (Objective 1b)
- DERIVE AN INTRODUCTORY ASSESSMENT OF THE CHANGES IN SKELETAL REMAINS OVER TIME DUE TO VARIOUS FACTORS (SLO 2)
- identify environmental conditions such as weather and burial conditions as possible modifiers to skeletal material (Objective 2a)
- Draft a preliminary hypothesis concerning possible antemortem changes in the skeleton such as trauma (Objective 2b)
- Propose an initial assessment of skeletal remains using published case studies (Objective 2c)
- ARTICULATE THE LEGAL AND ETHICAL RESPONSIBILITIES INVOLVED WITH WORKING WITH HUMAN REMAINS IN VARIOUS FORENSIC CONTEXTS (SLO 3)
- Discuss the responsibilities and potential issues involved in the positive identification of remains (Objective 3a)
- Appreciate the roles of forensic anthropologists in local and global settings (Objective 3b)
- Critique the effectiveness of forensic anthropology as a tool in scientific and social contexts (Objective 3c)

ANTH 310 Cultural Anthropology

This course is an introduction to the cultures and customs of human groups throughout the world with the aim of understanding how cultures function based on their world views. Topics include subsistence methods, religious belief systems, linguistics, economics, political organization, kinship, gender, marriage and family systems, social stratification, and globalization. This course stresses anthropological concepts such as culture, cultural relativism, holism, ethnocentrism, cross-cultural comparisons, world view, culture change, fieldwork, ethics and theory. A field trip may be required at the discretion of the instructor.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- DEMONSTRATE AN UNDERSTANDING OF CULTURAL ANTHROPOLOGY. (SLO 1)
- Recognize the scientific and humanistic approaches to cultural anthropology.
- Explain how cultural anthropologists use a four-field approach and an applied perspective.
- Evaluate cultural anthropological theories and understand how they have been used to view culture and society.
- Appraise field methods, such as ethnography, and ethical considerations in anthropology.
- EXPLORE DIVERSITY OF HUMAN CULTURE, INCLUDING CULTURAL TRADITIONS AND BELIEF SYSTEMS. (SLO 2)
- Employ important anthropological concepts such as cultural relativism, holism, world view, enculturation, ethnocentrism and culture.
- Utilize both an insider (emic) and outsider (etic) point of view to analyze cultural behavior and critique the benefits of each perspective.
Recognize how stratification occurs at the levels of family/kin, economic, social and political levels and how it impacts the culture as a whole.

Comprehend how environmental, social and political change can effect cultural adaptation, such as the switch from foraging to food production.

Demonstrate awareness of how groups delineate cultural boundaries such as sex, gender, race/ethnicity, religious beliefs and sub groups.

EVALUATE THE IMPORTANCE OF SYMBOLIC FORMS OF COMMUNICATION IN HUMAN CULTURES. (SL0 3)

Appraise the role of language in learning, enculturation and cross-cultural communication.

Recognize the importance of linguistic diversity and the problem of language extinction.

ASSESS GLOBAL TRENDS IN CULTURE CHANGE. (SLO 4)

Examine culture change for indigenous groups based on colonialism and globalization.

Appraise the creation of global culture and processes of cultural homogenization.

ANTH 313 Introduction to Cultural Anthropology: Medical Focus

This course is an introduction to the cultures and customs of human groups throughout the world with the aim of understanding how cultures function based on their world views. Topics include subsistence methods, religious belief systems, linguistics, economics, political organization, kinship, gender, marriage and family systems, social stratification, and globalization. This course emphasizes the intersection of culture and medical practices, perspectives on healing and health, and the notion that biology and culture matter equally in the human experience of disease. Through ethnographic examples the course stresses anthropological concepts such as culture, cultural relativism, holism, ethnocentrism, cross-cultural comparisons, world view, culture change, fieldwork, ethics and theory. This Introduction to Cultural Anthropology course is highly recommended for students pursuing degrees in the health fields. This class is not intended for students who have already completed Anthropology 310. A field trip may be required at the discretion of the instructor.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- DEMONSTRATE AN UNDERSTANDING OF CULTURAL ANTHROPOLOGY. (SLO 1)
- Recognize the scientific and humanistic approaches to cultural anthropology.
- Explain how cultural anthropologists use a four-field approach and an applied perspective.
- Evaluate cultural anthropological theories and understand how they have been used to view culture and society.
- Appraise field methods, such as ethnography, and ethical considerations in anthropology.

- EXPLORE DIVERSITY OF HUMAN CULTURE, INCLUDING CULTURAL TRADITIONS AND BELIEF SYSTEMS. (SLO 2)
- Employ important anthropological concepts such as cultural relativism, holism, world view, enculturation, ethnocentrism and culture.
- Utilize both an insider (emic) and outsider (etic) point of view to analyze cultural behavior and critique the benefits of each perspective.
- Recognize how stratification occurs at the levels of family/kin, economic, social and political levels and how it impacts the culture as a whole.
- Comprehend how environmental, social and political change can effect cultural adaptation, such as the switch from foraging to food production.
- Demonstrate awareness of how groups delineate cultural boundaries such as sex, gender, race/ethnicity, religious beliefs and sub groups.
- EVALUATE THE IMPORTANCE OF SYMBOLIC FORMS OF COMMUNICATION IN HUMAN CULTURES. (SL0 3)
Appraise the role of language in learning, enculturation and cross-cultural communication.
Recognize the importance of linguistic diversity and the problem of language extinction.
ASSESS GLOBAL TRENDS IN CULTURE CHANGE. (SLO 4)
Examine culture change for indigenous groups based on colonialism and globalization.
Appraise the creation of global culture and processes of cultural homogenization.
APPRAISE THE IMPORTANCE OF MEDICAL ANTHROPOLOGY IN THE HEALTH AND MEDICAL FIELDS. (SLO 5)
Recognize the importance of culture in the diagnosis, treatment, and cure of illness.
Examine ways in which medical anthropology can be applied to the care of patients.

ANTH 316 Global Forces in Culture Change

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Advisory: Eligibility for ENGWR 300 or the equivalent skills demonstrated through the assessment process.
Transferable: CSU; UC
General Education: AA/AS Area V(b); AA/AS Area V(f); CSU Area D1; IGETC Area 4A
Catalog Date: June 1, 2020

The course will focus on how global forces in culture change have an impact on groups of people within the United States and non-western cultures, such as European colonialism (including the slave trade), minority and indigenous people activism, and a redefinition of male and female roles with migration. The course considers such global forces as modernization, development, trade and finance, tourism, migration and refugees, transnationalism, ethnicity and diasporas, technology and digital media, and tribal cultures. Culture change will be illustrated through various ethnographic examples and includes issues such as women's issues, AIDS/HIV, underemployment, famine, terrorism, the digital divide, and overpopulation.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- DEMONSTRATE AN UNDERSTANDING OF GLOBAL FORCES SHAPING THE CONTEMPORARY WORLD. (SLO 1)
  - Explain how colonialism and capitalism have shaped global inequality.
  - Understand the influence of non-governmental organizations, terrorist groups, and grass roots movements as "non-state" actors capable of shifting world power dynamics.
  - Evaluate the impact of population movements of unprecedented scale (migrants, refugees, and tourists) for the environment, cultural identity, and global politics.
- UNDERSTAND THE DYNAMICS OF CULTURE CHANGE FROM AN ANTHROPOLOGICAL PERSPECTIVE. (SLO 2)
  - Recognize how long-term ethnographic research is necessary for studying culture change over time.
  - Utilize anthropological theories to explain global culture change in the past, present, and future.
- UNDERSTAND THE MECHANISMS OF CULTURE CHANGE AND BE ABLE TO COMPARE AND CONTRAST THE RESPONSES OF DIFFERENT CULTURES. (SLO 3)
  - Recognize the importance of diffusion, invention, and forced culture change in contemporary cultures.
  - Evaluate how local cultural responses in turn can impact and change global forces.

ANTH 323 Introduction to Archaeology

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Advisory: Eligibility for ENGWR 300 or the equivalent skills demonstrated through the assessment process.
Transferable: CSU; UC
General Education: AA/AS Area V(b); CSU Area D1; IGETC Area 4A
C-ID: C-ID ANTH 150
Catalog Date: June 1, 2020
This course is an introduction to the concepts, methods and theoretical perspectives employed in the scientific study of archaeology. Emphasis will be placed on how data is retrieved from the archaeological record, and how it can be used to address questions about the development and evolution of human social systems. Topics will include archaeological theory, survey and excavation methods, laboratory analysis, reconstructing past environments, and drawing conclusions about the past from archaeological data. This course will draw upon examples from the New World as well as archaeological examples worldwide. A field trip may be required.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- IDENTIFY THE APPROPRIATE ARCHAEOLOGICAL THEORIES AND METHODS USED TO INVESTIGATE ARCHAEOLOGICAL SITES. (SLO 1)
- Propose the appropriate dating technique to use on different archaeological materials.
- Critique the different theoretical approaches in archaeological investigations.
- Utilize appropriate mapping, excavation and collection techniques of archaeological sites and artifacts.
- Recognize appropriate mapping, excavation and collection techniques of archaeological sites and artifacts.
- INTERPRET ARCHAEOLOGICAL DATA TO FORM CONCLUSIONS ABOUT PAST USAGE OF ARCHAEOLOGICAL SITES. (SLO 2)
- Apply inquiry methods used by archaeologists to reconstruct past landscapes and social systems.
- Evaluate the effectiveness of different theoretical approaches at evaluating archaeological data.
- Analyze and describe how archaeological knowledge can be applied to the study of modern humans and our societies.

ANTH 324 World Prehistory

3 units
54 hours LEC
None.
CSU; UC
AA/AS Area V(b); AA/AS Area VI; CSU Area D1; IGETC Area 4A
June 1, 2020

This course is a broad survey of world prehistory, from an archaeological perspective. Patterns of culture change will be examined beginning at the emergence of human culture through the development of domestication of plants and animals, to the development of literate societies capable of recording their own history (in writing). Included are major cultural developments on every continent, emphasizing similarities and differences in the nature and timing of key technological, cultural, and social changes. The course will be focused around several key developments in human societies including the transition out of the last ice age, domestication of plants and animals, the establishment of "complex" societies, and the development of important technologies, including pottery and writing. Methodologies for learning about the past, major archaeological discoveries, important personalities, and contributions to the modern world are discussed in the context of understanding the strengths and limitations of a scientific approach to human prehistory.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- IDENTIFY THE APPROPRIATE ARCHAEOLOGICAL THEORIES AND METHODS USED TO INVESTIGATE ARCHAEOLOGICAL SITES. (SLO 1)
- Propose the appropriate dating technique to use on different archaeological materials.
- Recognize the different theoretical approaches in archaeological investigations, and how they have shaped the understanding of world prehistory.
- Interpret archaeological data to form conclusions about past usage of archaeological sites.
- PRODUCE A TRAJECTORY OF KEY EVENTS IN HUMAN PREHISTORY, INCLUDING HUMAN EVOLUTION AND DOMESTICATION OF PLANTS AND ANIMALS. (SLO 2)
- Evaluate current evidence of hominid fossils, artifacts, and archaeological sites and their validity in understanding human evolution.
- Recognize the potential problems in evaluating fossil evidence and interpreting archaeological sites.
- Evaluate the various theories concerning the inception of agriculture.
- Identify key archaeological sites relating to human evolution and the beginnings of agriculture.
APPRECIATE THE VARIATION OF PAST CIVILIZATIONS ACROSS THE GLOBE FROM AN ARCHAEOLOGICAL PERSPECTIVE. (SLO 3)

- Illustrate differences in various civilizations as a result of past history, environment, and technology.
- Recognize the impact of famous archaeological sites, such as Machu Picchu, Teotihuacan, and Giza on the study of human prehistory.
- Interpret the archaeological record and the evidence for the impact of ethnocentrism, ethnic identity, age, class, gender, conquest by outside groups, religion on the development of civilizations.
- Build a foundation of understanding of cultural tolerance of various modes of adaptation in the past and the development of different cultures, including their ideas, cultural values, religions, artistic expression and many other features from across the globe.

ANTH 331 The Anthropology of Religion

| Units: | 3 |
| Hours: | 54 hours LEC |
| Prerequisites: | None. |
| Advisory: | Eligibility for ENGWR 300 or the equivalent skills demonstrated through the assessment process. |
| Transferable: | CSU; UC |
| General Education: | AA/AS Area V(b); AA/AS Area VI; CSU Area D; IGETC Area 4 |
| Catalog Date: | June 1, 2020 |

This course is a cross-cultural study of the forms and functions of supernatural beliefs and associated rituals in various societies around the world. Emphasis of the course is on understanding beliefs and rituals within their social contexts and on broad comparisons to derive insight into the general functions of beliefs and rituals in human life. Students who have already completed ANTH 330 should not enroll in this course.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- DEMONSTRATE AN UNDERSTANDING OF ANTHROPOLOGY AND CULTURE. (SLO 1)
  - Define culture and religion.
  - Explain the four field approach and the applied perspective.
  - Evaluate anthropological theories on religious behavior and understand how they have been used to reduce anxiety and promote social solidarity.
  - Construct or analyze an ethnographic field study.
- EVALUATE THE ROLE OF RELIGION AND SUPERNATURAL BELIEFS IN SOCIETY. (SLO 2)
  - Describe the function of belief, religion, ritual, myth, symbols and taboo.
  - Recognize the distinction between religious specialists such as prophets, priests, shamans, and diviners.
  - Compare medical models of different cultures (ethnomedicine) emphasizing their belief systems, attributed causes and traditional cures as well as the efficacy of such approaches.
  - Explore cross-cultural approaches to and attitudes about altered states of reality/consciousness.
  - Examine how various cultures deal with death and dying including funerary and mortuary practices and beliefs about the afterlife.
- APPLY GENERAL PRINCIPLES OF ANTHROPOLOGY TO THE ANALYSIS OF SUPERNATURAL BELIEFS AND PRACTICES. (SLO 3)
  - Describe the impact of conflicting religious/spiritual beliefs and the effects it has on traditions and society, including marginalization, adaptation and syncretism.
  - Assess how people communicate with the supernatural through ceremonies and rituals.
  - Analyze the basis for supernatural contact achieved through meditation, ordeal or deprivation.
  - Delineate the roles of supernatural entities in the affairs of humans.
  - Elucidate the different types of organized religions: Cults, sects and established groups and explore the functions of revitalization movements, fundamentalism, beliefs in apocalypses, messiahs and salvation as anthropological concepts.
  - Examine the role of human biology and evolution in the origins of religion and ritual.
ANTH 332 Native Peoples of California

This course provides a study of the many cultures of the different native inhabitants of California from the prehistoric period through the present time, introducing the diversity and complexity of aboriginal California. Topics include native ecological adaptations, material culture, social structure, language, religion and mythology, ideology and worldview, and response to change. The course critically examines the impact of Native Californian cultures on each other as well as interactions between Native Californians and other Native Americans, Americans, Europeans, Africans, Asians, Pacific Islanders, and others. Perspectives on changes in traditional life and Native Californians’ current position in American society will be included as well as contributions of Native Californians to the cultures of the Americas. A field trip may be required.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- EXPLAIN THE DIVERSITY OF NATIVE CALIFORNIANS (SLO 1)
  - Create a map illustrating the major culture areas of California.
  - Recognize the environment of each of the major cultural groups and scientifically validate consequential ecological adaptations, including the diagnostic cultural features of the group(s) in each area.
  - Compare and contrast Native Californian social and cultural systems with those of other major Native North American culture areas such as the Southwest, Arctic, and Great Basin.
  - Evaluate the linguistic diversity and complexity of Native California.

- INTERPRET RESEARCH TO DESCRIBE PAST LIFEWAYS (SLO 2)
  - Utilize ethnographic texts and interpret archaeological data to assess Native California technology, subsistence, and other cultural adaptations.
  - Examine the various interpretations and historical significance of Native Californians in anthropology.

- EVALUATE CONTEMPORARY ISSUES OF NATIVE CALIFORNIANS (SLO 3)
  - Examine from an anthropological perspective a source of present day culture conflicts experienced by Native Californians, including at least one of the following: inter-tribal conflict, conflict with other minority groups, or conflict with dominant European American culture.
  - Explain and appraise current issues (ex: bias; cultural assumptions; financial stability; racial politics; and differences relating to class, gender, and age) among Native Californians within tribal groups and cross-tribally.

ANTH 334 Native Peoples of North America

This course is an introductory survey of the cultures of the different native inhabitants of North America from the prehistoric period through the present time. Topics include native ecological adaptations, material culture, social structure, language, religion and mythology, ideology and worldview, and response to change. The course critically examines the impact of Native American cultures on each other as well as the interactions between Native Americans and Europeans, Africans, Asians, Pacific Islanders and others. Perspectives on changes in traditional life and Native Americans’ current positions in North American societies will be included as well as contributions of Native Americans to the cultures of the Americas. A field trip may be required.

Student Learning Outcomes

Upon completion of this course, the student will be able to:
EXPLAIN THE DIVERSITY OF NATIVE NORTH AMERICANS (SLO 1)

- Create a map illustrating the major culture areas of North America.
- Recognize the environment of each of the major culture areas of North America and scientifically validate the consequential ecological adaptations including the diagnostic cultural features of the group(s) in each area.
- Evaluate the linguistic diversity and complexity of Native North America.

INTERPRET RESEARCH TO DESCRIBE PAST LIFEWAYS (SLO 2)

- Utilize ethnographic texts and interpret archaeological data to understand Native American technology, subsistence, and other cultural adaptations.
- Examine the various interpretations and historical significance of Native Americans in anthropology.

EVALUATE CONTEMPORARY ISSUES OF NATIVE AMERICANS (SLO 3)

- Examine from an anthropological perspective a source of present day culture conflict between Native Americans and the dominant Euro-American, Canadian, and Mexican cultures.
- Explain and appraise current issues (ex: bias; cultural assumptions; financial stability; racial politics; and differences relating to class, gender, and age) among Native Americans within tribal groups and cross-tribally.

ANTH 336 Anthropology of Sex, Sexuality and Gender

- **Units:** 3
- **Hours:** 54 hours LEC
- **Prerequisite:** ANTH 300 (Physical Anthropology) or ANTH 310 (Cultural Anthropology) with a grade of "C" or better, and eligibility for ENGWR 300 (College Composition).
- **Advisory:** CSU; UC
- **Transferable:** AA/AS Area V(b); AA/AS Area VI; CSU Area D; IGETC Area 4
- **General Education:** AA/AS Area V(b); CSU Area D; IGETC Area 4
- **Catalog Date:** June 1, 2020

This course provides an introductory overview of anthropological perspectives on sex, sexuality and gender, drawing from all four sub-fields (archaeology, cultural, linguistic, and physical). Topics will include cross-cultural comparisons of the diversity of sex, sexuality, and gender, comparisons of sexual behavior among extinct human ancestors and non-human primates such as monkeys and apes, drawing conclusions about the past from archaeological data, examining the nature/nurture debate, and examining evolutionary perspectives related to sex, sexuality and gender. A field trip may be required at the discretion of the instructor.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- **IDENTIFY CULTURAL ANTHROPOLOGICAL THEORIES, METHODS, AND CONCEPTS IN RELATION TO THE STUDY OF SEX, SEXUALITY, AND GENDER. (SLO 1)**
  - Describe cross-cultural diversity of gender and sexuality from the smallest indigenous societies to the largest industrial societies.
  - Identify and apply ethical dilemmas in anthropological research on sex, sexuality and gender.
  - Recognize how issues related to sex, sexuality, and gender affect society.
  - Distinguish how cultural anthropological approaches to understanding sex, sexuality, and gender benefit from a holistic perspective.

- **IDENTIFY LINGUISTIC ANTHROPOLOGICAL THEORIES, METHODS, AND CONCEPTS IN RELATION TO THE STUDY OF SEX, SEXUALITY, AND GENDER. (SLO 2)**
  - Explain how language is gendered and sexualized.
  - Review and apply the societal implications of gendered and or sexualized language.
  - Distinguish how linguistic anthropological approaches to understanding sex, sexuality, and gender benefit from a holistic perspective.

- **IDENTIFY ARCHAEOLOGICAL THEORIES, METHODS, AND CONCEPTS IN RELATION TO THE STUDY OF SEX, SEXUALITY, AND GENDER. (SLO 3)**
  - Summarize cross-cultural gender and sexuality diversity in the ancient past.
  - Explain and assess the issues associated with analyzing gender, sex, and sexuality in the archaeological record.
  - Evaluate representations of gender and sexuality diversity in media portrayals of prehistory.
Distinguish how archaeological approaches to understanding sex, sexuality, and gender benefit from a holistic perspective.

IDENTIFY PHYSICAL ANTHROPOLOGICAL THEORIES, METHODS, AND CONCEPTS IN RELATION TO THE STUDY OF SEX, SEXUALITY, AND GENDER. (SLO 4)

Describe the diversity of human biological sex and sexuality spectra.

Explain how human physical variation and behavior is a result of both biology and culture.

Compare sex differences and sexuality among non-human primates such as monkeys and apes and among extinct and modern humans.

Distinguish how physical anthropological approaches to understanding sex, sexuality, and gender benefit from a holistic perspective.

ANTH 341 Introduction to Linguistics

This course explores the role of language in social interaction and world view. It examines minority languages and dialects, bilingualism, literacy and the social motivation of language change through technology, globalization, and colonialism. The student will also be introduced to the analytical techniques of linguistics, the universal structures of language, and the demonstration of their relevance to language in sociocultural issues.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• DEMONSTRATE AN UNDERSTANDING OF ANTHROPOLOGICAL LINGUISTICS. (SLO 1)
  Appreciate the dynamic relationship between culture, language, and speakers.
  Comprehend the Sapir-Whorf hypothesis and its importance in anthropological linguistics.
  Recognize the importance of prosody, nonverbal communication, and symbolic communication.
  Identify the ways in which cultural diversity expresses itself in language.
• COMPREHEND THE THEORIES AND METHODS USED TO INTERPRET LANGUAGES AND THEIR RELATIONSHIPS TO CULTURE. (SLO 2)
  Recognize the history of language families and how to trace protolanguages.
  Describe the evolution of human language through non-human primate communication, childhood language acquisition, and Creole languages.
  Describe the process of linguistic divergence and the creation of new languages or dialects.
  Appreciate the role of research and different methodologies in the development of anthropological theory.
• INTERPRET AND DESCRIBE LANGUAGE USING STRUCTURAL LINGUISTIC TECHNIQUES. (SLO 3)
  Recognize a language from a holistic perspective by demonstrating knowledge of phonetics, phonology, morphology, syntax, and semantics.
  Utilize the techniques of structural linguistics to analyze different languages.
• ARTICULATE IMPORTANT THEMES OF ANTHROPOLOGY AND HOW THEY APPLY TO LINGUISTICS. (SLO 4)
  Demonstrate an awareness of the “ethnography of speaking” or how race, class, gender, ethnicity, age and sexual orientation intersect with language use.
  Appreciate the role of writing and literacy in cultural adaptation.
  Identify how globalization, culture change, and power transform languages and intensify the extinction of languages.
  Recognize the impact of new technologies such as cell phones, text messaging, instant messaging, and the Internet on language.
ANTH 374 Birth to Death: The Anthropology of Primate Culture and Behavior

This course will provide an overview of the life cycle of all primates, including humans, from an anthropological perspective. The basic biology behind the human life cycle will be examined and compared to nonhuman primates. Human and nonhuman primate life histories will be examined cross-culturally and will be compared and contrasted in light of their evolution and origins. The class will stress how cultural practices interact and support optimal reproductive behavior. Topics will include gestation and birth, adolescence, mating strategies and group structure, adulthood and senescence.

Upon completion of this course, the student will be able to:

- ANALYZE PATTERNS OF REPRODUCTIVE BEHAVIOR IN HUMANS AND PRIMATES WITH RESPECT TO GENETICS AND ENVIRONMENTAL FACTORS (SLO 1)
- Assess evolutionary trends of human and primate behavioral patterns (Objective 1a)
- Compare and contrast the evolution and origin of parenting, mating, mate selection, cooperation and conflict, war, puberty rituals and death rites in several primate species and human cultures (Objective 1b)
- Describe variation seen in nonhuman primate reproductive behavior in an evolutionary context (Objective 1c)
- Critically examine current societies' behavior in modifying reproduction and explain how it affects evolution (Objective 1d)
- ARTICULATE THE SCIENTIFIC PRINCIPLES OF BIOLOGY AND ANTHROPOLOGY AS RELATED TO PRIMATE REPRODUCTION (SLO 2)
- Demonstrate an understanding of the primate reproductive system (Objective 2a)
- Describe the process of evolution by natural selection (Objective 2b)
- Define basic cellular processes, including meiosis and mitosis (Objective 2c)
- Articulate concepts of transmission genetics such as Mendelian inheritance (Objective 2d)
- Discuss common primate mating systems and how they relate to human marriage practices (Objective 2e)
- Use appropriate anthropological terminology such as those describing kinship, descent and modes of subsistence (Objective 2f)

ANTH 495 Independent Studies in Anthropology

An independent studies project involves an individual student or small group of students in study, research, or activities beyond the scope of regularly offered courses. See the current catalog section of "Special Studies" for full details of Independent Studies.

Upon completion of this course, the student will be able to:

- SLO #1: Actively engage in intellectual inquiry beyond that required in order to pass a course of study (College Wide Learning Outcome – Area 4).
- Discuss and outline a proposal of study (that can be accomplished within one semester term) with a supervising instructor qualified within the discipline.
Design an independent study (to be completed individually or by collaboration of a small group) to foster special knowledge, skills, and experience that are not available in any one regularly scheduled course.

Use information resources to gather discipline-specific information.

SLO #2: Utilize modes of analysis and critical thinking to apply theoretical perspectives and/or concepts in the major discipline of study to significant problems and/or educational activities (College Wide Learning Outcome – Area 3).

Analyze and apply the knowledge, skills and experience that are involved in the independent study to theoretical perspectives and/or concepts in the major discipline of study.

Explain the importance of the major discipline of study in the broader picture of society.

SLO #3: Communicate a complex understanding of content matter of the major discipline of study (College Wide Outcome – Area 3).

Demonstrate competence in the skills essential to mastery of the major discipline of study that are necessary to accomplish the independent study.

SLO #4: Identify personal goals and pursue these goals effectively (College Wide Outcome – Area 4).

Utilize skills from the “academic tool kit” including time management, study skills, etc., to accomplish the independent study within one semester term.

ANTH 498 Work Experience in Anthropology

This course provides students with opportunities to develop marketable skills in preparation for employment in their major field of study or advancement within their career. It is designed for students interested in work experience and/or internships in transfer level degree occupational programs. Course content includes understanding the application of education to the workforce; completion of required forms which document the student’s progress and hours spent at the work site; and developing workplace skills and competencies. Appropriate level learning objectives are established by the student and the employer. During the semester, the student is required to participate in a weekly orientation and 75 hours of related paid work experience, or 60 hours of unpaid work experience for one unit. An additional 75 or 60 hours of related work experience is required for each additional unit. Work Experience may be taken for a total of 16 units when there are new or expanded learning objectives. Only one Work Experience course may be taken per semester.

Upon completion of this course, the student will be able to:

- DEMONSTRATE AN UNDERSTANDING AND APPLICATION OF PROFESSIONAL WORKPLACE BEHAVIOR IN A FIELD OF STUDY RELATED ONE’S CAREER.(SLO 1)

- Understand the effects time, stress, and organizational management have on performance.

- Demonstrate an understanding of consistently practicing ethics and confidentiality in a workplace.

- Examine the career/life planning process and relate its relevancy to the student.

- Demonstrate an understanding of basic communication tools and their appropriate use.

- Demonstrate an understanding of workplace etiquette.

- DESCRIBE THE CAREER/LIFE PLANNING PROCESS AND RELATE ITS RELEVANCY TO ONE’S CAREER.(SLO 2)

- Link personal goals to long term achievement.

- Display an understanding of creating a professional first impression.

- Understand how networking is a powerful job search tool.

- Understand necessary elements of a résumé.

- Understand the importance of interview preparation.

- Identify how continual learning increases career success.
DEMONSTRATE APPLICATION OF INDUSTRY KNOWLEDGE AND THEORETICAL CONCEPTS AS WRITTEN IN LEARNING OBJECTIVES IN PARTNERSHIP WITH THE EMPLOYER WORK SITE SUPERVISOR (SLO 3)
Architectural Design Technology
| Cosumnes River College

The Interior Building Architecture Program provides students with a background in Architectural Drafting. Students who successfully complete the suggested program will be capable of doing detail and layout work normally expected of the drafting aide or technician. The program is designed to provide transfer opportunities in the Environmental Design and/or Construction Management disciplines as well as opportunities for students to qualify for employment in a variety of positions within related industries.

Dean
 (916) 691-4300
✉ HarrisC2@crr.losrios.edu

Associate Degrees

A.S. in Building Information Modeling (BIM)

This Degree program provides students with a background in Computer-Aided Drafting & Design (CADD) and Building Information Modeling (BIM) for application to the architectural building space and design of buildings, interior space analysis and design to facilitate selection of materials & products promoting energy conservation, ecologically sustainable building space and building design using Green Building/LEED point principles.

Students who successfully complete the suggested program will be capable of performing pre-modeling (massing), modeling, and developing drawing documents normally expected of architects, designers, and drafting technicians.

The program is designed to provide job market skills, and college transfer skill opportunities within the Architectural Design disciplines and/or Construction Management as well as opportunities for students to qualify for employment in a variety of positions within the related industries. Additionally, this program offers opportunities for working professionals to take these courses for professional development to update and improve their skills in the Building Information Modeling field.

Note: It is highly recommended that each student keep a complete record of semester work/projects (i.e., a portfolio) to present for evaluation by university/college program advisors and/or employers.

This degree program utilizes various Building Information Modeling (BIM) software components, such as Revit Architecture, MEP, and Structure to prepare students for careers and college transfer in the area of Interior Building Architecture, Architecture, and Building Information Modeling (BIM), with an emphasis in the Architectural Technology area.

Highlights: State-of-the-Art computer lab and software.

Catalog Date: June 1, 2020

Degree Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADT 300</td>
<td>Architectural Sketching and Modeling I</td>
<td>3</td>
</tr>
<tr>
<td>ADT 302</td>
<td>Architectural Sketching and Modeling II</td>
<td>3</td>
</tr>
<tr>
<td>ADT 310</td>
<td>Architectural Computer-Aided Drawing I</td>
<td>3</td>
</tr>
<tr>
<td>ADT 314</td>
<td>Architectural 3D Modeling</td>
<td>3</td>
</tr>
<tr>
<td>ADT 320</td>
<td>Architectural Design Technology - Building Information Modeling (BIM)</td>
<td>3</td>
</tr>
<tr>
<td>COURSE CODE</td>
<td>COURSE TITLE</td>
<td>UNITS</td>
</tr>
<tr>
<td>-------------</td>
<td>------------------------------------------------------------------</td>
<td>-------</td>
</tr>
<tr>
<td>ADT 324</td>
<td>Architectural Design Technology - Building Information Modeling (BIM) III</td>
<td>3</td>
</tr>
<tr>
<td>ADT 322</td>
<td>Building Information Modeling (BIM) II</td>
<td>3</td>
</tr>
<tr>
<td>ADT 326</td>
<td>Architectural Design Technology - Building Information Modeling (BIM) IV</td>
<td>3</td>
</tr>
<tr>
<td>ADT 498</td>
<td>Work Experience in Architecture Design Technology</td>
<td>1 - 4</td>
</tr>
<tr>
<td></td>
<td><strong>Total Units:</strong></td>
<td><strong>25 - 28</strong></td>
</tr>
</tbody>
</table>

The Building Information Modeling (BIM) Associate in Science (A.S.) degree may be obtained by completion of the required program, plus general education requirements, plus sufficient electives to meet a 60-unit total. See CRC graduation requirements.

### Student Learning Outcomes

Upon completion of this program, the student will be able to:

- **SLO #1**: Research, evaluate and apply energy conservation, ergonomic considerations, American Disabilities Act (ADA), ecologically sustainable design solution and principles (Green Building/LEED) to design projects.
- **SLO #2**: Formulate, categorize and identify Green Building/LEED certified materials and systems for use in residential and commercial projects.
- **SLO #3**: Organize, categorize and illustrate the development of initial models into architectural design documents, individually or through work group methods.
- **SLO #4**: Demonstrate, summarize and recall visual and verbal note taking methods and apply the information into models and finalized residential and commercial project designs.
- **SLO #5**: Assess, compose and analyze architectural graphic information effectively to create solutions from a criteria matrix, bubble diagram and block diagramming methods.
- **SLO #6**: Choose, assemble and distinguish the necessary skills in developing marketable BIM/CADD skills for university transfer and the job market, through measurable methods in project development and presentations.

### Career Information

Architectural Draftsperson, Designer/Technician, Planning Assistant, CADD Technician, BIM Technician, Facilities/Space Planner.

### A.S. in Interior Building Architecture

This Associate Science program utilizes CADD and Building Information Modeling (BIM) software to prepare students for careers in the area of Interior Building Architecture, Architecture, with an emphasis in Architectural Design. Students who successfully complete the suggested program will be capable of performing pre-modeling (massing), modeling, and developing drawing documents normally expected of architects, designers, and technicians.

The program is designed to provide job market skills, college transfer opportunities in the Interior Building Architecture, Architecture and/or Construction Management disciplines as well as opportunities for students to qualify for employment in a variety of positions within related industries. Additionally, this program offers opportunities for working professionals to take these courses for professional development to update and improve their skills in the interior building architecture field.

**NOTE:** It is highly recommended that each student keep a complete record of work to present for evaluation by university/college program advisors and/or employers.

This degree program utilizes CADD and Building Information Modeling software components, such as Revit Architecture, MEP, and Structure to prepare students for careers in Interior Building Architecture, Architecture, Building Information Modeling (BIM), with an emphasis in Architectural Technology field.

**Highlights:** State-of-the-art computer lab and software.

**Catalog Date:** June 1, 2020

### Degree Requirements
ADT 300  Architectural Sketching and Modeling I   3
ADT 302  Architectural Sketching and Modeling II   3
ADT 310  Architectural Computer-Aided Drawing I   3
ADT 314  Architectural 3D Modeling   3
ADT 320  Architectural Design Technology - Building Information Modeling (BIM) I   3
ADT 322  Architectural Design Technology - Building Information Modeling (BIM) II   3
ARCH 329  Architectural Working Drawings   4
CMT 112  Construction Estimating   3

Total Units: 25

The Interior Building Architecture Associate in Science (A.S.) degree may be obtained by completion of the required program, plus general education requirements, plus sufficient electives to meet a 60-unit total. See CRC graduation requirements.

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- SLO #1: Research, evaluate and apply energy conservation, ergonomic considerations, American Disabilities Act (ADA), ecologically sustainable design solution and principles (Green Building/LEED) to design projects.
- SLO #2: Formulate, categorize and identify Green Building/LEED certified materials and systems for use in residential and commercial projects.
- SLO #3: Organize, categorize and illustrate the development of initial models into architectural design documents, individually or through work group methods.
- SLO #4: Demonstrate, summarize and recall visual and verbal note taking methods and apply the information into models and finalized residential and commercial project designs.
- SLO #5: Assess, compose and analyze architectural graphic information effectively to create solutions from a criteria matrix, bubble diagram and block diagramming methods.
- SLO #6: Choose, assemble and distinguish the necessary skills in developing marketable BIM/CADD skills for university transfer and the job market, through measurable methods in project development and presentations.

Career Information

Architectural Draftsperson, Designer/Technician, Planning Assistant, CADD Technician, BIM Technician, Facilities/Space Planner.

Certificates of Achievement

Building Information Modeling (BIM) Certificate

This Certificate program provides students with a background in Computer-Aided Drafting & Design (CADD) and Building Information Modeling (BIM) for application to the architectural building space and design of buildings, interior space analysis and design to facilitate selection of materials & products promoting energy conservation, ecologically sustainable building space and building design using Green Building/LEED point principles.

Students who successfully complete the suggested certificate will be capable of performing pre-modeling (massing, modeling, and developing drawing documents normally expected of architects, designers and drafting technicians.

The program is designed to provide job market skills and opportunities within the Architectural Design disciplines and/or Construction Management as well as opportunities for students to qualify for employment in a variety of positions within the related industries. Additionally, this certificate offers opportunities for working professionals to take these courses for professional development to update and improve their skills in the Building Information Modeling (BIM) field.

This certificate program utilizes various Building Information Modeling (BIM) software components, such as Revit Architecture, MEP, and Structure to prepare students for careers in the job market in the area of Interior Building, Architecture, Architecture, Building Information Modeling (BIM), with an emphasis in the Architectural Technology field.
NOTE: Highlights - State-of-the-Art computer lab and software.

Catalog Date: June 1, 2020

Certificate Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADT 300</td>
<td>Architectural Sketching and Modeling I</td>
<td>3</td>
</tr>
<tr>
<td>ADT 302</td>
<td>Architectural Sketching and Modeling II</td>
<td>3</td>
</tr>
<tr>
<td>ADT 310</td>
<td>Architectural Computer-Aided Drawing I</td>
<td>3</td>
</tr>
<tr>
<td>ADT 314</td>
<td>Architectural 3D Modeling</td>
<td>3</td>
</tr>
<tr>
<td>ADT 320</td>
<td>Architectural Design Technology - Building Information Modeling (BIM) I</td>
<td>3</td>
</tr>
<tr>
<td>ADT 322</td>
<td>Architectural Design Technology - Building Information Modeling (BIM) II</td>
<td>3</td>
</tr>
<tr>
<td>ADT 498</td>
<td>Work Experience in Architecture Design Technology</td>
<td>1 - 4</td>
</tr>
<tr>
<td>Total Units</td>
<td></td>
<td>19 - 22</td>
</tr>
</tbody>
</table>

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- SLO #1: Research, evaluate and apply energy conservation, ergonomic considerations, American Disabilities Act (ADA), ecologically sustainable design solution and principles (Green Building/LEED) to design projects.
- SLO #2: Formulate, categorize and identify Green Building/LEED certified materials and systems for use in residential and commercial projects.
- SLO #3: Organize, categorize and illustrate the development of initial models into architectural design documents, individually or through work group methods.
- SLO #4: Demonstrate, summarize and recall visual and verbal note taking methods and apply the information into models and finalized residential and commercial project designs.
- SLO #5: Assess, compose and analyze architectural graphic information effectively to create solutions from a criteria matrix, bubble diagram and block diagramming methods.
- SLO #6: Choose, assemble and distinguish the necessary skills in developing marketable BIM/CADD skills for university transfer and the job market, through measurable methods in project development and presentations.

Career Information

Architectural Draftsperson, Designer/Technician, Planning Assistant, CADD Technician, BIM Technician, Facilities/Space Planner.

Green Buildings Certificate

The purpose of this certificate is to develop job skills and an understanding of green strategies for high performance buildings and livable communities. It is focused at students and professionals in the fields of architecture; construction; building management; construction management; building inspection; design technology; landscape; and planning, who want to acquire a comprehensive knowledge of an integrated, economic life-cycle approach to the design of the built environment. It includes study of green rating systems, material choices and environmental strategies for a livable, sustainable future.

Catalog Date: June 1, 2020

Certificate Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARCH 342</td>
<td>Introduction to Green Buildings</td>
<td>3</td>
</tr>
<tr>
<td>COURSE CODE</td>
<td>COURSE TITLE</td>
<td>UNITS</td>
</tr>
<tr>
<td>-------------</td>
<td>------------------------------------------------------------------------------</td>
<td>-------</td>
</tr>
<tr>
<td>CMT 310</td>
<td>Materials of Construction</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>A minimum of 12 units from the following:</strong></td>
<td>12</td>
</tr>
<tr>
<td>ARCH 332</td>
<td>Design Awareness (3)</td>
<td></td>
</tr>
<tr>
<td>ARCH 334</td>
<td>Advanced Design in Three Dimensions (3)</td>
<td></td>
</tr>
<tr>
<td>ADT 320</td>
<td>Architectural Design Technology - Building Information Modeling (BIM) I (3)</td>
<td></td>
</tr>
<tr>
<td>ADT 322</td>
<td>Architectural Design Technology - Building Information Modeling (BIM) II (3)</td>
<td></td>
</tr>
<tr>
<td>BIT 150</td>
<td>California Energy Code – Building Energy Efficiency Standards (3)</td>
<td></td>
</tr>
<tr>
<td>CONST 143</td>
<td>Photovoltaic Systems (3)</td>
<td></td>
</tr>
<tr>
<td>ECON 306</td>
<td>Environmental Economics (3)</td>
<td></td>
</tr>
<tr>
<td>GEOG 302</td>
<td>Environmental Studies &amp; Sustainability (3)</td>
<td></td>
</tr>
<tr>
<td>GEOG 305</td>
<td>Global Climate Change (3)</td>
<td></td>
</tr>
<tr>
<td>GEOG 306</td>
<td>Weather and Climate (3)</td>
<td></td>
</tr>
<tr>
<td><strong>Total Units:</strong></td>
<td></td>
<td><strong>18</strong></td>
</tr>
</tbody>
</table>

**Student Learning Outcomes**

Upon completion of this program, the student will be able to:

- **PSLO 1**: Establish meaningful ethical, social and environmental objectives for buildings and communities based on the values of energy and resource conscious design.
- Compare and contrast societal and economic implications of utilizing renewable and non-renewable energy sources.
- Compare and contrast the effect of contextual issues and evaluate their impact on energy consumption, environment and the beneficial experience of interior and exterior spaces.
- **PSLO 2**: Identify and articulate issues related to the choice of various building, landscape and environmental systems; ideate responsive solutions; and compare the alternatives in making effective, sustainable decisions.
- Analyze and calculate energy use to make informed, environmentally-sound and economic choices to satisfy human needs for comfort and aesthetics.
- Explain the concepts of resource conservation and waste reduction and make sustainable design choices related to materials and construction.
- Develop a comprehensive understanding of green rating systems, livable communities strategies and the ability to apply these concepts in decision-making.
- **PSLO 3**: Demonstrate independent learning, teamwork and continuing education habits that will help to encourage a life long pursuit of knowledge.
- To use a teamwork process to identify issues, analyze criteria, research and apply learned principles to synthesize solutions to specific design projects.
- To demonstrate habits of visual note making and independent research by developing a sketch and notebook to record learning.

**Career Information**

This certificate helps to develop the knowledge base related to sustainable green buildings and environments for the careers of architecture, construction, construction management, building inspection, horticulture, landscape architecture and architectural design technology.
This certificate program utilizes CADD and Building Information Modeling (BIM) software to prepare students for careers in the area of Interior Building Architecture with an emphasis in Architectural Design.

Students who successfully complete the suggested program will be capable of performing pre-modeling (massing), modeling, and developing drawing documents normally expected of architects, designers and drafting technicians.

The program is designed to provide job market skills and opportunities within the Architectural Design disciplines and/or Construction Management as well as opportunities for students to qualify for employment in a variety of positions within the related industries. Additionally, this program offers opportunities for working professionals to take these courses for professional development to update and improve their skills in the interior building architecture field.

Note: It is highly recommended that each student keep a complete record of semester work/projects (i.e., a portfolio) to present for evaluation by employers.

This degree program utilizes various Building Information Modeling (BIM) software components, such as Revit MEP and Structure to prepare students for careers in Interior Building Architecture, Architecture, Building Information Modeling (BIM), with an emphasis in the Architectural Technology area.

Highlights: State-of-the-Art computer lab and software.

Catalog Date: June 1, 2020

Certificate Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADT 300</td>
<td>Architectural Sketching and Modeling I</td>
<td>3</td>
</tr>
<tr>
<td>ADT 302</td>
<td>Architectural Sketching and Modeling II</td>
<td>3</td>
</tr>
<tr>
<td>ADT 310</td>
<td>Architectural Computer-Aided Drawing I</td>
<td>3</td>
</tr>
<tr>
<td>ADT 320</td>
<td>Architectural Design Technology - Building Information Modeling (BIM) I</td>
<td>3</td>
</tr>
<tr>
<td>ADT 322</td>
<td>Architectural Design Technology - Building Information Modeling (BIM) II</td>
<td>3</td>
</tr>
<tr>
<td>ARCH 320</td>
<td>Architectural Design and Communication I</td>
<td>3.5</td>
</tr>
<tr>
<td>ARCH 321</td>
<td>Architectural Design and Communication II</td>
<td>3.5</td>
</tr>
<tr>
<td>CMT 310</td>
<td>Materials of Construction</td>
<td>3</td>
</tr>
<tr>
<td>Total Units:</td>
<td></td>
<td>25</td>
</tr>
</tbody>
</table>

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- SLO #1: Research, evaluate and apply energy conservation, ergonomic considerations, American Disabilities Act (ADA), ecologically sustainable design solution and principles (Green Building/LEED) to design projects.
- SLO #2: Formulate, categorize and identify Green Building/LEED certified materials and systems for use in residential and commercial projects.
- SLO #3: Organize, categorize and illustrate the development of initial models into architectural design documents, individually or through work group methods.
- SLO #4: Demonstrate, summarize and recall visual and verbal note taking methods and apply the information into models and finalized residential and commercial project designs.
- SLO #5: Assess, compose and analyze architectural graphic information effectively to create solutions from a criteria matrix, bubble diagram and block diagramming methods.
- SLO #6: Choose, assemble and distinguish the necessary skills in developing marketable BIM/CADD skills for university transfer and the job market, through measurable methods in project development and presentations.

Career Information

Architectural Draftsperson, Designer/Technician, Planning Assistant, CADD Technician, BIM Technician, Facilities/Space Planner.
ADT 300 Architectural Sketching and Modeling I

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO #1: Specify specific tools and drawing conventions to complete standardized 'freehand' & 'manual' architectural drawings and sketches.
- Examine, formulate and select proper drawing equipment necessary to read architectural drawings requiring differing scale representation.
- Formulate, illustrate and apply how to draw and sketch with drawing instruments.
- Select and use appropriate types of drawing paper and supplies in the preparation of architectural drawings and sketches.
- Define, recognize and illustrate various line types used in architectural drawing and sketching.
- Define, recognize and illustrate various line weight sizes used in architectural drawings and sketches.
- SLO #2: Utilize the two types of freehand lettering styles utilized in Architectural drawings and sketches.
- Demonstrate and apply how to letter using the expanded style of architectural lettering.
- Demonstrate and illustrate the difference in straight and inclined architectural lettering styles formulated in the American National Standard Alphabet.
- SLO #3: Identify the hardware & software elements of a surface, parametric, modeler and Computer-Aided Drawing/Design CADD computer workstation.
- Identify and describe the different kinds of computer hardware/software components and their functions.
- Evaluate, investigate and select the appropriate computer software application for use in the development of either a 'surface', 'parametric', or computer-aided drawing model.
- SLO #4: Appraise, select and apply the various paraline pictorial drawings used in architectural drawings and sketches.
- Evaluate, formalize and apply the recommended steps in producing orthographic architectural drawings and sketches.
- SLO #5: Identify and diagram two architectural types of section drawings.
- Contrast, assemble and compare the fundamental differences and similarities among isometric and oblique drawings and sketches.
- Define, identify and apply how to develop floor plan drawings, sketches and symbols.
- Evaluate, collect and compare methods to provide architectural interior and exterior elevations.
- Categorize, create and appraise the need for producing an architectural auxiliary view.
- SLO #6: Illustrate the major elements required and used to illustrate plot, site and landscape plans.
- Define, express and illustrate how to develop architectural drawings & sketches for landscape plans, symbols, dimensions and legends with pencil and computer models.
- Define, identify and illustrate topographic drawing and sketching techniques in architectural plot and site plans utilizing pencil and computer models.
ADT 301 Introduction to Architectural Design Technology

Introduction to Architectural Design Technology (ADT) is a foundational course for students interested in a career within the Architecture, Engineering and Construction (AEC) industry. The course covers introductory skills needed for success in completing the ADT degree. Students will explore the role of the architectural / building technologist in the AEC industry and the current best practices for use of technology in building design and construction. Upon completion of this course, students will be able to identify potential roles for employment and will be able to utilize various tools and instruments to create freehand, technical and digital drawings required in industry. A completed portfolio of work will be required.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- WRITE AND SPEAK PROFESSIONALLY AND EFFECTIVELY – PROFESSIONAL COMMUNICATION SKILLS (SLO 1)
- Apply manual (sketching / drafting) and digital tools and techniques for the creation of professional documents for presentation such as sketching, drawing and modeling – professional communication skills (Objective 1A)
- COLLECT, ASSESS, RECORD, AND EVALUATE DATA IN ORDER TO SUPPORT CONCLUSIONS RELATED TO A PROJECT OR ASSIGNMENT – INVESTIGATIVE SKILLS (SLO 2)
- DEMONSTRATE EFFECTIVE USE BASIC FORMAL, ORGANIZATIONAL AND ENVIRONMENTAL PRINCIPLES TO INFORM TWO AND THREE-DIMENSIONAL DESIGN – ARCHITECTURAL DESIGN SKILLS (SLO 3)
- EXAMINE THE FUNDAMENTAL PRINCIPLES OF ARCHITECTURAL PRECEDENT AND USE IN THE DESIGN OF BUILDINGS AND URBAN DESIGN PROJECTS – USE OF PRECEDENTS (SLO 4)
- PREPARE A COMPREHENSIVE PROGRAM FOR AN ARCHITECTURAL PROJECT THAT INCLUDES ASSESSMENT OF CLIENT AND USER NEEDS, AN INVENTORY OF SPACES AND THEIR REQUIREMENTS, ANALYSIS OF SITE CONDITIONS, REVIEW OF RELEVANT BUILDING CODES AND STANDARDS, AND ASSESSMENT OF SUSTAINABILITY REQUIREMENTS – PRE DESIGN SKILLS (SLO 5)
- ANALYZE THE THEORETICAL AND APPLIED RESEARCH METHODS AND BEST PRACTICES USED DURING THE DESIGN PROCESS – RESEARCH (SLO 6)
- IDENTIFY THE KEY STAKEHOLDERS IN THE DESIGN PROCESS – CLIENT, CONTRACTOR, ARCHITECT, USER GROUPS, AND THE LOCAL COMMUNITY – STAKEHOLDER ROLES IN ARCHITECTURE (SLO 7)

ADT 302 Architectural Sketching and Modeling II

This course instructs students at an intermediate level of sketching, 3D digital design, Green Building-LEED® (Leadership in Energy and Environmental Design) principles in building design, Green Building-LEED® material certification, selection and application to models, 3D surface modeling and site development. The course is designed to facilitate further development to refining the student’s design and research skills by specifying, certifying, and applying Green Building-LEED® materials and design concept principles to structures, interior architectural elements, site selection and development. A software application such as SketchUp® will be utilized as the primary software to refine and further develop detail concepts and techniques in 3D-digital modeling.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO #1: Explain the basic elements and techniques of exterior, interior and environmental site design factors.
- Research, compare, and apply energy conservation, ergonomical considerations and ecological (Green Building/Sustainable) design materials, and solutions to exterior, interior spaces and site's through sketches and drawings.
- SLO #2: Utilize manual and digital design concepts in the development of the individual interior living spaces and elements.
Research, incorporate, and employ design considerations to develop environmental, location, architectural elements, size, and shape of exterior and interior materials of building spaces.

SLO #3: Utilize manual and digital design concepts in the development of exterior building space elements and materials.

Research, incorporate, and employ design considerations to develop environmentally pleasing entries, patios, cafeterias, entertaining areas, and aquatic areas.

Estimate, formulate, and illustrate how to calculate area and volume of living and aquatic spaces.

SLO #4: Articulate and translate the importance of calculating areas and traffic patterns for interior planning.

Evaluate, assemble, and calculate effectiveness of traffic patterns, plan hallways, calculate the correct space needed for stairways, guidelines for entrance, foyer and lobby design.

ADT 304 Office & Commercial Space Planning

Units: 3
Hours: 36 hours LEC; 54 hours LAB
Prerequisite: None.
Transferable: CSU
Catalog Date: June 1, 2020

This course instructs students at the basic to intermediate level in office, commercial and residential space planning, Title 24 and general building code requirements. Concepts covered will develop skills in space programming, criteria schematics and matrices, bubble diagrams, space planning and layout, building materials, code requirements and applications to the design model.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO #1: Articulate the various historical architectural styles through illustration methods.
- Research, formulate, and catalogue architectural styles ranging from the early Greek, Roman, Middle Ages, Renaissance, Baroque, Rococo, Neoclassic, 19th Century Revival Style to the Modern period.
- SLO #2: Utilize the techniques of planning and design with Human Factors in Design principles, Green Design and Sustainable Design concepts.
- Research, examine, and illustrate design fundamentals, communication techniques, and environmental considerations in spacial design.
- SLO #3: Appraise the importance of building code design standards, the Americans with Disabilities Act, building space constraints, and specification writing.
- Diagnose, setup, and demonstrate through drawings and sketches appropriate space designs utilizing the constraints of building codes, ADA requirements, and specification documentation.

ADT 310 Architectural Computer-Aided Drawing I

Units: 3
Hours: 36 hours LEC; 54 hours LAB
Prerequisite: None.
Advisory: ADT 300 and 302
Transferable: CSU
Catalog Date: June 1, 2020

This course covers the introductory study in Architectural Computer-Aided Drawing/Design with specific emphasis in the architectural field. Course subject areas will include but not be limited to identifying CADD components, working in the Windows environment, creating and saving files, entity geometry, editing features, MLine ‘Styles’, Layer convention properties, text/font ‘Styles’, layering creation, dimensioning and dimension ‘Styles’, Model and Paper Space environments, plotting, and Plot ‘Styles’. The subject content will cover the development of architectural floor plans, foundation plans & foundation ‘details’, electrical plans, subdivision plans and others drawings as they relate to the architectural field of study. Students will learn how to develop professional architectural drawing file documentation through the preparation and plotting (printing) presentation.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO #1: Appraise the importance of basic digital drawing preparation and development.
- Assess, generate and define how to open/close a file, manage files, enter basic commands, create basic shapes, select objects, use basic Coordinate Geometry and secure/use the digital Help option.
- \( \text{SLO} \#2; \) Demonstrate how to properly use Editing and Viewing functions within CADD software.
- Compose, classify and compute the use of Object Snaps, Drawing tools, Construction Aids, Zooming and Panning functions within the CADD software.
- \( \text{SLO} \#3; \) Articulate the use of Drawing and Editing tools in drawing development.
- Assess, assemble and employ the use of Solid/Curved tools, Adding & Altering, Moving & Duplicating, Modifying & Maneuvering of objects.
- \( \text{SLO} \#4; \) Utilize the basic functions in the development of Dimensioning Styles and formats for Architectural Drawings.
- Appraise, build and demonstrate basic dimensioning style development and use application within drawings.
- \( \text{SLO} \#5; \) Utilize specific methods in Paper Space to develop proper plotting documents.
- Assemble, demonstrate and outline the proper methods for drawing setup, Layer and Line type assignments, view port development and plotting drawing to hard copy (paper).

---

**ADT 314 Architectural 3D Modeling**

**Units:** 3  
**Hours:** 36 hours LEC; 54 hours LAB  
**Prerequisite:** ADT 310 with a grade of “C” or better; Under special circumstances, such as prior outside experience, a student may take ADT 314 prior to taking ADT 312 but must obtain the instructor's permission. These courses are sequential prerequisites for this course.  
**Transferable:** CSU; UC  
**Catalog Date:** June 1, 2020

This course covers the introduction to 3-dimensional modeling and rendering for building structures and spatial analysis studies, Green Building/LEED® (Leadership in Energy and Environmental Design) material and guidelines application. Course subject areas will include shapes, splines, meshes, light, shadows, models, materials, scene creation, animations, and creating exterior and interior architectural and construction objects with software such as 3ds Max Design®.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- \( \text{SLO} \#1; \) Utilize shape and primitive elements in the development of conceptual 3D architectural models and rendered images.
- Assess, compose, and demonstrate the creation and use of creating and editing shapes, meshes for architectural models and renderings.
- Design, analyze, and employ how to utilize external design data in rendering.
- \( \text{SLO} \#2; \) Articulate through the development and use of element objects in 3D architectural models.
- Examine, formulate, and evaluate the appropriate use of internal and external light and shadow studies for building and topographical (toposurfaces) applications.
- \( \text{SLO} \#3; \) Articulate through the organization and management of architectural objects and scene creation.
- Define, identify, and apply how to create a new project using defined architectural elements.
- Define, identify, and develop scenes from architectural element objects.
- \( \text{SLO} \#4; \) Utilize interior and exterior models in the creation of rendered animations.
- Evaluate, analyze, and demonstrate the use and creation of animations with mental ray® using atmosphere, effects, and composition.

---

**ADT 320 Architectural Design Technology - Building Information Modeling (BIM) I**
This course instructs students in the beginning level of Building Information Modeling as it relates to parametric building modeling for architectural interiors and building space using software such as AutoDesk's Revit® Architecture. The content is a first level introduction course to data-generated Parametric Building Modeling for architectural design and drawing, also known as Building Information Modeling (BIM). Professionals in the design/construction field may have work and/or academic experience to waive any pre-requisites.

### Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO #1: Explain the basis and orientation to the Building Information Management (BIM) technology.
- Organize, survey, and define the AutoDesk Revit® user interface screen.
- SLO #2: Utilize the element tools using basic building components and editing tools.
- Generate, analyze, and exhibit how to create elements such as walls, doors, windows, and surface materials within the parametric model.
- Appraise, manage, and convert existing elements by utilizing many of the editing tools within the parametric model.
- SLO 3#: Articulate how to work with datum's and create standard model views with the project browser.
- Choose, build, and develop standard concept levels for buildings, models and spaces.
- Choose, build, and develop standard architectural grids for the project files.
- Arrange, apply, and define transverse and longitudinal sections with work plane and reference plane tools.
- SLO #4: Utilize the intermediate building components in developing specific levels of space in a parametric model.
- Choose, manage, and apply specific locations and materials to floors, ceilings and creating roof types and material applications.
- SLO #5: Utilize the massing tool in developing initial/preliminary architectural exterior and spatial designs for review.
- Appraise, contrive, and examine through the use of the massing tool initial build/space designs before converting to building elements.
- Generate, analyze and exhibit how to use ‘Create-In-Place’ (CIP) tools.

**ADT 322 Architectural Design Technology - Building Information Modeling (BIM) II**

This course instructs students to the intermediate level of parametric modeling and management of architectural interiors and exteriors, building space management/design using software such as Autodesk's Revit®. The content is a second level course introduction to data-generated parametric building modeling "document drawing", also known as Building Information Management that surpasses pencil and CADD generated architectural drawings.

### Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO #1: Explain the intermediate features of line weights and wall types applied to models.
- Build, categorize, and demonstrate how to create coarse, medium, and fine wall types.
- Build, categorize, and apply specific numerical line weight properties to models.
- SLO #2: Utilize the 16 intermediate editing tools available in the edit tool bar for modifying architectural models.
- Define, identify, and apply the various editing tools for modifying a parametric model.
SLO #3: Utilize the automated intermediate components in the development of architectural models.

Examine, formulate, and choose the various 'Automated' component tools available to create roofs, stairs, ceilings, wall systems, curtain walls and systems and railings.

SLO #4: Appraise the importance of applying site features to architectural models.

Define, express, and sketch topographic surface models, inserting site components for merging into architectural models.

SLO #5: Articulate through illustration the importance of creating animated 'renderings' and 'walk-throughs' for interior/exterior architectural models.

Compose, apply, and simulate through a realistic walk-through how interiors/exteriors will appear in a photo realistic appearance.

ADT 324 Architectural Design Technology - Building Information Modeling (BIM) III

Units: 3
Hours: 36 hours LEC; 54 hours LAB
Prerequisite: ADT 322 with a grade of "C" or better; or skills equivalent to ADT 322 with proficiency determined by the instructor.
Advisory: ADT 310 and 320; Students' knowledge and/or skills may be evaluated by the instructor on an individual basis, in lieu of the two Advisory Courses listed.
Transferable: CSU
Catalog Date: June 1, 2020

This course instructs students in the intermediate level of Building Information Modeling as it relates to parametric modeling and Green Building/LEED® (Leadership in Energy and Environmental Design) for 'Building Systems' drawing and design using software such as AutoDesk's Revit® MEP. The content is a first level introduction course of data-generated Parametric Building Modeling software for Mechanical, Electrical, and Plumbing systems; illustrating how the MEP (Mechanical-Electrical-Plumbing) software drawing designs integrate with Revit® Architecture and/or Revit® Structure.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO #1: Specify what Building Information Modeling (BIM) methodology means.
- SLO #2: Indicate the location of various tools from the ribbon tabs, and panels.
- SLO #3: Specify the recommended practices for working with Revit® 'elements' and 'families'.
- SLO #4: Assemble and demonstrate the necessary steps in using heating-cooling 'elements' and developing 'families'.
- SLO #5: Examine the practices for creating and working with ‘views’ and ‘view templates’.
- SLO #6: Assemble and produce the steps necessary in creating perspective ‘view’s and developing ‘view’ templates.
- SLO #7: Determine the best practices to create and modify 3D perspective and 2D orthographic views of a model.
- SLO #8: Examine, manipulate, and illustrate the steps to create 3D perspective and 2D orthographic views of heating-cooling views.
- SLO #9: Examine the process of shared projects using worksets, and import/edit AutoCAD drawing details into Revit®.
- SLO #10: Assemble, set-up, and formulate how to create Central and Local files for design team design.
- SLO #11: Examine the process of developing identity data and Heating Ventilating Air Conditioning system zones.
- SLO #12: Formulate, set-up and sketch the identity of elements, tags with data and creating HVAC zones.
- SLO #13: Demonstrate, summarize, and apply the steps in viewing analytical models and work with heating and cooling loads.
- SLO #14: Identify and diagram how to create, generate, and modify HVAC systems, layouts and ductwork.
- SLO #15: Diagram methods for creating fire, plumbing suppression and electrical system.
ADT 326 Architectural Design Technology - Building Information Modeling (BIM) IV

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO #1; Describe building information methodology.
- Identify and illustrate two written or verbal examples defining Building Information Modeling.
- SLO #2; Use the Revit® Structure user interface and work with different types of structural 'elements' and 'families'.
- Assemble and demonstrate the necessary steps in how to use structural 'elements' and developing 'families' from the user interface.
- SLO #3; Understand how to work with the Project Browser, how to control object visibility and graphical representation, and work the elevation, section, and 3D view.
- Evaluate, formulate, and illustrate the use of Visibility Graphics methods and Project Browser to modify various views within a project.
- SLO #4; Determine initial level and grid patterns of structural layouts.
- Evaluate, organize, and determine how to establish a project layout, transfer project standards, and work with levels and grids in a structural model.
- SLO #5; Specify specific tools and drawing conventions to establish structural building systems.
- Design, calculate, and apply methods to create structural columns and structural walls, create new wall types, and work with foundations, pilasters, and elevator pits.
- SLO #6; Specify specific tools to edit structural building systems.
- Resolve, examine, and employ methods for modifying beams and beam systems, add and edit structural steel moment and braced frames.
- SLO #7; Create slabs and roofs, and add structural framing to roofs for support.
- Assess, draft, and sketch methods to create overhead structural, and structural wall systems.
- SLO #8; Add foundations to a structural model.
- Diagnose, calculate, and employ drawing methods for the design of foundation floors, walls, and footer systems.
- SLO #9; Create structural stairs and various types of interior and exterior ramps to building structures.
- Diagnose, calculate, and employ drawing methods for design of structural stairs and ramps.
- SLO #10; Developing Annotation and Annotation standards in structural drawing views.
Appraise, create, and illustrate how to work with plan annotations using tags, dimensions, spot dimensions, and text as well as creating legends, annotation symbols, and schedules.

SLO #11; Illustrate how to Import and Export various 2D Revit® and AutoCad file formats in drawings and views.

Create and use detailing components and also import and use DWG™ details in your models.

SLO #12; Specify the methods for developing printed format in Revit® and AutoCad.

Recommend, formulate, and employ techniques for construction documentation, working with sheets and title-blocks, print a sheet set, and export Revit® Structure content to CAD™ formats.

ADT 495 Independent Studies in Architectural Design Technology

| Units:    | 1 - 3          |
| Hours:    | 54 - 162 hours LAB |
| Prerequisite: | None.         |
| Transferable: | CSU           |
| Catalog Date: | June 1, 2020  |

An independent studies project involves an individual student or small group of students in study, research, or activities beyond the scope of regularly offered courses. See the current catalog section of “Special Studies” for full details of Independent Studies.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO #1: Actively engage in intellectual inquiry beyond that required in order to pass a course of study (College Wide Learning Outcome – Area 4).

- Discuss and outline a proposal of study (that can be accomplished within one semester term) with a supervising instructor qualified within the discipline.

- Design an independent study (to be completed individually or by collaboration of a small group) to foster special knowledge, skills, and experience that are not available in any one regularly scheduled course.

- Use information resources to gather discipline-specific information.

- SLO #2: Utilize modes of analysis and critical thinking to apply theoretical perspectives and/or concepts in the major discipline of study to significant problems and/or educational activities (College Wide Learning Outcome – Area 3).

- Analyze and apply the knowledge, skills and experience that are involved in the independent study to theoretical perspectives and/or concepts in the major discipline of study.

- Explain the importance of the major discipline of study in the broader picture of society.

- SLO #3: Communicate a complex understanding of content matter of the major discipline of study (College Wide Outcome – Area 3).

- Demonstrate competence in the skills essential to mastery of the major discipline of study that are necessary to accomplish the independent study.

- SLO #4: Identify personal goals and pursue these goals effectively (College Wide Outcome – Area 4).

- Utilize skills from the “academic tool kit” including time management, study skills, etc., to accomplish the independent study within one semester term.

ADT 498 Work Experience in Architecture Design Technology

| Units:    | 1 - 4          |
| Hours:    | 60 - 300 hours LAB |
| Prerequisite: | None.         |
| Enrollment Limitation: | Students must be in a paid or unpaid internship, volunteer position or job related to career goals in Architecture Design Technology. |
| Transferable: | CSU           |
| General Education: | AA/AS Area III(b) |
| Catalog Date: | June 1, 2020  |
This course provides students with opportunities to develop marketable skills in preparation for employment in their major field of study or advancement within their career. It is designed for students interested in work experience and/or internships in transfer level degree occupational programs. Course content includes understanding the application of education to the workforce; completion of required forms which document the student's progress and hours spent at the work site; and developing workplace skills and competencies. Appropriate level learning objectives are established by the student and the employer. During the semester, the student is required to participate in a weekly orientation and 75 hours of related paid work experience, or 60 hours of unpaid work experience for one unit. An additional 75 or 60 hours of related work experience is required for each additional unit. Work Experience may be taken for a total of 16 units when there are new or expanded learning objectives. Only one Work Experience course may be taken per semester.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- **DEMONSTRATE AN UNDERSTANDING AND APPLICATION OF PROFESSIONAL WORKPLACE BEHAVIOR IN A FIELD OF STUDY RELATED TO ONE'S CAREER.**

- Understand the effects time, stress, and organizational management have on performance.

- Demonstrate an understanding of consistently practicing ethics and confidentiality in a workplace.

- Examine the career/life planning process and relate its relevancy to the student.

- Demonstrate an understanding of basic communication tools and their appropriate use.

- Demonstrate an understanding of workplace etiquette.

- **DESCRIBE THE CAREER/LIFE PLANNING PROCESS AND RELATE ITS RELEVANCY TO ONE'S CAREER.**

- Link personal goals to long term achievement.

- Display an understanding of creating a professional first impression.

- Understand how networking is a powerful job search tool.

- Understand necessary elements of a résumé.

- Understand the importance of interview preparation.

- Identify how continual learning increases career success.

- **DEMONSTRATE APPLICATION OF INDUSTRY KNOWLEDGE AND THEORETICAL CONCEPTS AS WRITTEN IN LEARNING OBJECTIVES IN PARTNERSHIP WITH THE EMPLOYER WORK SITE SUPERVISOR.**
Architecture | Cosumnes River College

This program offers students study and job-related experience in architectural drafting, construction techniques, design, rendering, and energy systems as well as opportunities to develop skills necessary for employment in the professional field of architecture. Transfer programs are articulated with California State Polytechnic University at San Luis Obispo, the University of California at Berkeley, and New School of Architecture and Design.

Dean

 (916) 691-4300

 HarrisC2@crc.losrios.edu (mailto:HarrisC2@crc.losrios.edu)

Associate Degree

A.S. in Architecture

The objective of this program is to develop design and job-related skills necessary for entry into the professional field of architecture. The curriculum focuses on development of critical thinking and problem solving abilities as a means to creative thinking. College preparation for a career in architecture spans several disciplines and includes the development of knowledge and competencies in areas such as: architectural history and design; visual communication and drawing; computer modeling and rendering; construction methods and materials; energy systems and an understanding of human needs and sociology as they relate to the built environment.

HIGHLIGHTS
* Participation in architecturally-related events such as the Design Village Competition at Cal Poly San Luis Obispo.
* Field trips to a variety of architectural sites for study and appreciation of the built environment.
* Special studies in environmental sustainability and energy conscious design.
* Liaison with professional organizations such as the American Institute of Architects (AIA) and the Construction Specification Institute (CSI).

Catalog Date: June 1, 2020

Degree Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARCH 300</td>
<td>Introduction to Design Professions</td>
<td>2</td>
</tr>
<tr>
<td>ARCH 310</td>
<td>History of Architecture</td>
<td>3</td>
</tr>
<tr>
<td>ARCH 320</td>
<td>Architectural Design and Communication I</td>
<td>3.5</td>
</tr>
<tr>
<td>ARCH 321</td>
<td>Architectural Design and Communication II</td>
<td>3.5</td>
</tr>
<tr>
<td>ARCH 322</td>
<td>Architectural Design and Communication III</td>
<td>3.5</td>
</tr>
<tr>
<td>ARCH 325</td>
<td>Architectural Digital Design and Communication I</td>
<td>3</td>
</tr>
<tr>
<td>ARCH 326</td>
<td>Architectural Digital Design and Communication II</td>
<td>3</td>
</tr>
<tr>
<td>ARCH 329</td>
<td>Architectural Working Drawings</td>
<td>4</td>
</tr>
<tr>
<td>ARCH 330</td>
<td>Design Fundamentals</td>
<td>3.5</td>
</tr>
<tr>
<td>ARCH 332</td>
<td>Design Awareness</td>
<td>3</td>
</tr>
<tr>
<td>ARCH 334</td>
<td>Advanced Design in Three Dimensions</td>
<td>3</td>
</tr>
<tr>
<td>ARCH 342</td>
<td>Introduction to Green Buildings</td>
<td>3</td>
</tr>
</tbody>
</table>
The Architecture Associate in Science (A.S.) degree may be obtained by completion of the required program, plus general education requirements, plus sufficient electives to meet a 60-unit total. See CRC graduation requirements.

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- PSLO #1: Have the necessary technical knowledge and reasoning skills to identify, articulate, record information, assess evidence, investigate precedents and solve problems pertaining to the built environment and perform the tasks required within the architecture and environmental design professions. This includes the ability to use basic formal organizational and environmental principles; build abstract relationships to inform two and three-dimensional design; and understand the impact of ideas based on research, analysis of multiple theoretical, social, political, economic, cultural and environmental contexts.

- PSLO #2: Have the necessary communication skills, using a diverse range of techniques and media to think about and convey architectural ideas including writing, analytical and envisioning drawing, speaking to peers and groups; computer modeling and physical model-making.

- PSLO #3: Be able to comprehend the technical aspects of design, systems, sustainability, constructability, and materials, and be able to apply this comprehension to architectural solutions. This includes: 1. Site Design: Ability to respond to site determinants such as context and planning issues in the development of a project design. 2. Life Safety: Ability to apply basic principles of life-safety systems and exiting. 3. Environmental Systems: Understanding the principles of environmental control systems and sustainable design. 4. Structural Systems: Understanding the basic principles of structural behavior in withstanding gravity and lateral loads and the appropriate structural alternatives. 5. Building Envelope Systems: Understanding of the basic principles of building materials and characteristics in the appropriate selection relative to performance, aesthetics, moisture control, energy and durability.

- PSLO #4: Have the values of ethics and understanding of historical, cultural, human, aesthetic, environmental, public health and social issues to be able to affect creative change. This includes understanding the diverse needs, values, behavioral norms, physical abilities, social and spatial patterns that characterize different cultures and individuals.

- PSLO #5: Be able to work effectively as a team member or as an individual.

- PSLO #6: Have the professional attitude and desire for life-long learning. This includes developing habits of research, precedent, and independent learning.

Career Information

Architecture; Building Information Modeler; Inspection; Planning; Construction Administration. Some career options may require more than two years of college study. Classes beyond the associate degree may be required to fulfill some career options or for preparation for transfer to a university program.

Certificates of Achievement

Architectural Technology Certificate

The objective of this certificate is to develop design and job-related skills necessary for entry into the professional field of architecture. The curriculum focuses on development of critical thinking and problem solving abilities as a means to creative thinking. College preparation for a career in architecture spans several disciplines and includes the development of knowledge and competencies in areas such as: architectural design; visual communication and drawing; computer modeling and rendering; construction methods and materials; energy systems and an understanding of human needs and sociology as they relate to the built environment.

Catalog Date: June 1, 2020

Certificate Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARCH 300</td>
<td>Introduction to Design Professions</td>
<td>2</td>
</tr>
<tr>
<td>ARCH 320</td>
<td>Architectural Design and Communication I</td>
<td>3.5</td>
</tr>
<tr>
<td>ARCH 321</td>
<td>Architectural Design and Communication II</td>
<td>3.5</td>
</tr>
<tr>
<td>COURSE CODE</td>
<td>COURSE TITLE</td>
<td>UNITS</td>
</tr>
<tr>
<td>-------------</td>
<td>--------------------------------------------------</td>
<td>-------</td>
</tr>
<tr>
<td>ARCH 322</td>
<td>Architectural Design and Communication III</td>
<td>3.5</td>
</tr>
<tr>
<td>ARCH 325</td>
<td>Architectural Digital Design and Communication I</td>
<td>3</td>
</tr>
<tr>
<td>ARCH 326</td>
<td>Architectural Digital Design and Communication II</td>
<td>3</td>
</tr>
<tr>
<td>ARCH 329</td>
<td>Architectural Working Drawings</td>
<td>4</td>
</tr>
<tr>
<td>ARCH 330</td>
<td>Design Fundamentals</td>
<td>3.5</td>
</tr>
<tr>
<td>ARCH 332</td>
<td>Design Awareness</td>
<td>3</td>
</tr>
<tr>
<td>ARCH 334</td>
<td>Advanced Design in Three Dimensions</td>
<td>3</td>
</tr>
<tr>
<td>ARCH 342</td>
<td>Introduction to Green Buildings</td>
<td>3</td>
</tr>
<tr>
<td>CMT 310</td>
<td>Materials of Construction</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Total Units:</strong></td>
<td><strong>38</strong></td>
</tr>
</tbody>
</table>

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- PSLO #1: Have the necessary technical knowledge and reasoning skills to identify, articulate, record information, assess evidence, investigate precedents and solve problems pertaining to the built environment and perform the tasks required within the architecture and environmental design professions. This includes the ability to use basic formal organizational and environmental principles; build abstract relationships to inform two and three-dimensional design; and understand the impact of ideas based on research, analysis of multiple theoretical, social, political, economic, cultural and environmental contexts.

- PSLO #2: Have the necessary communication skills, using a diverse range of techniques and media to think about and convey architectural ideas including writing; analytical and envisioning drawing; speaking to peers and groups; computer modeling and physical model-making.

- PSLO #3: Be able to comprehend the technical aspects of design, systems, sustainability, constructability, and materials, and be able to apply this comprehension to architectural solutions. This includes: 1. Site Design: Ability to respond to site determinants such as context and planning issues in the development of a project design. 2. Life Safety: Ability to apply basic principles of life-safety systems and exiting. 3. Environmental Systems: Understanding the principles of environmental control systems and sustainable design. 4. Structural Systems: Understanding the basic principles of structural behavior in withstanding gravity and lateral loads and the appropriate structural alternatives. 5. Building Envelope Systems: Understanding of the basic principles of building materials and characteristics in the appropriate selection relative to performance, aesthetics, moisture control, energy and durability.

- PSLO #4: Have the values of ethics and understanding of historical, cultural, human, aesthetic, environmental, public health and social issues to be able to affect creative change. This includes understanding the diverse needs, values, behavioral norms, physical abilities, social and spatial patterns that characterize different cultures and individuals.

- PSLO #5: Be able to work effectively as a team member or as an individual.

- PSLO #6: Have the professional attitude and desire for life-long learning. This includes developing habits of research, precedent, and independent learning.

Career Information

Architecture; Building Information Modeler; Inspection; Planning; Construction Administration. Some career options may require more than an Architectural Technology certificate. Classes beyond the associate degree may be required to fulfill some career options or for preparation for transfer to a university program.

Green Buildings Certificate

The purpose of this certificate is to develop job skills and an understanding of green strategies for high performance buildings and livable communities. It is focused at students and professionals in the fields of architecture; construction; building management; construction management; building inspection; design technology; landscape; and planning, who want to acquire a comprehensive knowledge of an integrated, economic life-cycle approach to the design of the built environment. It includes study of green rating systems, material choices and environmental strategies for a livable, sustainable future.

**Catalog Date:** June 1, 2020
Certificate Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARCH 342</td>
<td>Introduction to Green Buildings</td>
<td>3</td>
</tr>
<tr>
<td>CMT 310</td>
<td>Materials of Construction</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>A minimum of 12 units from the following:</strong></td>
<td>12</td>
</tr>
<tr>
<td>ARCH 332</td>
<td>Design Awareness (3)</td>
<td></td>
</tr>
<tr>
<td>ARCH 334</td>
<td>Advanced Design in Three Dimensions (3)</td>
<td></td>
</tr>
<tr>
<td>ADT 320</td>
<td>Architectural Design Technology - Building Information Modeling (BIM) I (3)</td>
<td></td>
</tr>
<tr>
<td>ADT 322</td>
<td>Architectural Design Technology - Building Information Modeling (BIM) II (3)</td>
<td></td>
</tr>
<tr>
<td>BIT 150</td>
<td>California Energy Code – Building Energy Efficiency Standards (3)</td>
<td></td>
</tr>
<tr>
<td>CONST 143</td>
<td>Photovoltaic Systems (3)</td>
<td></td>
</tr>
<tr>
<td>ECON 306</td>
<td>Environmental Economics (3)</td>
<td></td>
</tr>
<tr>
<td>GEOG 302</td>
<td>Environmental Studies &amp; Sustainability (3)</td>
<td></td>
</tr>
<tr>
<td>GEOG 305</td>
<td>Global Climate Change (3)</td>
<td></td>
</tr>
<tr>
<td>GEOG 306</td>
<td>Weather and Climate (3)</td>
<td></td>
</tr>
<tr>
<td>Total Units:</td>
<td></td>
<td>18</td>
</tr>
</tbody>
</table>

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- PSLO 1: Establish meaningful ethical, social and environmental objectives for buildings and communities based on the values of energy and resource conscious design.
- Compare and contrast societal and economic implications of utilizing renewable and non-renewable energy sources.
- Compare and contrast the effect of contextual issues and evaluate their impact on energy consumption, environment and the beneficial experience of interior and exterior spaces.
- PSLO 2: Identify and articulate issues related to the choice of various building, landscape and environmental systems; ideate responsive solutions; and compare the alternatives in making effective, sustainable decisions.
- Analyze and calculate energy use to make informed, environmentally-sound and economic choices to satisfy human needs for comfort and aesthetics.
- Explain the concepts of resource conservation and waste reduction and make sustainable design choices related to materials and construction.
- Develop a comprehensive understanding of green rating systems, livable communities strategies and the ability to apply these concepts in decision-making.
- PSLO 3: Demonstrate independent learning, teamwork and continuing education habits that will help to encourage a life long pursuit of knowledge.
- To use a team work process to identify issues, analyze criteria, research and apply learned principles to synthesize solutions to specific design projects.
- To demonstrate habits of visual note making and independent research by developing a sketch and notebook to record learning.

Career Information

This certificate helps to develop the knowledge base related to sustainable green buildings and environments for the careers of architecture, construction, construction management, building inspection, horticulture, landscape architecture and architectural design technology.
Architecture (ARCH)

ARCH 300 Introduction to Design Professions

Units: 2  
Hours: 36 hours LEC  
Prerequisite: None.  
Transferable: CSU; UC  
Catalog Date: June 1, 2020

This course is a comprehensive study of the professions related to the built environment including architecture, landscape architecture, construction management, construction, city and urban planning, interior design, building inspection, environmental and energy planning. Guest speakers from various design and construction professions will engage students in discussions related to their professional practice and the necessary preparation in education and experience. Each student will evaluate his/her interest and potential of success in the areas of his/her choice. The course will include an overview of architectural history, an introduction to some of the major architects and class discussion of current issues in the environmental design professions. Additional topics in the class will include: transfer, licensing requirements and environmental design vocabulary.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO-1: Demonstrate basic abilities at using problem solving and design process methodologies to identify problems, analyze criteria and apply learned principles to synthesize solutions to specific design projects.
- SLO-2: Evaluate and reflect on the success of the process and the solution for a specific design project.
- SLO-3: Utilize skill associated with representing ideas and thinking visually, orally and by writing.
- SLO-4: Identify needs and assume diverse roles that maximize individual talents and to cooperate with other students, when working as a team, to maximize accomplishment.
- SLO-5: Show ability at active participation and contribution both as an individual and in team efforts.
- SLO-6: Demonstrate ability at research, investigation and the skills associated with life-long learning.
- SLO-7: Utilize comprehensive and graphic visual note-making in sketch books for recording of thoughts, observations, design thinking, and to enhance the desire for research, independent learning and continuing education as a life-long pursuit.
- SLO-8: Identify, assess and reflect on the values of historical, cultural, human, aesthetic, environmental and social issues in effecting creative change to the built environment.
- SLO-9: Identify, assess and reflect on the issues related to choosing an environmental design profession and determine for themselves their interest, placement and occupational pursuit.
- SLO-10: Recognize the differences in the various environmental design professions and apply learned information and principles to make rational and fulfilling education and career decisions.
- SLO-11: Outline the requirements for matriculation to CRC transfer schools in order to gain acceptance.
- SLO-12: Describe the workplace requirements of the environmental design professions for successful completion of career goals.

ARCH 310 History of Architecture

Units: 3  
Hours: 54 hours LEC  
Prerequisite: None.  
Advisory: Eligibility for ENGWR 101  
Transferable: CSU; UC  
General Education: AA/AS Area I; CSU Area C1  
Catalog Date: June 1, 2020

This course studies the architecture design theories and practices of the late 19th and 20th century to the present including the Beaux Arts, Art Nouveau, Expressionism, De Stijl international style, Fascist Ideologies, Regionism, Post World War II Amalgamations of Twentieth Century idioms and recent reactions to contemporary standardization.

Student Learning Outcomes
Upon completion of this course, the student will be able to:

- **SLO-1:** Understand and demonstrate how historical issues have been able to influence and affect creative change and evolution in the character of the built environment.

- **SLO-2:** Identify, understand and demonstrate the relationship of development of the built environment to changes in fine art, technological development, structural innovation, cultural influences, aesthetic concepts, sociological psychology, architectural theory, context, resources, environment, etc.

- To identify buildings that have been significant milestones in the evolution of the built environment, place them in their historical timeframe, identify what is the architectural and historical significance of the building.

- **SLO-3:** Demonstrate ability to identify and assume diverse roles that maximize individual talents and to cooperate with other students, when working as a team, to maximize accomplishment.

- To demonstrate ability at active participation and contribution both as an individual and in team efforts.

- **SLO-4:** To demonstrate ability at research, investigation and the skills associated with life-long learning.

- To demonstrate ability to use comprehensive and graphic visual note-making in sketch books for recording of thoughts, observations, design thinking, and to enhance the desire for research, independent learning and continuing education as a life-long pursuit.

### ARCH 320 Architectural Design and Communication I

**Units:** 3.5  
**Hours:** 54 hours LEC; 27 hours LAB  
**Prerequisite:** None.  
**Corequisite:** ARCH 325  
**Transferable:** CSU; UC  
**Catalog Date:** June 1, 2020

This course is an introduction to the concepts and processes associated with two and three-dimensional design. A series of design projects are used to discover principles and concepts of design while simultaneously addressing the skills associated with representing envisioned ideas, objects and environments. This includes the development of freehand sketching, manual drafting and graphic skills for communication of analysis and design concepts. Students should previously or concurrently enroll in ARCH 325 to learn methods for digital construction of design and drawing projects assigned in ARCH 320.

### Student Learning Outcomes

Upon completion of this course, the student will be able to:

- **SLO-1:** Apply basic organizational and spatial principles in the conception and development of architectural environments.

- Utilize problem solving and design process methodologies to identify problems, analyze criteria and apply learned principles to synthesize solutions to specific design projects; to assess and reflect on the success of the process and solution.

- Use the fundamentals of visual perception and the principles of order (unity, balance, pattern, hierarchy, etc.) to create relationships between elements.

- Demonstrate understanding and ability at using a range of architectural design concepts including the sequential experiences of approach, entry, arrival, open/implied versus closed/explicit space, clear spatial figure, etc.

- **SLO-2:** Understand and utilize the skills associated with representing envisioned ideas, objects and environments.

- Employ appropriate drawing and representational media, including computer and duplication technology, to convey essential formal elements at each stage of the programming and design process.

- Understand and apply information gathered by the human visual system to support the perception of form and space (spatial cues as well as the graphic language of texture, value, line weight etc).

- Define the role of different types of drawing in the communication of design ideas at the various stages of a project and to be able to use the primary drawing systems of orthographics, para-line and perspective to represent those ideas.

- Utilize a range of drawing types from quick freehand gestures to carefully constructed representations to represent existing and imagined objects or environments on two-dimensional surfaces.

- Create the context of figures, landscape, and furnishings into various drawing systems with appropriate scale to enhance the representation of depth.

- Produce hand lettering using a range of media (i.e. pencil, pen, and marker) that exhibits good letter form, consistency, alignment and shape.

- **SLO-3:** Identify and assume diverse roles that maximize individual talents and to cooperate with other students, when working as members of a team, to maximize accomplishment.
Demonstrate ability at active participation and contribution to a team effort.

SLO-4: Demonstrate ability at research, investigation and the skills associated with life-long learning.

Use comprehensive and graphic visual note-making in sketch books for recording of thoughts, observations, design thinking and to enhance the desire for research, independent learning and continuing education as a life-long pursuit.

ARCH 321 Architectural Design and Communication II

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO-1: Apply basic organizational and spatial principles to the conception and development of architectural environments.
- SLO-2: Understand and utilize the skills associated with representing envisioned ideas, objects and environments.
- SLO-3: Identify and assume diverse roles that maximize individual talents and to cooperate with other students, when working as members of a team, to maximize accomplishment.
- SLO-4: To demonstrate ability at research, investigation and the skills associated with life-long learning.

This course is a continuation and development of the content and issues introduced in ARCH 320 plus the principles, concepts, methods and skills pertaining to the construction of shadows and reflections, physical model building, entourage and color theory. A series of design projects are used to discover principles and concepts of design while simultaneously addressing the skills associated with representing envisioned ideas, objects and environments. This includes the development of physical model making, freehand sketching, manual drafting and graphic skills for communication of analysis and design concepts. Students should previously or concurrently enroll in ARCH 326 to learn methods for digital construction of design and drawing projects assigned in ARCH 321.

ús: 3.5
Hours: 54 hours LEC; 27 hours LAB
Prerequisite: None.
Corequisite: ARCH 326
Advisory: It is advisable that students enrolling in this course should have completed Arch 320 and 325 or a computer modeling course, in order to have abilities at computer modeling and to understand basic drawing types of orthographic, paraline and perspective.
Transferable: CSU; UC
Catalog Date: June 1, 2020

3.5
Units:
54 hours LEC; 27 hours LAB
Prerequisite:
None.
Corequisite:
ARCH 326
Advisory:
It is advisable that students enrolling in this course should have completed Arch 320 and 325 or a computer modeling course, in order to have abilities at computer modeling and to understand basic drawing types of orthographic, paraline and perspective.
Transferable:
CSU; UC
Catalog Date:
June 1, 2020

Upon completion of this course, the student will be able to:

- SLO-1: Apply basic organizational and spatial principles to the conception and development of architectural environments.
- SLO-2: Understand and utilize the skills associated with representing envisioned ideas, objects and environments.
- SLO-3: Identify and assume diverse roles that maximize individual talents and to cooperate with other students, when working as members of a team, to maximize accomplishment.
- SLO-4: To demonstrate ability at research, investigation and the skills associated with life-long learning.

This course is a continuation and development of the content and issues introduced in ARCH 320 plus the principles, concepts, methods and skills pertaining to the construction of shadows and reflections, physical model building, entourage and color theory. A series of design projects are used to discover principles and concepts of design while simultaneously addressing the skills associated with representing envisioned ideas, objects and environments. This includes the development of physical model making, freehand sketching, manual drafting and graphic skills for communication of analysis and design concepts. Students should previously or concurrently enroll in ARCH 326 to learn methods for digital construction of design and drawing projects assigned in ARCH 321.

Upon completion of this course, the student will be able to:

- SLO-1: Apply basic organizational and spatial principles to the conception and development of architectural environments.
- SLO-2: Understand and utilize the skills associated with representing envisioned ideas, objects and environments.
- SLO-3: Identify and assume diverse roles that maximize individual talents and to cooperate with other students, when working as members of a team, to maximize accomplishment.
- SLO-4: To demonstrate ability at research, investigation and the skills associated with life-long learning.

This course is a continuation and development of the content and issues introduced in ARCH 320 plus the principles, concepts, methods and skills pertaining to the construction of shadows and reflections, physical model building, entourage and color theory. A series of design projects are used to discover principles and concepts of design while simultaneously addressing the skills associated with representing envisioned ideas, objects and environments. This includes the development of physical model making, freehand sketching, manual drafting and graphic skills for communication of analysis and design concepts. Students should previously or concurrently enroll in ARCH 326 to learn methods for digital construction of design and drawing projects assigned in ARCH 321.

Upon completion of this course, the student will be able to:

- SLO-1: Apply basic organizational and spatial principles to the conception and development of architectural environments.
- SLO-2: Understand and utilize the skills associated with representing envisioned ideas, objects and environments.
- SLO-3: Identify and assume diverse roles that maximize individual talents and to cooperate with other students, when working as members of a team, to maximize accomplishment.
- SLO-4: To demonstrate ability at research, investigation and the skills associated with life-long learning.

This course is a continuation and development of the content and issues introduced in ARCH 320 plus the principles, concepts, methods and skills pertaining to the construction of shadows and reflections, physical model building, entourage and color theory. A series of design projects are used to discover principles and concepts of design while simultaneously addressing the skills associated with representing envisioned ideas, objects and environments. This includes the development of physical model making, freehand sketching, manual drafting and graphic skills for communication of analysis and design concepts. Students should previously or concurrently enroll in ARCH 326 to learn methods for digital construction of design and drawing projects assigned in ARCH 321.

Upon completion of this course, the student will be able to:

- SLO-1: Apply basic organizational and spatial principles to the conception and development of architectural environments.
- SLO-2: Understand and utilize the skills associated with representing envisioned ideas, objects and environments.
- SLO-3: Identify and assume diverse roles that maximize individual talents and to cooperate with other students, when working as members of a team, to maximize accomplishment.
- SLO-4: To demonstrate ability at research, investigation and the skills associated with life-long learning.

This course is a continuation and development of the content and issues introduced in ARCH 320 plus the principles, concepts, methods and skills pertaining to the construction of shadows and reflections, physical model building, entourage and color theory. A series of design projects are used to discover principles and concepts of design while simultaneously addressing the skills associated with representing envisioned ideas, objects and environments. This includes the development of physical model making, freehand sketching, manual drafting and graphic skills for communication of analysis and design concepts. Students should previously or concurrently enroll in ARCH 326 to learn methods for digital construction of design and drawing projects assigned in ARCH 321.

Upon completion of this course, the student will be able to:

- SLO-1: Apply basic organizational and spatial principles to the conception and development of architectural environments.
- SLO-2: Understand and utilize the skills associated with representing envisioned ideas, objects and environments.
- SLO-3: Identify and assume diverse roles that maximize individual talents and to cooperate with other students, when working as members of a team, to maximize accomplishment.
- SLO-4: To demonstrate ability at research, investigation and the skills associated with life-long learning.

This course is a continuation and development of the content and issues introduced in ARCH 320 plus the principles, concepts, methods and skills pertaining to the construction of shadows and reflections, physical model building, entourage and color theory. A series of design projects are used to discover principles and concepts of design while simultaneously addressing the skills associated with representing envisioned ideas, objects and environments. This includes the development of physical model making, freehand sketching, manual drafting and graphic skills for communication of analysis and design concepts. Students should previously or concurrently enroll in ARCH 326 to learn methods for digital construction of design and drawing projects assigned in ARCH 321.

Upon completion of this course, the student will be able to:

- SLO-1: Apply basic organizational and spatial principles to the conception and development of architectural environments.
- SLO-2: Understand and utilize the skills associated with representing envisioned ideas, objects and environments.
- SLO-3: Identify and assume diverse roles that maximize individual talents and to cooperate with other students, when working as members of a team, to maximize accomplishment.
- SLO-4: To demonstrate ability at research, investigation and the skills associated with life-long learning.

This course is a continuation and development of the content and issues introduced in ARCH 320 plus the principles, concepts, methods and skills pertaining to the construction of shadows and reflections, physical model building, entourage and color theory. A series of design projects are used to discover principles and concepts of design while simultaneously addressing the skills associated with representing envisioned ideas, objects and environments. This includes the development of physical model making, freehand sketching, manual drafting and graphic skills for communication of analysis and design concepts. Students should previously or concurrently enroll in ARCH 326 to learn methods for digital construction of design and drawing projects assigned in ARCH 321.

Upon completion of this course, the student will be able to:

- SLO-1: Apply basic organizational and spatial principles to the conception and development of architectural environments.
- SLO-2: Understand and utilize the skills associated with representing envisioned ideas, objects and environments.
- SLO-3: Identify and assume diverse roles that maximize individual talents and to cooperate with other students, when working as members of a team, to maximize accomplishment.
- SLO-4: To demonstrate ability at research, investigation and the skills associated with life-long learning.

This course is a continuation and development of the content and issues introduced in ARCH 320 plus the principles, concepts, methods and skills pertaining to the construction of shadows and reflections, physical model building, entourage and color theory. A series of design projects are used to discover principles and concepts of design while simultaneously addressing the skills associated with representing envisioned ideas, objects and environments. This includes the development of physical model making, freehand sketching, manual drafting and graphic skills for communication of analysis and design concepts. Students should previously or concurrently enroll in ARCH 326 to learn methods for digital construction of design and drawing projects assigned in ARCH 321.

Upon completion of this course, the student will be able to:

- SLO-1: Apply basic organizational and spatial principles to the conception and development of architectural environments.
- SLO-2: Understand and utilize the skills associated with representing envisioned ideas, objects and environments.
- SLO-3: Identify and assume diverse roles that maximize individual talents and to cooperate with other students, when working as members of a team, to maximize accomplishment.
- SLO-4: To demonstrate ability at research, investigation and the skills associated with life-long learning.
This course is a continuation and development of the content and issues introduced in ARCH 320 and 321 plus the issues, concepts, processes and skills pertaining to the analysis and design of architectural form, space and organizations. A series of design projects are used to discover principles and concepts of design while simultaneously addressing the skills associated with representing envisioned ideas, objects and environments. This includes the development of freehand sketching, computer modeling, architectural delineation and graphic skills for communication of analysis and design concepts.

Upon completion of this course, the student will be able to:

- SLO-1: Apply basic organizational and spatial principles to the conception and development of architectural environments.
- Utilize problem solving and design process methodologies to identify problems, analyze criteria and apply learned principles to synthesize solutions to specific design projects; to assess and reflect on the success of the process and solution. Students should be able to analyze issues related to image, function and context in order to develop appropriate conceptual responses.
- Use the fundamentals of visual perception and the principles of order (unity, balance, pattern, hierarchy, etc,) to create relationships between elements.
- Analyze the work of precedent architects to understand the formal techniques of expressing philosophy and meaning. Demonstrate understanding and ability at using a range of learned architectural design concepts and geometry including the sequential experiences of approach, entry, arrival, continuum, open/implied versus closed/explicit space, clear spatial figure, etc. to respond to discovered issues related to context, image and function.
- SLO-2: Understand and utilize the skills associated with representing envisioned ideas, objects and environments.
- Employ appropriate drawing and representational media, including computer and duplication technology, to convey essential formal elements at each stage of the programming and design process.
- Understand and apply information gathered by the human visual system to support the perception of form and space (spatial cues as well as the graphic language of color, texture, light, shade, shadow, reflectivity, line weight etc).
- Define the role of different drawing and model types in the communication of design ideas at the various stages of a project and to be able to use the primary drawing systems of orthographics, para-line and perspective.
- Utilize a range of drawing types from quick freehand gestures to carefully constructed and rendered delineations to represent existing and imagined objects or environments on two-dimensional surfaces.
- Create the context of figures, landscape, and furnishings into various drawing systems with appropriate scale to enhance the representation of depth.
- Produce hand lettering using a range of media (i.e. pencil, pen, and marker) that exhibits good letter form, consistency, alignment and shape.
- SLO-3: Identify and assume diverse roles that maximize individual talents and to cooperate with other students, when working as members of a team, to maximize accomplishment.
- Demonstrate ability at active participation and contribution to a team effort.
- SLO-4: Demonstrate ability at research, investigation and the skills associated with life-long learning.
- Use comprehensive and graphic visual note-making in sketch books for recording of thoughts, observations, design thinking and to enhance the desire for research, independent learning and continuing education as a life-long pursuit.
This is a studio course to explore principles, concepts, methods and skills pertaining to the digital construction of drawings employing orthographic, axonometric, oblique, and lineal perspective drawing systems to represent ideas, objects and environments.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO-1: Demonstrate technical knowledge of a range of digital media and techniques that can be employed in drawing and other visual communications.
- Create a range of two-dimensional reproduction techniques (i.e. prints, photocopies, statistics, scans, etc.).
- Use a range of presentation methods including computer images.
- Use a range of computer hardware components and software applications and understand the function and relationship of the major hardware components of a typical stand-alone computer system; explain the relationship between the hardware and software of computer systems; describe the function and relationship of operation systems, shell applications and special purpose applications.
- SLO-2: Utilize problem solving methodologies to identify problems and issues, to apply learned principles to synthesize solutions to specific 2d and 3d design problems assigned in Arch 320 and to assess and reflect on the success of the process and solution.
- SLO-3: Demonstrate ability at research, investigation and the skills associated with life-long learning.
- Use comprehensive and graphic visual note-making in sketch books for recording of thoughts, observations, design thinking and to enhance the desire for research, independent learning and continuing education as a life-long pursuit.

ARCH 326 Architectural Digital Design and Communication II

This course is a continuation and development of the content and issues introduced in ARCH 325, plus the principles, concepts, methods and skills pertaining to the digital construction of shadows, digital and physical model building, entourage and color theory.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO-1: Demonstrate technical knowledge of a range of digital media and techniques that can be employed in drawing and other visual communications.
- create a range of two-dimensional reproduction techniques (i.e. prints, photocopies, statistics, scans, etc.).
- use a range of presentation methods including computer images.
- use a range of computer hardware components and software applications to understand the function and relationship of the major hardware components of a typical stand-alone computer system.
- explain the relationship between the hardware and software of computer systems.
- describe the function and relationship of operation systems, shell applications and special purpose applications.
- SLO-2: Demonstrate ability at using problem solving methodologies to identify problems and issues to apply learned principles to synthesize solutions to specific 2d and 3d design problems.
- assess and reflect on the success of the process to synthesize solutions to specific 2d and 3d design problems.
- SLO-3: To demonstrate ability at research, investigation and the skills associated with life-long learning.
demonstrate ability to use comprehensive and graphic visual note-making in sketch books for recording of thoughts and observations for design thinking.

ARCH 329 Architectural Working Drawings

This course provides an introduction to residential design and construction documents. Students will design a residence and produce a complete set of architectural working drawings.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO-1: Demonstrate ability to apply basic organizational and spatial principles to the conception and development of architectural environments for a residential design project.
- SLO-2: Demonstrate basic abilities at using problem solving and design process methodologies to identify problems, analyze criteria and apply learned principles to synthesize solutions to a specific residential design project; to assess and reflect on the success of the process and solution. Students should be able to analyze issues related to image, function and context in order to develop appropriate design and detail responses.
- SLO-3: Demonstrate and apply the skills associated with representing envisioned ideas, objects and environments.
- SLO-4: Employ appropriate drawing and representational media, including computer, manual drafting and duplication technology, to convey concepts and ideas at each stage of the project delivery process including programming, design and construction documents.
- SLO-5: Demonstrate ability to communicate architectural information on construction documents with the use of line-work, manual and digital lettering, symbols and drafting conventions.
- SLO-6: Identify and explain light frame construction including techniques, materials, systems and apply learned principles to create the drawings that control the construction of a building.
- SLO-7: Explain the basic technical elements of wood frame construction including layout; structural, mechanical and electrical sizing; framing techniques; detailing and apply learned principles to create the drawings that control building development.
- SLO-8: Describe and design site planning, grading, drainage and site systems and apply learned principles to create the drawings that control site development.
- SLO-9: Describe and design the primary building systems including structure, mechanical, electrical, weatherproofing, etc., that are integrated into a building and apply learned principles to create the drawings that control building development.
- SLO-10: Organize a set of documents including cross-referencing, code review, checklists, coordination, cartooning and other planning methods to create the documents that control building development.
- SLO-11: Identify and assume diverse roles that maximize individual talents and to cooperate with other students, when working as members of a team, to maximize accomplishment.
- SLO-12: Demonstrate active participation and contribution to a team effort as well as individual effort.
- SLO-13: Apply research, investigation and the skills associated with life-long learning.
- SLO-14: Demonstrate the use of comprehensive and graphic visual note-making in sketch books for recording of thoughts, observations, and design thinking to enhance research and independent learning within continuing education as a life-long pursuit.

ARCH 330 Design Fundamentals

This course is designed for students who have completed a Building Information Modeling (BIM) course or have completed Arch 321 and Arch 326. Students should be able to analyze issues related to image, function and context in order to develop appropriate design and detail responses.
This course develops an understanding of design fundamentals in terms of materiality and the theories, concepts, creative problem solving processes, and skills pertaining to the analysis and design of architectural form, space and organizations to communicate intended concepts and meanings.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO-1: Apply basic organizational and spatial principles to the conception and development of architectural environments.
- use problem solving and design process methodologies to identify problems, analyze criteria and apply learned principles to synthesize solutions to specific design projects.
- assess and reflect on the success of the process and solution within the design methodologies.
- use organization systems, spatial geometry and principles of order (unity, balance, pattern, hierarchy, rhythm, etc,) to create meaning and relationships between elements.
- identify and use a range of architectural design concepts, including the sequential experiences of approach, entry, arrival, continuum, open/implied versus closed/explicit space, and clear spatial figure, etc., to respond to discovered issues related to context, image and function.
- observe and analyze existing conditions, context, function and image, as well as define goals and issues to generate concepts that provide abstract meaning into architectural form and spaces.
- SLO-2: Comprehend and demonstrate the 2d and 3d skills associated with representing envisioned ideas, objects and environments.
- employ appropriate representational media including study and presentation models, freehand and conceptual drawing.
- compose analytical drawing and diagramming to convey visualize ideas and convey essential formal elements at each stage of the programming and design process.
- SLO-3: Demonstrate teamwork skills within active participation and contribution to a team effort.
- identify and employ diverse roles that maximize individual talents and to cooperate with other students, when working as members of a team, to maximize accomplishment.
- SLO-4: Demonstrate knowledge an understanding of historical, cultural, human, aesthetic, environmental and social issues to be able to affect creative change in the built environment.
- SLO-5: Demonstrate skills in research and investigation associated with architectural design and life-long learning.
- Sketch and use comprehensive and graphic visual note-making in sketch books for recording thoughts and observations for design thinking and to express the desire for research, independent learning and continuing education as a life-long pursuit.
- SLO-6: Demonstrate oral communication skills that are appropriate and effective within group discussion and oral presentation that pertains to design thinking.

ARCH 332 Design Awareness

This course examines design problems and the environment by providing theories, concepts, processes, studies and skills pertaining to space, form, structure, context, materials, climate, livability and sustainability. The course covers sustainability as a determinant that shapes and impacts the built environment.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO-1: Demonstrate ability to apply basic organizational and spatial principles to the conception and development of architectural environments.
- Use problem solving and design process methodologies to identify problems, analyze criteria and apply learned principles to synthesize solutions to specific design projects.
ARCH 334 Advanced Design in Three Dimensions

**Units:** 3  
**Hours:** 54 hours LEC; 18 hours LAB  
**Prerequisite:** ARCH 332 with a grade of "C" or better  
**Advisory:** ARCH 320 and 330  
**Transferable:** CSU  
**Catalog Date:** June 1, 2020

This course is a continuation of the content in ARCH 332 that emphasizes design process, with a focus on advanced design in terms of three dimensional design and design problems pertaining to the environment. The course studies the theories, concepts, processes and skills pertaining to space, form, structure, context, structure, materials, climate, and livability, as well as sustainability as determinants that shape and impact the built environment.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- **SLO-1:** Apply basic organizational and spatial principles to the conception and development of architectural environments.
- **SLO-2:** Use problem solving and design process methodologies to identify problems, analyze criteria and apply learned principles to synthesize solutions to specific design projects at an advanced level.
- **SLO-3:** Assess and reflect on the success of the process and solution within the design methodologies.
- **SLO-4:** Demonstrate understanding and the ability to use organization systems, spatial geometry and principles of order (unity, balance, pattern, hierarchy, rhythm, etc.) to create meaning and relationships between elements.
- **SLO-5:** Demonstrate understanding and ability at using a range of architectural design concepts including the sequential experiences of approach, entry, arrival, continuum, open/implied versus closed/explicit space, clear spatial figure, etc., in order to respond to discovered issues related to context, image and function.
- **SLO-6:** Observe and analyze existing conditions, context, function and image, as well as define goals and issues to generate concepts that provide abstract meaning into architectural form and spaces.
- **SLO-7:** Comprehend and demonstrate the 2d and 3d skills associated with representing envisioned ideas, objects and environments.
- **SLO-8:** Employ appropriate representational media including study and presentation models, freehand and conceptual drawing.
- **SLO-9:** Compose analytical drawing and diagramming to convey visualize ideas and convey essential formal elements at each stage of the programming and design process.
- **SLO-10:** Demonstrate teamwork skills within active participation and contribution to a team effort.
- **SLO-11:** Identify and employ diverse roles that maximize individual talents and to cooperate with other students, when working as members of a team, to maximize accomplishment.
- **SLO-12:** Demonstrate knowledge and understanding of historical, cultural, human, aesthetic, environmental and social issues to be able to affect creative change in the built environment.
- **SLO-13:** Demonstrate an understanding of sustainable environmental design by applying learned principles to create energy and resource conscious, climate-adapted architectural and environmental design.
- **SLO-14:** Demonstrate an awareness of sociological, cultural and urban planning issues by applying learned principles to create livable communities and architecture that support ecological, pedestrian and human environments.
- **SLO-15:** Demonstrate skills in research and investigation associated with architectural design and life-long learning.
- **SLO-16:** Sketch and use comprehensive and graphic visual note-making in sketch books for recording thoughts and observations for design thinking and to express the desire for research, independent learning and continuing education as a life-long pursuit.
- **SLO-17:** Demonstrate oral communication skills that are appropriate and effective within group discussion and oral presentation that pertains to design thinking.
• Observe and analyze existing conditions, context, function and image, as well as define goals and issues to generate concepts that provide abstract meaning into architectural form and spaces.

• SLO-2: Understand and demonstrate the 2d and 3d skills associated with representing envisioned ideas, objects and environments.

• Employ appropriate representational media including study and presentation models, freehand and conceptual drawing.

• Compose advanced, analytical drawing and diagramming to convey visualize ideas and convey essential formal elements at each stage of the programming and design process.

• SLO-3: Demonstrate teamwork skills within active participation and contribution to a team effort.

• Identify and employ diverse roles that maximize individual talents and to cooperate with other students, when working as members of a team, to maximize accomplishment.

• SLO-4: Demonstrate knowledge an understanding of historical, cultural, human, aesthetic, environmental and social issues to be able to affect creative change in the built environment.

• Demonstrate an understanding of sustainable environmental design by applying learned principles to create energy and resource conscious, climate-adapted architectural and environmental design.

• Demonstrate an awareness of sociological, cultural and urban planning issues by applying learned principles to create livable communities and architecture that support ecological, pedestrian and human environments.

• SLO-5: Demonstrate advanced skills in research and investigation associated with architectural design and life-long learning.

• Sketch and use comprehensive and graphic visual note-making in sketch books for recording thoughts and observations for advanced design thinking and to express the desire for research, independent learning and continuing education as a life-long pursuit.

• SLO-6: Demonstrate oral communication skills that are appropriate and effective within group discussion and oral presentation that pertains to design thinking.

ARCH 342 Introduction to Green Buildings

<table>
<thead>
<tr>
<th>Units:</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hours:</td>
<td>54 hours LEC</td>
</tr>
<tr>
<td>Prerequisite:</td>
<td>None.</td>
</tr>
<tr>
<td>Transferable:</td>
<td>CSU</td>
</tr>
<tr>
<td>Catalog Date:</td>
<td>June 1, 2020</td>
</tr>
</tbody>
</table>

This course is the study of theory and application of climate, energy use and thermal comfort as determinants of architectural form in envelope load dominated buildings. Emphasis is placed on sustainable architectural methods and topics related to resource conservation and waste reduction; site analysis; sun access; sun shading; daylighting; lighting, ventilating, cooling and heating for envelope-load dominated buildings; and sound in buildings. The course enhances students’ knowledge base and preparation for design classes ARCH 332 and ARCH 334.

This course replaces the ARCH 340 and 341 two-course sequence, and is therefore not open to a student that has received credit for both ARCH 340 and 341.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• SLO 1: Make reasonable architectural decisions based on the ethical, social, and environmental value of energy conscious design.

• Compare and contrast societal implications of utilizing non-renewable and renewable energy sources.

• Express how the relationship between building form, scale and location affects a building's successful response to the environment.

• Compare and contrast the effect of orientation and other contextual issues to evaluate their impact on energy consumption and beneficial experience of spaces.

• SLO 2: Identify and compare issues and alternatives related to the choice of various building systems; ideate and apply responsive solutions by integrating knowledge of climate, site, materials and assemblies as drivers of design.

• Understand the tools of performance assessment to analyze and calculate energy use so as to make informed choices to satisfy human needs for comfort and aesthetic.

• Analyze the context of buildings, evaluate needs and make informed choices that respond, in a sustainable way, to solar geometry, sun access, daylighting, shading, and photovoltaic systems.
- Describe the physics of light, including the luminous environment as architectural form-givers, and apply learned principles to the selection and design of electrical systems.
- Understand and demonstrate the concepts of waste reduction, water and resource conservation; calculate embodied energy and waste contribution; and make sustainable design choices related to materials and construction.
- Understand the physics of sound, analyze requirements, calculate criteria and apply learned principles to the selection of walls, floors and ceilings for noise isolation or sound enhancement.
- Understand the concepts of human thermal comfort and performance; heat transfer; building materials, assemblies and systems; climate analysis, vernacular architecture and climate responsive architectural design; and be able to apply learned principles to analyze the context of buildings and climate, evaluate needs and synthesize informed, calculated choices that respond, in a sustainable way, to create thermal comfort.
- Describe strategies for passive heating and cooling and be able to apply learned principles to reduce energy consumption and provide thermal comfort for various climates including: hot arid, hot humid, cold and temperate.
- Describe and apply the principles of psychrometrics to provide thermal comfort.
- Describe the various types of mechanical systems for heating and cooling buildings and be able to apply learned principles to propose responsive schematic design.
- SLO 3: Demonstrate independent learning, knowledge of teamwork principles and continuing education habits that will encourage a lifelong pursuit of knowledge, including the ability to gather, assess, record and comparatively evaluate relevant information.
- Use a teamwork process to identify issues, analyze criteria, research and apply learned principles to synthesize solutions to a specific design project.
- Demonstrate habits of visual note making and independent learning by developing a sketch and notebook to record learning and process for generating ideas.

ARCH 495 Independent Studies in Architecture

Units: 1 - 3
Hours: 54 - 162 hours LAB
Prerequisite: None.
Transferable: CSU
Catalog Date: June 1, 2020

An independent studies project involves an individual student or small group of students in study, research, or activities beyond the scope of regularly offered courses. See the current catalog section of “Special Studies” for full details of Independent Studies.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO #1: Actively engage in intellectual inquiry beyond that required in order to pass a course of study (College Wide Learning Outcome – Area 4).
- Discuss and outline a proposal of study (that can be accomplished within one semester term) with a supervising instructor qualified within the discipline.
- Design an independent study (to be completed individually or by collaboration of a small group) to foster special knowledge, skills, and experience that are not available in any one regularly scheduled course.
- Use information resources to gather discipline-specific information.
- SLO #2: Utilize modes of analysis and critical thinking to apply theoretical perspectives and/or concepts in the major discipline of study to significant problems and/or educational activities (College Wide Learning Outcome – Area 3).
- Analyze and apply the knowledge, skills and experience that are involved in the independent study to theoretical perspectives and/or concepts in the major discipline of study.
- Explain the importance of the major discipline of study in the broader picture of society.
- SLO #3: Communicate a complex understanding of content matter of the major discipline of study (College Wide Outcome – Area 3).
- Demonstrate competence in the skills essential to mastery of the major discipline of study that are necessary to accomplish the independent study.
- SLO #4: Identify personal goals and pursue these goals effectively (College Wide Outcome – Area 4).
Utilize skills from the "academic tool kit" including time management, study skills, etc., to accomplish the independent study within one semester term.

ARCH 498 Work Experience in Architecture

Units: 1 - 4
Hours: 60 - 300 hours LAB
Prerequisite: None.
Enrollment Limitation: Students must be in a paid or unpaid internship, volunteer position or job related to career goals in Architecture.
Transferable: CSU
General Education: AA/AS Area III(b)
Catalog Date: June 1, 2020

This course provides students with opportunities to develop marketable skills in preparation for employment in their major field of study or advancement within their career. It is designed for students interested in work experience and/or internships in transfer level degree occupational programs. Course content includes understanding the application of education to the workforce; completion of required forms which document the student's progress and hours spent at the work site; and developing workplace skills and competencies. Appropriate level learning objectives are established by the student and the employer. During the semester, the student is required to participate in a weekly orientation and 75 hours of related paid work experience, or 60 hours of unpaid work experience for one unit. An additional 75 or 60 hours of related work experience is required for each additional unit. Work Experience may be taken for a total of 16 units when there are new or expanded learning objectives. Only one Work Experience course may be taken per semester.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- **DEMONSTRATE AN UNDERSTANDING AND APPLICATION OF PROFESSIONAL WORKPLACE BEHAVIOR IN A FIELD OF STUDY RELATED ONE'S CAREER.**
  - Understand the effects time, stress, and organizational management have on performance.
  - Demonstrate an understanding of consistently practicing ethics and confidentiality in a workplace.
  - Examine the career/life planning process and relate its relevancy to the student.
  - Demonstrate an understanding of basic communication tools and their appropriate use.
  - Demonstrate an understanding of workplace etiquette.

- **DESCRIBE THE CAREER/LIFE PLANNING PROCESS AND RELATE ITS RELEVANCY TO ONE'S CAREER.**
  - Link personal goals to long term achievement.
  - Display an understanding of creating a professional first impression.
  - Understand how networking is a powerful job search tool.
  - Understand necessary elements of a résumé.
  - Understand the importance of interview preparation.
  - Identify how continual learning increases career success.

- **DEMONSTRATE APPLICATION OF INDUSTRY KNOWLEDGE AND THEORETICAL CONCEPTS AS WRITTEN IN LEARNING OBJECTIVES IN PARTNERSHIP WITH THE EMPLOYER WORK SITE SUPERVISOR.**


CRC's art curriculum offers introductory and intermediate level courses in painting, figure drawing, digital art, drawing, sculpture, ceramics, printmaking and design, as well as courses in art appreciation and art history. Through the program's art theory and art practice classes, students develop an awareness and understanding of the materials, tools, rationale and significance of art in society. The art curriculum's critical thinking and technical skills components encourage students to utilize independent thought processes and problem solving.

Dean

 (916) 691-7170
 BedfordB@crc.losrios.edu

Associate Degrees for Transfer

A.A.-T. in Art History

The Associate in Arts in Art History for Transfer Degree (AA-T) is designed to provide a seamless transfer pathway for students interested in pursuing at least one Art History degree option in the California State University (CSU) system. The degree is comprised of lower division coursework typically required by CSU institutions. Students must complete a total of 60 transferable semester units with a minimum 2.0 GPA, to include either the California State University General Education Breadth pattern or the Intersegmental General Education Transfer Curriculum; students must also earn a grade of C or better in all the courses for the major as described in the Required Program. Upon successful completion of the degree requirements, students will be guaranteed admission to the CSU system with junior status and will not have to repeat lower division coursework. Students are encouraged to meet with a counselor to develop their educational plans as degree options and general education requirements vary for each university.

Catalog Date: June 1, 2020

Degree Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARTH 303</td>
<td>Art Survey: Ancient to 14th Century</td>
<td>3</td>
</tr>
<tr>
<td>ARTH 309</td>
<td>Art Survey: Renaissance to 19th Century</td>
<td>3</td>
</tr>
<tr>
<td>ARTH 311</td>
<td>Art Survey: Modern Art</td>
<td>3</td>
</tr>
<tr>
<td>ART 300</td>
<td>Drawing and Composition I</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>A minimum of 3 units from the following:</td>
<td>3</td>
</tr>
<tr>
<td>ARTH 333</td>
<td>Introduction to Islamic Art (3)</td>
<td></td>
</tr>
<tr>
<td>or ARTH 328</td>
<td>Survey of African Art (3)</td>
<td></td>
</tr>
<tr>
<td>or ARTH 332</td>
<td>Asian Art (3)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>A minimum of 3 units from the following:</td>
<td>3</td>
</tr>
<tr>
<td>ART 304</td>
<td>Figure Drawing I (3)</td>
<td></td>
</tr>
<tr>
<td>or ART 320</td>
<td>Design: Fundamentals (3)</td>
<td></td>
</tr>
<tr>
<td>or ART 361</td>
<td>Printmaking: Survey (3)</td>
<td></td>
</tr>
<tr>
<td>or ART 372</td>
<td>Sculpture (3)</td>
<td></td>
</tr>
</tbody>
</table>
COURSE CODE | COURSE TITLE | UNITS
---|---|---
A minimum of 3 units from the following: | | 3
Choose a minimum of three units from below that was not chosen above.

<table>
<thead>
<tr>
<th>ART 301</th>
<th>Digital Drawing and Composition (3)</th>
</tr>
</thead>
<tbody>
<tr>
<td>or ART 327</td>
<td>Painting I (3)</td>
</tr>
<tr>
<td>or ART 304</td>
<td>Figure Drawing I (3)</td>
</tr>
<tr>
<td>or ARTH 333</td>
<td>Introduction to Islamic Art (3)</td>
</tr>
<tr>
<td>or ARTH 328</td>
<td>Survey of African Art (3)</td>
</tr>
<tr>
<td>or ART 320</td>
<td>Design: Fundamentals (3)</td>
</tr>
<tr>
<td>or ART 361</td>
<td>Printmaking: Survey (3)</td>
</tr>
<tr>
<td>or ART 372</td>
<td>Sculpture (3)</td>
</tr>
<tr>
<td>or ARTH 312</td>
<td>Women in Art (3)</td>
</tr>
<tr>
<td>or ARTH 332</td>
<td>Asian Art (3)</td>
</tr>
</tbody>
</table>

Total Units: 21

The Associate in Arts in Art History for Transfer (AA-T) degree may be obtained by completion of 60 transferable, semester units with a minimum 2.0 GPA, including (a) the major or area of emphasis described in the Required Program, and (b) either the Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education-Breadth Requirements.

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- assess and evaluate the contributions of artists throughout history and analyze art and architecture within the context of their functions and meanings (SLO #1).
- discuss works of art publicly (SLO #2).
- identify and evaluate works of art or architecture according to their appropriate style, region, and time frame (SLO #3).
- research and assess theoretical information concerning the meanings and purposes of art and architecture, use scholarly sources, and express thoughts clearly in writing (SLO #4).
- develop an appreciation for the arts, cultural practices, and history of people of the past and demonstrate how art and architecture is a reflection of that history (SLO #5).

Career Information

The AA-T in Art History can provide students with the foundational knowledge necessary for transfer to a 4-year Bachelor of Arts (BA) degree program. Career opportunities for students who have earned BA degrees in Art History include but are not limited to: registrars, preparators, and curatorial staff in art museums and galleries; art critics in mass media publications, such as newspapers and magazines. An advanced degree allows an art historian a wider range of possible career applications, including museums directorships, curators, instructors, preservationists, researchers, and auction house personnel. Some careers may require additional training. NOTE TO TRANSFER STUDENTS: The Associate in Arts in Art History for Transfer program is designed for students who plan to transfer to a campus of the California State University (CSU). Other than the required core, the courses you choose to complete this degree will depend to some extent on the selected CSU for transfer. In addition, some CSU-GE Breadth or IGETC requirements can also be completed using courses required for this associate degree for transfer major (known as “double-counting”). Meeting with a counselor to determine the most appropriate course choices will facilitate efficient completion of your transfer requirements. For students wishing to transfer to other universities (UC System, private, or out-of-state), the Associate Degree for Transfer may not provide adequate preparation for upper-division transfer admissions; it is critical that you meet with a CRC counselor to select and plan the courses for the major, as programs vary widely in terms of the required preparation.

A.A.-T. in Studio Arts
Completion of this degree provides a foundation in studio art methods. Program offerings include coursework in art history, 2-D, and 3-D studio practices. The Associate in Arts in Studio Art for Transfer Degree (AA-T) is designed to provide a seamless transfer pathway for students interested in pursuing at least one art studio degree option in the California State University (CSU) system. The degree is comprised of lower division coursework typically required by CSU institutions. Students must complete a total of 60 transferable semester units with a minimum 2.0 GPA, to include either the California State University General Education Breadth pattern or the Intersegmental General Education Transfer Curriculum; students must also earn a grade of C or better in all the courses for the major as described in the Required Program. Upon successful completion of the degree requirements, students will be guaranteed admission to the CSU system with junior status and will not have to repeat lower division coursework. Students are encouraged to meet with a counselor to develop their educational plans as degree options and general education requirements vary for each university.

**Catalog Date:** June 1, 2020

## Degree Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 300</td>
<td>Drawing and Composition I</td>
<td>3</td>
</tr>
<tr>
<td>ART 320</td>
<td>Design: Fundamentals</td>
<td>3</td>
</tr>
<tr>
<td>ART 370</td>
<td>Three Dimensional Design</td>
<td>3</td>
</tr>
<tr>
<td>ARTH 309</td>
<td>Art Survey: Renaissance to 19th Century</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Art History Elective:</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>A minimum of 3 units from the following:</td>
<td>3</td>
</tr>
<tr>
<td>ARTH 303</td>
<td>Art Survey: Ancient to 14th Century (3)</td>
<td></td>
</tr>
<tr>
<td>ARTH 332</td>
<td>Asian Art (3)</td>
<td></td>
</tr>
<tr>
<td>ARTH 311</td>
<td>Art Survey: Modern Art (3)</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Studio Art Electives:</strong></td>
<td>9</td>
</tr>
<tr>
<td></td>
<td>A minimum of 9 units from the following:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Select three courses, each from a different category listed below.</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Drawing</strong></td>
<td></td>
</tr>
<tr>
<td>ART 302</td>
<td>Drawing and Composition II (3)</td>
<td></td>
</tr>
<tr>
<td>ART 304</td>
<td>Figure Drawing I (3)</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Color Theory</strong></td>
<td></td>
</tr>
<tr>
<td>ART 323</td>
<td>Design: Color Theory (3)</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Painting</strong></td>
<td></td>
</tr>
<tr>
<td>ART 327</td>
<td>Painting I (3)</td>
<td></td>
</tr>
<tr>
<td>ART 336</td>
<td>Watercolor Painting (3)</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Printmaking</strong></td>
<td></td>
</tr>
<tr>
<td>ART 361</td>
<td>Printmaking: Survey (3)</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Sculpture</strong></td>
<td></td>
</tr>
<tr>
<td>ART 372</td>
<td>Sculpture (3)</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Ceramics</strong></td>
<td></td>
</tr>
<tr>
<td>ART 402</td>
<td>Beginning Clay Sculpture (3)</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Photography</strong></td>
<td></td>
</tr>
<tr>
<td>PHOTO 301</td>
<td>Beginning Photography (3)</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Total Units:</strong></td>
<td>24</td>
</tr>
</tbody>
</table>
The Associate in Arts in Studio Arts for Transfer (AA-T) degree may be obtained by completion of 60 transferable, semester units with a minimum 2.0 GPA, including (a) the major or area of emphasis described in the Required Program, and (b) either the Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education-Breadth Requirements.

Student Learning Outcomes
Upon completion of this program, the student will be able to:

- differentiate major historical movements and developments in the visual arts. PSLO #1
- compose or design works of art that utilize a combination of technique, materials, visual ideas, and experiences. PSLO #2
- construct and document an initial portfolio of artworks for professional presentation. PSLO #3
- critique artworks using correct terminology related to concepts, materials, and techniques. PSLO #4
- evaluate form, image, and artistic creation of visual artworks from different traditions, cultures, and civilizations. PSLO #5

Career Information
Individuals with baccalaureate degrees in art may be placed in the K-12 educational field as well as in museums and galleries as registrars, preparators, and curatorial staff. Individuals may also work as fine artists, graphic artists or designers, illustrators, digital artists, and other commercial work such as freelance photographers. Advanced degrees in art may lead to careers as educators at the college or university level, art directors, art editors, curators, conservators, and restorers for museums and galleries. Many careers may require training beyond the baccalaureate level. NOTE TO TRANSFER STUDENTS: The Associate Degree for Transfer program is designed for students who plan to transfer to a campus of the California State University (CSU). Other than the required core, the courses you choose to complete this degree will depend to some extent on the selected CSU for transfer. In addition, some CSU-GE Breadth or IGETC requirements can also be completed using courses required for this associate degree for transfer major (known as "double-counting"). Meeting with a counselor to determine the most appropriate course choices will facilitate efficient completion of your transfer requirements. It is critical that you meet with a CRC counselor to select and plan the courses for the major, as programs vary widely in terms of the required preparation.

Associate Degrees

A.A. in Art - Art History
CRC's art curriculum offers introductory and intermediate level courses in painting, watercolor, computer art, drawing, sculpture, ceramics, printmaking and design, as well as courses in art appreciation and art history. Through the program's art theory and art practice classes, students develop an awareness and understanding of the materials, tools, rationale and significance of art in society. The art curriculum's critical thinking and technical skills components encourage students to utilize independent thought processes and problem solving. This program provides transfer and employment opportunities as well as personal enrichment for students.

The art faculty is composed of professional artists with diverse specializations encompassing the spectrum of the classes offered.

HIGHLIGHTS
*Art faculty who have exhibited regionally, nationally and internationally
*Opportunities to explore artistic pursuits in two- and three-dimensional media using a wide variety of materials and techniques
*Regularly scheduled trips to major museums
*Guest lectures and demonstrations
*New state-of-the-art facility

NOTE TO TRANSFER STUDENTS: If you are interested in transferring to a four-year college or university to pursue a bachelor's degree in this major, it is critical that you meet with a CRC counselor to select and plan the courses for your major. Schools vary widely in terms of the required preparation. The courses that CRC requires for an Associate's degree in this major may be different from the requirements needed for the Bachelor's degree.

Catalog Date: June 1, 2020

Degree Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARTH 303</td>
<td>Art Survey: Ancient to 14th Century</td>
<td>3</td>
</tr>
<tr>
<td>COURSE CODE</td>
<td>COURSE TITLE</td>
<td>UNITS</td>
</tr>
<tr>
<td>-------------</td>
<td>--------------------------------------------</td>
<td>-------</td>
</tr>
<tr>
<td>ARTH 309</td>
<td>Art Survey: Renaissance to 19th Century</td>
<td>3</td>
</tr>
<tr>
<td>ARTH 311</td>
<td>Art Survey: Modern Art</td>
<td>3</td>
</tr>
</tbody>
</table>

**Plus three (3) courses selected from:**

A minimum of 9 units from the following:

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARTH 312</td>
<td>Women in Art</td>
<td>(3)</td>
</tr>
<tr>
<td>ARTH 332</td>
<td>Asian Art</td>
<td>(3)</td>
</tr>
<tr>
<td>ARCH 310</td>
<td>History of Architecture</td>
<td>(3)</td>
</tr>
<tr>
<td>HUM 300</td>
<td>Classical Humanities</td>
<td>(3)</td>
</tr>
<tr>
<td>HUM 310</td>
<td>Modern Humanities</td>
<td>(3)</td>
</tr>
<tr>
<td>HUM 320</td>
<td>Asian Humanities</td>
<td>(3)</td>
</tr>
<tr>
<td>HUM 332</td>
<td>American Humanities</td>
<td>(3)</td>
</tr>
</tbody>
</table>

**Plus one (1) studio course selected from:**

A minimum of 3 units from the following:

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 300</td>
<td>Drawing and Composition I</td>
<td>(3)</td>
</tr>
<tr>
<td>ART 304</td>
<td>Figure Drawing I</td>
<td>(3)</td>
</tr>
<tr>
<td>ART 320</td>
<td>Design: Fundamentals</td>
<td>(3)</td>
</tr>
<tr>
<td>ART 327</td>
<td>Painting I</td>
<td>(3)</td>
</tr>
<tr>
<td>ART 336</td>
<td>Watercolor Painting</td>
<td>(3)</td>
</tr>
<tr>
<td>ARCH 320</td>
<td>Architectural Design and Communication I</td>
<td>(3.5)</td>
</tr>
</tbody>
</table>

**Special Projects - select either ART 494 or ART 499:**

A minimum of 2 units from the following:

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 499</td>
<td>Experimental Offering in Art</td>
<td>(0.5 - 4)</td>
</tr>
<tr>
<td>or ART 494</td>
<td>Topics in Art</td>
<td>(0.5 - 4)</td>
</tr>
</tbody>
</table>

Total Units: 23

*The Art - Art History Associate in Arts (A.A.) degree may be obtained by completion of the required program, plus general education requirements, plus sufficient electives to meet a 60-unit total. See CRC graduation requirements.*

**Student Learning Outcomes**

Upon completion of this program, the student will be able to:

- demonstrate an appreciation of artistic endeavors, cultural expressions, ideas and/or institutions through non-empirical, analytic, interpretive studies and critical thinking projects (SLO #1).
- manage the ability to discuss works of art publicly (SLO #2).
- structure an historical, geographical and chronological context of art (SLO #3).
- express clearly personal analyses and interpretations of arts, ideas, techniques, skills, and/or institutions, and will properly use the vocabulary appropriate to the field (SLO #4).
- choose and apply a variety of scholarly sources for research and express thoughts clearly in writing (SLO #5).
- develop an appreciation for the arts and cultural practices of people of the past (SLO #6).

**Career Information**
A.A. in Art - Design

CRC's art curriculum offers introductory and intermediate level courses in painting, watercolor, digital art, drawing, sculpture, ceramics, printmaking and design, as well as courses in art appreciation and art history. Through the program's art theory and art practice classes, students develop an awareness and understanding of the materials, tools, rationale and significance of art in society. The art curriculum's critical thinking and technical skills components encourage students to utilize independent thought processes and problem solving. This program provides transfer and employment opportunities as well as personal development for students. With a choice of acquiring an A.A. degree in one of three areas related to art the student can tailor the program to their interests. The A.A. degree in Art-History allows the student to focus on the history, theory and research of art products, architecture and artifacts. The A.A. degree in Art-Studio Art is designed for the student wanting to develop their individual technical skill, conceptual abilities and creative processes emphasizing 2-D or 3-D art forms. The A.A. degree in Art-Design allows the student to focus on the application of art technical skills and the creative process as it relates to the applied arts, e.g. graphic design, product design, architecture, web design, interior design, etc.

The art faculty is composed of professional artists with diverse specializations encompassing the spectrum of the classes offered.

**HIGHLIGHTS**

* Art faculty who have exhibited regionally, nationally and internationally
* Opportunities to explore artistic pursuits in two- and three-dimensional media using a wide variety of materials and techniques
* Regularly scheduled trips to major museums
* Guest lectures and demonstrations
* New state-of-the-art facility

**NOTE TO TRANSFER STUDENTS:** If you are interested in transferring to a four-year college or university to pursue a bachelor's degree in this major, it is critical that you meet with a CRC counselor to select and plan the courses for your major. Schools vary widely in terms of the required preparation. The courses that CRC requires for an Associate's degree in this major may be different from the requirements needed for the Bachelor's degree.

**Catalog Date:** June 1, 2020

### Degree Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 300</td>
<td>Drawing and Composition I</td>
<td>3</td>
</tr>
<tr>
<td>ART 304</td>
<td>Figure Drawing I</td>
<td>3</td>
</tr>
<tr>
<td>ART 320</td>
<td>Design: Fundamentals</td>
<td>3</td>
</tr>
<tr>
<td>ART 323</td>
<td>Design: Color Theory</td>
<td>3</td>
</tr>
<tr>
<td>ART 370</td>
<td>Three Dimensional Design</td>
<td>3</td>
</tr>
</tbody>
</table>

**Restricted Electives:**

A minimum of 6 units from the following:

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 325</td>
<td>Introduction to Graphic Design (3)</td>
<td>3</td>
</tr>
<tr>
<td>ARTNM 324</td>
<td>Digital Design (3)</td>
<td>3</td>
</tr>
<tr>
<td>JOUR 335</td>
<td>Introduction to Desktop Publishing (2)</td>
<td></td>
</tr>
<tr>
<td>JOUR 336</td>
<td>Intermediate Desktop Publishing (2)</td>
<td></td>
</tr>
<tr>
<td>ART 338</td>
<td>Introduction to Digital Painting I (3)</td>
<td></td>
</tr>
<tr>
<td>or ART 301</td>
<td>Digital Drawing and Composition (3)</td>
<td></td>
</tr>
</tbody>
</table>

**Art History Electives:**

A minimum of 3 units from the following:

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARTH 303</td>
<td>Art Survey: Ancient to 14th Century (3)</td>
<td>3</td>
</tr>
<tr>
<td>COURSE CODE</td>
<td>COURSE TITLE</td>
<td>UNITS</td>
</tr>
<tr>
<td>-------------</td>
<td>-------------------------------------------</td>
<td>-------</td>
</tr>
<tr>
<td>ARTH 309</td>
<td>Art Survey: Renaissance to 19th Century</td>
<td>(3)</td>
</tr>
<tr>
<td>ARTH 311</td>
<td>Art Survey: Modern Art</td>
<td>(3)</td>
</tr>
<tr>
<td>ARTH 312</td>
<td>Women in Art</td>
<td>(3)</td>
</tr>
<tr>
<td>ARTH 332</td>
<td>Asian Art</td>
<td>(3)</td>
</tr>
<tr>
<td><strong>Total Units:</strong></td>
<td></td>
<td><strong>24</strong></td>
</tr>
</tbody>
</table>

The Art - Design Associate in Arts (A.A.) degree may be obtained by completion of the required program, plus general education requirements, plus sufficient electives to meet a 60-unit total. See CRC graduation requirements.

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- demonstrate physical skills/dexterity within a discipline. SLO #1
- manage the ability to discuss works of art publicly. SLO #2
- structure an historical, geographical and chronological context of art. SLO #3
- investigate self-analysis and external analysis techniques through the activity of “critique”. SLO #4
- formulate a conceptual framework for the future by applying analytical skills. SLO #5
- choose and apply a variety of informational resources for research. SLO #6

Career Information

Painter; Sculptor; Ceramist; Art Instructor; Illustrator; Printmaker; Digital Publishing Specialist; Graphic Designer; Gallery Director; Curator; Graphic Artist; Digital Artist Some career options may require more than two years of college study.

A.A. in Art - Studio Art

CRC's art curriculum offers introductory and intermediate level courses in painting, watercolor, digital art, drawing, sculpture, ceramics, printmaking and design, as well as courses in art appreciation and art history. Through the program's art theory and art practice classes, students develop an awareness and understanding of the materials, tools, rationale and significance of art in society. The art curriculum's critical thinking and technical skills components encourage students to utilize independent thought processes and problem solving. This program provides transfer and employment opportunities as well as personal development for students. With a choice of acquiring an A.A. degree in one of three areas related to art the student can tailor the program to their interests. The A.A. degree in Art-History allows the student to focus on the history, theory and research of art products, architecture and artifacts. The A.A. degree in Art-Studio Art is designed for the student wanting to develop their individual skill, conceptual and creative processes emphasizing 2-D or 3-D art forms. The A.A. degree in Art-Design allows the student to focus on the application of art skills and the creative process as it relates to the applied arts, e.g. graphic design, product design, architecture, web design, interior design, etc.

The art faculty is composed of professional artists with diverse specializations encompassing the spectrum of the classes offered.

HIGHLIGHTS

*Art faculty who have exhibited regionally, nationally and internationally
*Opportunities to explore artistic pursuits in two- and three-dimensional media using a wide variety of materials and techniques
*Regularly scheduled trips to major museums
*Guest lectures and demonstrations
*New state-of-the-art facility

NOTE TO TRANSFER STUDENTS: If you are interested in transferring to a four-year college or university to pursue a bachelor's degree in this major, it is critical that you meet with a CRC counselor to select and plan the courses for your major. Schools vary widely in terms of the required preparation. The courses that CRC requires for an Associate’s degree in this major may be different from the requirements needed for the Bachelor’s degree.

**Catalog Date:** June 1, 2020
<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 300</td>
<td>Drawing and Composition I</td>
<td>3</td>
</tr>
<tr>
<td>ART 304</td>
<td>Figure Drawing I</td>
<td>3</td>
</tr>
<tr>
<td>ART 320</td>
<td>Design: Fundamentals</td>
<td>3</td>
</tr>
<tr>
<td>ART 370</td>
<td>Three Dimensional Design</td>
<td>3</td>
</tr>
</tbody>
</table>

**Take two (2) Art History courses selected from:**

A minimum of 6 units from the following:

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARTH 303</td>
<td>Art Survey: Ancient to 14th Century (3)</td>
</tr>
<tr>
<td>ARTH 309</td>
<td>Art Survey: Renaissance to 19th Century (3)</td>
</tr>
<tr>
<td>ARTH 311</td>
<td>Art Survey: Modern Art (3)</td>
</tr>
<tr>
<td>ARTH 312</td>
<td>Women in Art (3)</td>
</tr>
<tr>
<td>ARTH 328</td>
<td>Survey of African Art (3)</td>
</tr>
<tr>
<td>ARTH 332</td>
<td>Asian Art (3)</td>
</tr>
<tr>
<td>ARTH 333</td>
<td>Introduction to Islamic Art (3)</td>
</tr>
</tbody>
</table>

**Plus four (4) courses from chosen emphasis of 2-D or 3-D art forms:**

A minimum of 12 units from the following:

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 301</td>
<td>Digital Drawing and Composition (3)</td>
</tr>
<tr>
<td>ART 302</td>
<td>Drawing and Composition II (3)</td>
</tr>
<tr>
<td>ART 305</td>
<td>Figure Drawing II (3)</td>
</tr>
<tr>
<td>ART 312</td>
<td>Portrait Drawing (3)</td>
</tr>
<tr>
<td>ART 324</td>
<td>Collage and Assemblage (3)</td>
</tr>
<tr>
<td>ART 327</td>
<td>Painting I (3)</td>
</tr>
<tr>
<td>ART 328</td>
<td>Painting II (3)</td>
</tr>
<tr>
<td>ART 330</td>
<td>Mural Painting (3)</td>
</tr>
<tr>
<td>ART 336</td>
<td>Watercolor Painting (3)</td>
</tr>
<tr>
<td>ART 337</td>
<td>Intermediate Watercolor Painting (3)</td>
</tr>
<tr>
<td>ART 361</td>
<td>Printmaking: Survey (3)</td>
</tr>
<tr>
<td>ART 362</td>
<td>Printmaking: Intaglio (3)</td>
</tr>
<tr>
<td>ART 364</td>
<td>Printmaking: Relief (3)</td>
</tr>
<tr>
<td>ART 372</td>
<td>Sculpture (3)</td>
</tr>
<tr>
<td>ART 402</td>
<td>Beginning Clay Sculpture (3)</td>
</tr>
<tr>
<td>ART 404</td>
<td>Intermediate Clay Sculpture (3)</td>
</tr>
<tr>
<td>ART 338</td>
<td>Introduction to Digital Painting I (3)</td>
</tr>
<tr>
<td>ARTNM 324</td>
<td>Digital Design (3)</td>
</tr>
<tr>
<td>ARTNM 420</td>
<td>3D Modeling and Texturing I - Introduction (3)</td>
</tr>
<tr>
<td>ART 443</td>
<td>Art Gallery Operations (3)</td>
</tr>
</tbody>
</table>

Total Units: 30
The Art - Studio Art Associate in Arts (A.A.) degree may be obtained by completion of the required program, plus general education requirements, plus sufficient electives to meet a 60-unit total. See CRC graduation requirements.

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- demonstrate physical skills/dexterity within a discipline. SLO #1
- manage the ability to discuss works of art publicly. SLO #2
- structure an historical, geographical and chronological context of art. SLO #3
- investigate self-analysis and external analysis techniques through the activity of "critique". SLO #4
- formulate a conceptual framework for the future by applying analytical skills. SLO #5
- choose and apply a variety of informational resources for research. SLO #6

Career Information

Painter; Sculptor; Ceramist; Art Instructor; Illustrator; Printmaker; Digital Publishing Specialist; Graphic Designer; Gallery Director; Curator; Graphic Artist; Digital Artist Some career options may require more than two years of college study.

A.A. in Art-Photo

The art-photography program is designed to teach students fine art photography with an emphasis in black and white film based processes. Critical analysis, history and current theories in photography are also requirements.

Students planning to prepare for a four-year degree in Photography should consult the lower division requirements of the university to which they plan to transfer.

Catalog Date: June 1, 2020

Degree Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 300</td>
<td>Drawing and Composition I</td>
<td>3</td>
</tr>
<tr>
<td>PHOTO 301</td>
<td>Beginning Photography (3)</td>
<td>3</td>
</tr>
<tr>
<td>PHOTO 420</td>
<td>History of Photography (3)</td>
<td>3</td>
</tr>
<tr>
<td>PHOTO 310</td>
<td>Intermediate Photography (3)</td>
<td>3</td>
</tr>
<tr>
<td>ARTH 300</td>
<td>Introduction to Art (3)</td>
<td>3</td>
</tr>
<tr>
<td>ART 304</td>
<td>Figure Drawing I (3)</td>
<td>3</td>
</tr>
<tr>
<td>or ART 361</td>
<td>Printmaking: Survey (3)</td>
<td></td>
</tr>
<tr>
<td>PHOTO 320</td>
<td>Color Photography (3)</td>
<td>3</td>
</tr>
<tr>
<td>PHOTO 360</td>
<td>Large Format Photography (3)</td>
<td>3</td>
</tr>
<tr>
<td>PHOTO 365</td>
<td>Alternative Process Photography (3)</td>
<td>3</td>
</tr>
<tr>
<td>or PHOTO 364</td>
<td>Advanced Black and White Photography (3)</td>
<td></td>
</tr>
<tr>
<td>Total Units:</td>
<td></td>
<td>27</td>
</tr>
</tbody>
</table>

The Art-Photo Associate in Arts (A.A.) degree may be obtained by completion of the required program, plus general education requirements, plus sufficient electives to meet a 60-unit total. See CRC graduation requirements.

Student Learning Outcomes
Upon completion of this program, the student will be able to:

- SLO #1 Produce a portfolio that conveys creative self expression.
- SLO #2 Work with silver based and alternative processes in black and white photography.
- SLO #3 Use a variety of film based cameras, including medium and large format.
- SLO #4 Describe the history of photography.
- SLO #5 Recount current trends in photographic theories and aesthetics.

Career Information

Fine art photographer, gallery worker, museum worker, curator or general photographer. Some career options may require more than two years of college study. Classes beyond the associate degree may be required to fulfill some career options or for preparation for transfer to a university program.

Certificate of Achievement

Fine Art Photography Certificate

The fine art photography program is designed for students who want to enter a career path in fine art photography. Students will use a variety of cameras and formats to produce images in both color and black and white. Personal expression and creativity, history and contemporary issues in photography and visual communication will also be emphasized.

Catalog Date: June 1, 2020

Certificate Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHOTO 301</td>
<td>Beginning Photography (3)</td>
<td>3</td>
</tr>
<tr>
<td>PHOTO 310</td>
<td>Intermediate Photography (3)</td>
<td>3</td>
</tr>
<tr>
<td>or PHOTO 364</td>
<td>Advanced Black and White Photography (3)</td>
<td></td>
</tr>
<tr>
<td>PHOTO 320</td>
<td>Color Photography</td>
<td>3</td>
</tr>
<tr>
<td>PHOTO 360</td>
<td>Large Format Photography (3)</td>
<td>3</td>
</tr>
<tr>
<td>PHOTO 365</td>
<td>Alternative Process Photography (3)</td>
<td>3</td>
</tr>
<tr>
<td>or PHOTO 366</td>
<td>Advanced Alternative Process Photography (3)</td>
<td></td>
</tr>
<tr>
<td>PHOTO 400</td>
<td>Digital Imaging (3)</td>
<td>3</td>
</tr>
<tr>
<td>PHOTO 420</td>
<td>History of Photography (3)</td>
<td>3</td>
</tr>
<tr>
<td>A minimum of 3 units from the following:</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>PHOTO 260</td>
<td>The Eastern Sierra Landscape, Yosemite Valley (2)</td>
<td></td>
</tr>
<tr>
<td>PHOTO 272</td>
<td>Lightroom (1.5)</td>
<td></td>
</tr>
<tr>
<td>PHOTO 273</td>
<td>Video Capture with DSLRs (1.5)</td>
<td></td>
</tr>
<tr>
<td>PHOTO 275</td>
<td>Digital Applications for Alternative Processes (1.5)</td>
<td></td>
</tr>
<tr>
<td>PHOTO 277</td>
<td>Creating a Digital Portfolio (1.5)</td>
<td></td>
</tr>
<tr>
<td>PHOTO 350</td>
<td>Photojournalism (3)</td>
<td></td>
</tr>
<tr>
<td>PHOTO 278</td>
<td>Flash Photography (1.5)</td>
<td></td>
</tr>
<tr>
<td>Total Units:</td>
<td></td>
<td>24</td>
</tr>
</tbody>
</table>

Student Learning Outcomes
Art (ART)

ART 300 Drawing and Composition I

This course covers the fundamentals of drawing emphasizing the use of line, shape, value, perspective, space, and composition. It introduces and uses various drawing media and techniques for drawing. This is a foundation requirement for all art students. Field trips may be required.

Upon completion of this course, the student will be able to:

- DIFFERENTIATE VARIOUS DRAWING MATERIALS AND TECHNIQUES APPROPRIATE FOR EACH. SLO#1
- PRIORITIZE, INTEGRATE AND APPLY CONCEPTS RELATED TO FORM AND SPATIAL DEVELOPMENT AND COMPOSITIONAL UNITY WITH THE INTENT OF CREATING ILLUSION ON A TWO-DIMENSIONAL SURFACE UTILIZING A PROBLEM SOLVING APPROACH TO PROJECTS. SLO#2
- evaluate and apply methods of organizational line and sight measurement.
- assess and interpret light by utilizing a range of values.
- judge and apply principles of perspective.
- organize the visual elements based on the principles of design.
- FORMULATE AN HISTORICAL, GEOGRAPHICAL AND CHRONOLOGICAL CONTEXT OF DRAWING. SLO#3
- CRITIQUE SELF AND PEER WORK USING SELECT CRITERIA SUCH AS COMPARISON, CONTRAST AND FORMAL ANALYSIS. SLO#4

Career Information

freelance photographer, editorial photographer, photojournalist, gallery apprentice, museum apprentice, teacher

Art (ART)

ART 301 Digital Drawing and Composition

This course is designed to address the traditional qualities of creative drawing and the unique properties of drawings produced using computer technology. The course includes problems in observation and expression and the translating of these experiences into graphic terms by exploration of gesture, line, texture, shape, volume, space, perspective, light, and shadow. Field trips may be planned.

Upon completion of this program, the student will be able to:

- PSLO #1 communicate visual ideas in a variety of formats
- PSLO #2 describe important historical and contemporary movements in photography
- PSLO #3 produce a portfolio of images emphasizing personal creativity and self expression

Career Information

freelance photographer, editorial photographer, photojournalist, gallery apprentice, museum apprentice, teacher
Student Learning Outcomes

Upon completion of this course, the student will be able to:

- differentiate and synthesize various digital drawing materials, techniques and software appropriate for vector-based and pixel-based images. SLO#1
- analyze and integrate concepts related to form and spatial development and compose with the intent of creating illusion on a two-dimensional surface using a problem solving approach. SLO #2
- distinguish properties of scanning reflective art and transparencies. SLO#3
- construct, manage and manipulate digital images. SLO#4
- evaluate, prepare and print digital files. SLO#5
- critique and articulate visual concepts related to completed work. SLO#6

ART 302 Drawing and Composition II

Units: 3
Hours: 36 hours LEC; 54 hours LAB
Course Family: [Drawing Fundamentals](http://crc.losrios.edu/course-families#id_100006)
Prerequisite: ART 300 with a grade of “C” or better
Transferable: CSU; UC
General Education: CSU Area C1
C-ID: C-ID ARTS 205
Catalog Date: June 1, 2020

This studio course utilizes the skills acquired in ART 300 to pursue more complex problems. The student will initiate and execute a series of related works. Field trips may be required.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- PRODUCE SOLUTIONS TO MORE COMPLEX PROBLEMS RELATED TO FORM, SPATIAL DEVELOPMENT AND COMPOSITION. SLO#1
- integrate and refine technical skills using a greater variety of drawing tools, techniques and surfaces.
- distinguish the basic properties of color and color mixing with drawing media and relate value to color, space and composition.
- INVESTIGATE AND FORMULATE METHODS TOWARD THE ACHIEVEMENT OF PERSONAL EXPRESSION AND SELF-DIRECTION. SLO #2
- Complete a series of works related in subject, technique or theme.
- Evaluate, based on select criteria, one’s own work and the work of others through critiques and discussions.
- SYNTHESIZE DRAWING CONCEPTS AND HISTORY OF DRAWING BY APPLYING THE LANGUAGE IN WRITTEN FORM TO THE VIEWING EXPERIENCE. SLO #3

ART 304 Figure Drawing I

Units: 3
Hours: 36 hours LEC; 54 hours LAB
Course Family: [Figure Studies](http://crc.losrios.edu/course-families#id_100008)
Prerequisite: ART 300 with a grade of “C” or better
Transferable: CSU; UC
General Education: AA/AS Area I; CSU Area C1
Catalog Date: June 1, 2020

This studio class offers drawing from the human figure. There will be lectures and discussion on proportion, anatomy, and the relationship of the figure to space and composition. Student may wish to challenge the prerequisite by presenting to the instructor a portfolio of their work. Field trips may be required.

Student Learning Outcomes

Upon completion of this course, the student will be able to:
• SYNTHESIZE A KNOWLEDGE OF ANATOMICAL STRUCTURE IN THE INTERPRETATION OF HUMAN PROPORTIONS AND THE RELATIONSHIP OF THE FIGURE TO SPACE. SLO #1

• Analyze and complete drawings from the human skeleton to understand bone placement and connections.

• Utilize analytical line and sight measurement to control the proportions of body features and placement.

• INCORPORATE THE ELEMENTS OF DRAWING (LINE, VALUE, TEXTURE, PERSPECTIVE, ETC.) WHEN CREATING COMPOSITIONS WITH THE FIGURE AS THE SUBJECT. SLO #2

• Utilize rapid visualization techniques such as gesture drawing or quick studies and contour to assess overall structure, placement, movement and composition.

• Assess and interpret light on the figure by utilizing a range of values.

• COMPARE AND CONTRAST HISTORICAL AND CONTEMPORARY CONCEPTUAL APPROACHES TO DRAWING THE FIGURE. SLO #3

• ASSESS AND EVALUATE THE DEPICTION OF THE HUMAN FORM THROUGH VERBAL CRITIQUE AND WRITTEN ASSIGNMENTS UTILIZING ART LANGUAGE. SLO #4

ART 305 Figure Drawing II

| Units: 3 |
| Hours: 36 hours LEC; 54 hours LAB |
| Course Family: Figure Studies (http://crc.losrios.edu/course-families#id_100008) |
| Prerequisite: ART 304 with a grade of "C" or better |
| Transferable: CSU; UC |
| General Education: CSU Area C1 |
| C-ID: C-ID ARTS 200 |
| Catalog Data: June 1, 2020 |

This studio course offers intermediate drawing from the human figure. There will be more sophisticated lectures and discussions on proportion, anatomy, and the relationship of the figure to space and composition. A local field trip to a museum or gallery may be assigned.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• ANALYZE AND DRAW WITH INCREASING SKILL THE FIGURE WITH RESPECT TO ANATOMY AND PROPORTION. SLO #1

• Assess through sight measurement and analytical line the figure proportions and placement of parts based on anatomical knowledge.

• Incorporate the use of color through dry color media to depict light, texture, form and spatial relationships within the figure.

• ASSESS AND CONTROL THE HUMAN FORM AS THE DOMINANT EXPRESSIVE ELEMENT IN A COMPOSITION THROUGH A SERIES OF DIRECTED PROJECTS. SLO #2

• Investigate the use of environment, props, clothing and drapery in complex compositions with the figure.

• Evoke mood or theme by controlling value and color relationships.

• GENERATE A SUBJECTIVE STYLE BASED ON RESPONSE TO HISTORICAL THEORY, CONCEPTS AND REPEATED PRACTICAL APPLICATIONS. SLO #3

• Research the use of the human figure in visual art and respond by creating works that demonstrate individual expression.

• Assess the intent and effectiveness of individual solutions to the use of the human figure as the primary subject.

• INTEGRATE SELF-ANALYSIS AND EXTERNAL ANALYSIS TECHNIQUES THROUGH VERBAL "CRITIQUES" AND WRITTEN RESPONSE TO WORKS OF ART. SLO #4

• Analyze and respond to others work through oral and written communication during class and/or group discussion during class critique and in response to museum or gallery visits.

ART 312 Portrait Drawing
This course is an introduction to and exploration of the human face as a subject in art. Focus will be placed on the development of skills needed to portray specific individuals rather than a generalized image. This is primarily a practice course including elements of the history and traditions of portraiture as well as anatomy.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- SYNTHESIZE A KNOWLEDGE OF ANATOMICAL STRUCTURE IN THE INTERPRETATION OF HUMAN FACIAL PROPORTIONS. SLO #1
- Assess through analytical line and sight measurement the relative position and size of various facial features.
- Investigate the skeletal and planar structure of the head through drawings from skull.
- Assess the uniqueness of facial features and apply drawing skill in terms proportions, value relationships and textural control in portraying those features to capture not only a likeliness but also a personality in their drawings.
- ANALYZE AND EXPLORE THE RELATIONSHIP OF THE PORTRAIT IN COMPOSITION. SLO #2
- EXAMINE AND UTILIZE A VARIETY OF HISTORICAL APPROACHES, MEDIA, & TECHNIQUES USED IN DRAWING A PORTRAIT. SLO #3
- EVALUATE THE PORTRAIT AS SUBJECT AND CONTENT IN ART BOTH VERBALLY IN STUDIO “CRITIQUE” AND THROUGH WRITTEN ASSIGNMENT. SLO #4

**ART 320 Design: Fundamentals**

This course is comprised of lectures and projects concentrating on the elements of design (line, shape, color, texture, form, space) and the principles of organization (such as unity, variety, contrast, balance, emphasis, etc.) as applicable to both the fine and applied arts. Field trips may be planned.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- CREATE COMPOSITIONS USING THE ELEMENTS OF DESIGN: LINE, SHAPE, VALUE, TEXTURE, COLOR AND SPACE AND THE PRINCIPLES OF ORGANIZATION: EMPHASIS, HARMONY, VARIETY, MOVEMENT, BALANCE, PROPORTION AND ECONOMY. SLO #1
- research various design organizational strategies, e.g. open vs. closed, golden mean, gestalt, unity, rhythm, figure/ground, etc.
- distinguish types of balance: symmetrical, asymmetrical, radial, axis.
- investigate the various properties of the visual elements, e.g. line qualities and direction, value scale or range, color hue, saturation and value.
- DEMONSTRATE THE PHYSICAL SKILLS/DEXTERITY TO USE DESIGN TOOLS PROFESSIONALLY IN THE EXPRESSION OF CONCEPTS. SLO #2
- Assemble and utilize various rulers and shape tools to accurately design images.
- Assess and apply pencil, pen and brush tools to create a professional finish.
- FORMULATE A CONCEPTUAL FRAMEWORK FOR THE FUTURE BY APPLYING ANALYTICAL SKILLS. SLO #3
- Analyze works of fine and applied art to critically assess the components of subject, form and content.
- INVESTIGATE SELF-ANALYSIS AND EXTERNAL ANALYSIS TECHNIQUES THROUGH THE ACTIVITY OF “CRITIQUE”. SLO #4
Synthesize design concepts and history by applying the visual language in verbal and written form to the viewing experience.

ART 323 Design: Color Theory

Units: 3
Hours: 36 hours LEC; 54 hours LAB
Prerequisite: None.
Transferable: CSU; UC
General Education: AA/AS Area I; CSU Area C1
Catalog Date: June 1, 2020

This course covers studio problems in the use and understanding of color and its application to works of art, interior design and graphics, basics of color theory, and color interchange. It also includes image and composition as related to the use of color both functionally and creatively. Field trips may be required.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- DIFFERENTIATE THE HISTORICAL AND CULTURAL USES OF COLOR AND THE HISTORICAL CHANGES IN ATTITUDE TOWARD COLOR. SLO #1
- COMPARE AND CONTRAST MAJOR THEORIES OF COLOR. SLO #2
- Understand the origin and rational for various systems of organizing color including Munsell's color solid model.
- Compare differences between color schemes e.g. complementary, analogous, triadic, etc.
- MANAGE SKILLS IN THE APPLICATION OF PAINT, KNOWLEDGE OF COLOR MIXING, AND COLOR INTERACTIONS. SLO #3
- Assess the effects of altering color in various ways such as single color alteration, multiple color alteration, and visual alteration.
- Contrast the difference between light color mixing and pigment color mixing and how this affects artistic production.
- ASSESS THE USE OF COLOR IN CONCEPT AND DESIGN SOLUTIONS AND APPLY THIS ANALYSIS TOWARDS MANIPULATING COLOR FOR CREATIVE EXPRESSION. SLO #4
- INTEGRATE KNOWLEDGE OF COLOR THEORY AND VISUAL VOCABULARY THROUGH VERBAL AND WRITTEN CRITIQUE OF ONE'S OWN AND OTHERS WORK. SLO #5
- analyze works of fine art and design to critically assess the function of color as it relates to the components of subject, form and content.

ART 324 Collage and Assemblage

Units: 3
Hours: 36 hours LEC; 54 hours LAB
Prerequisite: None.
Transferable: CSU; UC
General Education: AA/AS Area I; CSU Area C1
Catalog Date: June 1, 2020

This course investigates the alteration and creation of a dimensional surface with found and constructed materials. Topics on the history of collage and assemblage and the application of historical and contemporary techniques and concepts provide the impetus for production of works of art. Development of a personal visual language is fundamental to this course. Field trips may be planned.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- Choose diverse fragments of scraps and found objects to build a collection of materials. SLO #1
- Evaluate the potential design aspects of an object and assess the potential of various materials to suggest meaningful, artistic expression.
- Organize the use of artistic elements such as line, shape, value, texture, color, and space utilizing the principles of design. SLO #2
- Conceive a composition of found and chosen materials based upon the inherent properties of selected materials.
- Assess and revise expressive elements and unity in a composition.
Investigate major historical developments and trends in contemporary work in assemblage. SLO #3

Critique examples of student and professional work in relation to its historical context and design. SLO #4

ART 325 Introduction to Graphic Design

Units: 3
Hours: 36 hours LEC; 54 hours LAB
Prerequisite: ART 320 with a grade of "C" or better, or placement through the assessment process.
Transferable: CSU
Catalog Date: June 1, 2020

This is an introduction to the visual communication arts. The course will cover a series of creative problems designed to analyze letterform and image and demonstrate impact on visual perception. The student will be introduced to the terminology of traditional and digital tools and the visual language of graphic design. Field trips may be required for this course.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- ACQUIRE TECHNICAL SKILLS/DEXTERITY WITHIN A DISCIPLINE. SLO #1
  - Arrange compositional elements and apply Gestalt principles using digital methods.
  - Apply digital tools to create and manipulate production art.
  - Assess graphic and text methods of input, output and file storage such as scanning and printing and understanding various file formats.
  - Differentiate monitor color models and printing color models.
  - ESTABLISH AN HISTORICAL, GEOGRAPHICAL, AND CHRONOLOGICAL CONTEXT OF ART. SLO#2
    - Describe differences between traditional and contemporary methods of creating graphic design.
    - Assess the role of graphic design in art history.
    - DEVELOP SELF-ANALYSIS AND EXTERNAL ANALYSIS THROUGH THE ACTIVITY OF CRITIQUES. SLO#3
      - Evaluate and assess self and peer projects from start to completion implementing specific analysis vocabulary.
    - ACQUIRE ANALYTICAL SKILLS AND A CONCEPTUAL FRAMEWORK FOR THE FUTURE. SLO#4
      - Define terms specific to traditional and digital graphic design and production art.
      - Research a variety of information sources that will inform the graphic design solution.
      - Deduce differences between vector, raster and page layout software.
      - Analyze the relationship of letter form and image in visual communication.
      - Compose, coordinate and effect a two-dimensional design or project plan using current methods of production.
      - Assemble a professional digital portfolio that demonstrates a personal creative style in graphic communication design.

ART 327 Painting I

Units: 3
Hours: 36 hours LEC; 54 hours LAB
Course Family: Painting (http://crc.losrios.edu/course-families#id_100009)
Prerequisite: None.
Advisory: ART 300
Transferable: CSU; UC
General Education: CSU Area C1
C-ID: C-ID ARTS 210
Catalog Date: June 1, 2020

This is an introduction to the tools, materials, and techniques of painting. Coursework includes exercises in light and color theory, description of form, color and spatial development, and composition. Field trips may be required for this course.
Upon completion of this course, the student will be able to:

- **BUILD PHYSICAL SKILLS/DEXTERITY WITHIN A DISCIPLINE. SLO #1**
- Evaluate and judge the correlation between painting supports, surface preparation, paint application and techniques for opaque painting medium.
- Create the color wheel and utilize the color wheel to make effective decisions for color harmony, balance and tone.
- Assess the effects of color mixing and application based on understanding the subtractive color model and color theory.
- **DISCRIMINATE AND ANALYZE THE MAJOR CONCERNS OF PAINTING: FORM DEVELOPMENT, SPATIAL REPRESENTATION, COMPOSITION AND EXPRESSION. SLO #2**
- Assess the effects of light on color.
- Understand the effect of color value, saturation and temperature on form development and spatial interpretation.
- **UTILIZE ANALYTICAL SKILLS AND DEVELOP A CONCEPTUAL FRAMEWORK FOR THE FUTURE. SLO #3**
- Integrate concept, process and execution in order to create compositions with a variety of subjects including still life, landscape and figure.
- **INTEGRATE SELF-ANALYSIS AND EXTERNAL ANALYSIS TECHNIQUES THROUGH THE ACTIVITY OF “CRITIQUES”. SLO #4**

**ART 328 Painting II**

- **Units:** 3
- **Hours:** 36 hours LEC; 54 hours LAB
- **Course Family:** Painting [http://crc.losrios.edu/course-families#id_100009](http://crc.losrios.edu/course-families#id_100009)
- **Prerequisite:** ART 327 with a grade of "C" or better
- **Transferable:** CSU; UC
- **General Education:** CSU Area C1
- **Catalog Date:** June 1, 2020

This is an intermediate studio course for the student who wishes to develop greater technical skills and problem-solving ability in a more independent framework. The student will initiate and execute progressively complex problems and assignments. Field trips may be required for this course.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- **CONSTRUCT PHYSICAL SKILLS/DEXTERITY WITHIN A DISCIPLINE. SLO #1**
- Evaluate skills and manage judgment in the application of painting concerns: handling of medium, spatial development, composition and expression.
- Assess appropriate support for intended project resolution.
- **MANAGE ANALYTICAL SKILLS AND DEVELOP A CONCEPTUAL FRAMEWORK FOR THE FUTURE. SLO #2**
- Compose a series of paintings that reflect more complex problem solving in ideation, process and presentation.
- Research and construct projects that respond to the variations of artistic expression in historical painting and contemporary concerns.
- **DEMONSTRATE CRITICAL ANALYSIS IN WRITTEN FORM. SLO #3**
- Evaluate concerns in painting historically and in contemporary world through research project and written analysis of project resolutions.
- **DEMONSTRATE SELF-ANALYSIS AND EXTERNAL ANALYSIS TECHNIQUES THROUGH THE ACTIVITY OF “CRITIQUES.” SLO #4**
- Justify analysis of own work and peer work using various criteria such as comparison, formal analysis and assessment of subject matter, form and content relationship.
- **ASSESS AND UTILIZE A VARIETY OF INFORMATIONAL SOURCES FOR RESEARCH. SLO #5**
**ART 330 Mural Painting**

This course is a comparative survey of the use of mural painting as an interactive, public art form used throughout the world and across time. This course examines the process of creating a mural painting by analyzing a site, researching, planning, and executing murals in public spaces and working collaboratively with others. Field trips are required to execute the work on location if applicable.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- DEMONSTRATE PHYSICAL SKILLS/DEXTERITY WITHIN A DISCIPLINE. SLO #1
  - diagnose, compare and employ appropriate surface, media and techniques for chosen site.
  - investigate, prioritize and apply the planning steps in large scale commission work.
  - coordinate and work collaboratively with others to execute a mural as a public art form.
- BUILD SELF-ANALYSIS AND EXTERNAL ANALYSIS TECHNIQUES THROUGH THE ACTIVITY OF “CRITIQUES”. SLO #2
  - assess the style, preliminary sketches and final design for the project based on its location, materials, and audience.
  - evaluate success of design on aesthetic, narrative and technical levels.
- CONSTRUCT AN HISTORICAL, GEOGRAPHICAL, AND CHRONOLOGICAL CONTEXT OF MURAL ART. SLO #3
  - research and contrast the function or purpose of the mural art form in various cultures and time periods in history.

**ART 336 Watercolor Painting**

This is an introduction to transparent watercolor painting. The class covers media, methods of brush painting, representational and non-representational composition, color relationships, and creative resolutions to watercolor problems. Field trips may be required for this course.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- BUILD PHYSICAL SKILLS/DEXTERITY WITHIN A DISCIPLINE. SLO #1
  - Generate proficiency with the fundamentals of watercolor media: wash, transition, dry brush, glazing, and wet-into-wet.
  - Evaluate strength, responsiveness, and freedom of handling medium through the interaction of watercolor on various papers.
- DISCRIMINATE AND ANALYZE THE MAJOR CONCERNS OF PAINTING: FORM DEVELOPMENT, SPATIAL REPRESENTATION, COMPOSITION AND EXPRESSION. SLO #2
  - Differentiate the affect of color value, saturation and temperature on form development and spatial interpretation.
- UTILIZE ANALYTICAL SKILLS AND DEVELOP A CONCEPTUAL FRAMEWORK FOR THE FUTURE. SLO #3
  - Develop visual analysis skills and translate these perceptions to the watercolor media.
  - Synthesize concept, process and execution in order to create compositions with a variety of subjects including still life, landscape and figure.
- INTEGRATE SELF-ANALYSIS AND EXTERNAL ANALYSIS TECHNIQUES THROUGH THE ACTIVITY OF “CRITIQUES”. SLO #4
Assess the effectiveness of problem solutions based on media use, compositional strategies, and correlation of form and content expression.

ESTABLISH AN HISTORICAL, GEOGRAPHICAL, AND CHRONOLOGICAL CONTEXT FOR ART. SLO #5

Appraise the antecedents in history in watercolor painting and assess contemporary trends in the watercolor medium.

**ART 337 Intermediate Watercolor Painting**

Units: 3  
Hours: 36 hours LEC; 54 hours LAB  
Course Family: Painting (http://crc.losrios.edu/course-families#id_100009)  
Prerequisite: ART 336 with a grade of "C" or better  
Transferable: CSU; UC  
Catalog Date: June 1, 2020

This is an intermediate watercolor course. It includes an in-depth study of contemporary methods and concepts in transparent watercolor. Emphasis is given to different approaches to watercolor, as well as composition, technical problems and solutions, and individual style development. Field trips may be required.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- **CONSTRUCT PHYSICAL SKILLS/DEXTERITY WITHIN A DISCIPLINE. SLO #1**
- Assess appropriate support and technical handling of watercolor for intended project resolution.
- Evaluate skills and manage judgment in the application of painting concerns: handling of watercolor medium, spatial and form development using color, compositional design and expression.
- **MANAGE ANALYTICAL SKILLS AND DEVELOP A CONCEPTUAL FRAMEWORK FOR THE FUTURE. SLO #2**
- Compose a series of watercolor paintings that reflect more complex problem solving in ideation, process and presentation.
- Explore personal expression through both style and content.
- **INVESTIGATE CRITICAL ANALYSIS IN WRITTEN FORM. SLO #3**
- Evaluate concerns in watercolor painting historically and in the contemporary world through research project and written analysis of project resolutions.
- **CONFIRM SELF-ANALYSIS AND EXTERNAL ANALYSIS TECHNIQUES THROUGH THE ACTIVITY OF "CRITIQUES". SLO #4**
- Justify analysis of own work and peer work using various criteria such as comparison, formal analysis and assessment of subject matter, form and content relationship.

**ART 338 Introduction to Digital Painting I**

Units: 3  
Hours: 36 hours LEC; 54 hours LAB  
Course Family: Painting (http://crc.losrios.edu/course-families#id_100009)  
Prerequisite: None.  
Transferable: CSU; UC  
General Education: AA/AS Area I  
Catalog Date: June 1, 2020

This course is an introduction to the tools, materials, and techniques of painting using digital software to create and manipulate images. Coursework includes exercises in light and color theory, description of form, color and spatial development, and composition. The fundamental skills of drawing and painting will be applied to individual portfolio quality projects. Field trips may be planned.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- **assess and synthesize various painting tools and techniques in painting software. SLO #1**
- **discriminate and analyze through projects the major concerns of painting: spatial representation, form development, composition and expression. SLO #2**
• integrate through directed projects the understanding of ideation, process and product presentation. SLO #3
• construct, manage, manipulate and print digital images. SLO #4
• critique and articulate visual concepts related to completed work. SLO #5

ART 361 Printmaking: Survey

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• BUILD PHYSICAL SKILLS/DEXTERITY WITHIN A DISCIPLINE. SLO #1
• Differentiate the tools and techniques applied to each printmaking process: intaglio, relief, stencil and/or monotype.
• Assess the relationship of paper or other surfaces and the print process to achieve the most effective aesthetic combination.
• Create editions by printing a matrix repeatedly.

• UTILIZE ANALYTICAL SKILLS AND DEVELOP A CONCEPTUAL FRAMEWORK FOR THE FUTURE. SLO #2
• Integrate ideas in relationship to different printmaking techniques.
• INTEGRATE SELF-ANALYSIS AND EXTERNAL ANALYSIS TECHNIQUES THROUGH THE ACTIVITY OF “CRITIQUES”. SLO #3
• Analyze printed compositions on the basis of applied techniques and print aesthetics.
• Justify analysis of own work and peer work using various criteria such as comparison, formal analysis and assessment of subject matter, form and content relationship.
• CONSTRUCT AN HISTORICAL, GEOGRAPHICAL, AND CHRONOLOGICAL CONTEXT OF PRINTMAKING. SLO #4
• Correlate the major concerns of printmaking within a specific printmaking process.
• Research the development of printmaking as a major art medium.

ART 362 Printmaking: Intaglio

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• BUILD PHYSICAL SKILLS/DEXTERITY WITHIN A DISCIPLINE. SLO #1
• Differentiate techniques of intaglio: hard ground etching, soft ground etching, aquatint, drypoint, engraving and/or mezzotint.

This course studies the techniques of Intaglio processes including hard ground etching, soft ground etching, aquatint, drypoint, engraving and/or mezzotint. Field trips are required.
- Formulate and execute solutions to image development utilizing various intaglio techniques.
- Compare and select appropriate papers for image production and proper presentation formats.
- Manage production to create an edition.
- ORGANIZE ANALYTICAL SKILLS AND DEVELOP A CONCEPTUAL FRAMEWORK FOR THE FUTURE. SLO #2
- Synthesize understanding of intaglio processes with imaginative use of materials, tools, and techniques to resolve image.
- INTEGRATE SELF-ANALYSIS AND EXTERNAL ANALYSIS TECHNIQUES THROUGH THE ACTIVITY OF “CRITIQUES”. SLO #3
- Evaluate own prints and those of their peers by discussing technical effects, assessing the composition employing the vocabulary of two-dimensional design and judging the overall print quality.
- CONSTRUCT AN HISTORICAL, GEOGRAPHICAL, AND CHRONOLOGICAL CONTEXT OF INTAGLIO. SLO#4
- Appraise the antecedents in history in intaglio printmaking and assess contemporary trends in the use of intaglio.

**ART 364 Printmaking: Relief**

- **Units:** 3
- **Hours:** 36 hours LEC; 54 hours LAB
- **Course Family:** Printmaking (http://crc.losrios.edu/course-families#id_100010)
- **Prerequisite:** None.
- **Transferable:** CSU; UC
- **General Education:** AA/AS Area I
- **Catalog Date:** June 1, 2020

This course presents the techniques of wood and linoleum cutting and printing by hand and by press. Field trips are required.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- BUILD PHYSICAL SKILLS/DEXTERITY WITHIN A DISCIPLINE. SLO #1
- Differentiate each relief technique, distinguish tools to carve and control effects of each technique and tool.
- Formulate and execute solutions to image development utilizing various relief techniques.
- Compare and select appropriate papers for image production and proper presentation formats.
- Manage production to create an edition.
- ORGANIZE ANALYTICAL SKILLS AND DEVELOP A CONCEPTUAL FRAMEWORK FOR THE FUTURE. SLO #2
- Synthesize understanding of relief processes with imaginative use of materials, tools, and techniques to resolve image.
- INTEGRATE SELF-ANALYSIS AND EXTERNAL ANALYSIS TECHNIQUES THROUGH THE ACTIVITY OF “CRITIQUES”. SLO #3
- Evaluate own prints and those of their peers by discussing technical effects, assessing the composition employing the vocabulary of two-dimensional design and judging the overall print quality.
- CONSTRUCT AN HISTORICAL, GEOGRAPHICAL, AND CHRONOLOGICAL CONTEXT OF ART. SLO#4
- Appraise the antecedents in history in relief printmaking and assess contemporary trends in the use of relief printing.

**ART 370 Three Dimensional Design**

- **Units:** 3
- **Hours:** 36 hours LEC; 54 hours LAB
- **Prerequisite:** None.
- **Transferable:** CSU; UC
- **General Education:** AA/AS Area I; CSU Area C1
- **C-ID:** C-ID ARTS 101
- **Catalog Date:** June 1, 2020

This is a studio course covering the analysis of historical and contemporary designs and the resolution of technical and conceptual problems (using a variety of media such as: wood, fabric, glass, etc.) by the creation of 3-dimensional forms. Form, color, space, composition, and other formal values will be considered. This course may include visits to nearby museums and/or galleries.
Student Learning Outcomes

Upon completion of this course, the student will be able to:

- **DEMONSTRATE FUNDAMENTAL PHYSICAL SKILLS/DEXTERITY IN THE FABRICATION OF THREE DIMENSIONAL FORMS. (SLO #1)**
- Create preliminary drawings to develop ideas for three-dimensional forms.
- Incorporate a variety of construction methods necessary to assemble three-dimensional forms from various media.
- Integrate knowledge of the properties and tendencies of various media while constructing three dimensional forms.
- **MANAGE THE ABILITY TO DISCUSS WORKS OF ART PUBLICLY. (SLO #2)**
- Utilize the basic vocabulary of art and design.
- Design standards to evaluate the functional and aesthetic value of three-dimensional forms.
- Design observations regarding the functionality and aesthetics of three-dimensional forms.
- Manage oral presentations in a professional manner while presenting finished projects.
- **STRUCTURE A HISTORICAL, GEOGRAPHICAL AND CHRONOLOGICAL CONTEXT FOR THREE-DIMENSIONAL FORMS. (SLO #3)**
- Examine and consider how three-dimensional design concepts have been applied past and present in various cultures.
- Analyze how established design concepts are incorporated into contemporary three-dimensional forms.
- **INVESTIGATE SELF-ANALYSIS AND EXTERNAL ANALYSIS TECHNIQUES THROUGH THE ACTIVITY OF “CRITIQUE”. (SLO #4)**
- Critique three-dimensional forms and discuss the decision making process used during the creation of those forms.
- Assess and evaluate the aesthetic attributes of three-dimensional forms.
- Evaluate the strength and clarity of any message or symbolism present in a three dimensional form.
- Judge points of craftsmanship used in the construction of three-dimensional forms.
- Evaluate the function and impact of three-dimensional forms as they relate to the environment in which they are displayed.
- Examine and explore the aesthetic attributes and relationship of a three-dimensional form within the context of its environment.
- Assess the use of other techniques or design alterations that might enhance aesthetic attributes of a three-dimensional form.
- **FORMULATE A CONCEPTUAL FRAMEWORK FOR THE FUTURE BY APPLYING ANALYTICAL SKILLS. (SLO #5)**
- Evaluate how the level of craftsmanship and planning executed during production of a project directly relates to the precision and overall success evident in a finished three-dimensional form.
- Assess the time allotted to each step in the production of a project and evaluate its impact on the execution of the work.
- **CHOOSE AND APPLY A VARIETY OF INFORMATIONAL RESOURCES FOR RESEARCH. (SLO #6)**
- Incorporate information from museum/gallery trips, Internet research, library research and personal observation in the conceptualization of three-dimensional projects.
- Support and defend their own observations and opinions regarding three-dimensional art forms.

**ART 372 Sculpture**

- **Units:** 3
- **Hours:** 36 hours LEC; 54 hours LAB
- **Course Family:** Sculpture (http://crc.losrios.edu/course-families#id_100011)
- **Prerequisites:** None.
- **Transferable:** CSU; UC
- **General Education:** AA/AS Area I; CSU Area C1
- **Catalog Date:** June 1, 2020

This is a basic practice class in the expressive use of form and color in space. The student will use a variety of media, including plaster, wood, glass, clay, or stone. Creative effort, development of individual expression, new ideas, and knowledge of technical processes will be stressed. Content will be developed by using both historical and contemporary approaches.

**Student Learning Outcomes**
Upon completion of this course, the student will be able to:

- **DEMONSTRATE FUNDAMENTAL PHYSICAL SKILLS/DEXTERITY IN THE FABRICATION OF THREE-DIMENSIONAL SCULPTURE.** (SLO#1)
- Create preliminary drawings to develop ideas for sculptures.
- Incorporate a variety of construction methods necessary to assemble sculptures from various media.
- Integrate knowledge of the properties and tendencies of various media while creating sculptural forms.
- **MANAGE THE ABILITY TO DISCUSS WORKS OF ART PUBLICLY.** (SLO#2)
- Utilize the basic vocabulary of art.
- Design standards to evaluate the functional and aesthetic value of sculptural forms.
- Report observations regarding the function and aesthetic value of sculptural forms.
- Manage oral presentations in a professional manner while presenting finished projects.
- **STRUCTURE A HISTORICAL, GEOGRAPHICAL AND CHRONOLOGICAL CONTEXT FOR SCULPTURAL FORMS.** (SLO#3)
- Examine and consider how concepts for sculpture have been applied past and present in various cultures.
- Analyze how established concepts for sculpture are incorporated into contemporary sculptural forms.
- Correlate the aesthetic trends and stylistic devices apparent in contemporary sculpture with those from various historic, geographic and cultural sources.
- **INVESTIGATE SELF-ANALYSIS AND EXTERNAL ANALYSIS TECHNIQUES THROUGH THE ACTIVITY OF "CRITIQUE".** (SLO#4)
- Critique sculptural forms and discuss the decision making process used during the creation of those forms.
- Assess and evaluate the aesthetic attributes of sculptural forms.
- Evaluate the strength and clarity of any message or symbolism present in sculptural forms.
- Judge points of craftsmanship used in the construction of sculptural forms.
- Examine one's own artistic point of view through self critique.
- **FORMULATE A CONCEPTUAL FRAMEWORK FOR THE FUTURE BY APPLYING ANALYTICAL SKILLS.** (SLO#5)
- Evaluate how the level of craftsmanship and planning executed during production of a project directly relates to the precision and overall success evident in a finished sculptural form.
- Assess the time allotted to each step in the production of a project and evaluate its impact on the execution of the work.
- **CHOOSE AND APPLY A VARIETY OF INFORMATIONAL RESOURCES FOR RESEARCH.** (SLO#6)
- Incorporate information from museum/gallery trips, Internet research, library research and personal observation in the conceptualization of sculptural forms.
- Support and defend their own observations and opinions regarding sculptural forms.

**ART 394 Wheel Thrown Ceramics, Beginning**

<table>
<thead>
<tr>
<th>Units:</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hours:</td>
<td>36 hours LEC; 54 hours LAB</td>
</tr>
<tr>
<td>Prerequisite:</td>
<td>None.</td>
</tr>
<tr>
<td>Transferable:</td>
<td>CSU; UC</td>
</tr>
<tr>
<td>General Education:</td>
<td>AA/AS Area I</td>
</tr>
<tr>
<td>Catalog Date:</td>
<td>June 1, 2020</td>
</tr>
</tbody>
</table>

This course is an introductory class in wheel-thrown ceramics. The course will provide students with a broad understanding of the ceramics process, from clay composition to fired-glazed wares. Alternative firing processes are explored, such as Raku, pit firing, and sawdust firing. Students at all skill levels may enroll in the class.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- **DEMONSTRATE THE FUNDAMENTAL PHYSICAL SKILLS/DEXTERITY IN THE CREATION OF CERAMIC WHEEL THROWN FORMS** (SLO#1)
Create functional ceramic vessel forms implementing the basic techniques of wheel throwing.

Integrate knowledge of the properties and tendencies of the material, clay.

Incorporate standards of functionality and aesthetics while creating wheel thrown forms.

Demonstrate informed choices in color, texture, design and pattern in the application of basic glazing techniques.

MANAGE THE ABILITY TO DISCUSS WORKS OF ART PUBLICLY (SLO#2)

Utilize the basic vocabulary of ceramic art.

Design standards to evaluate the functional and aesthetic value of pottery forms through guided discussion.

Report observations regarding functionality and aesthetics of pottery forms.

Formulate questions pertaining to aspects of throwing techniques used, choice of materials, and firing process used in the creation of pottery forms.

STRUCTURE A HISTORICAL, GEOGRAPHICAL, AND CHRONOLOGICAL CONTEXT FOR CERAMIC FORMS(SLO#3)

Examine and discuss historical trends of ceramic throwing/building techniques, firing and glazing materials/methods, practiced in various cultures.

Compare and contrast the function and creation of ceramic forms beyond fine art and every day domestic use, into the realm of industrial ceramic applications.

Analyze the utilitarian nature of pottery forms throughout history and how it affected the design and evolution of those forms.

INVESTIGATE SELF-ANALYSIS AND EXTERNAL ANALYSIS TECHNIQUES THROUGH THE ACTIVITY OF “CRITIQUE”(SLO#4)

Critique finished vessel forms and discuss the decision making process used during the creation of those forms.

Assess and evaluate the functionality and aesthetic attributes of pottery forms.

Verify attributes of craftsmanship in pottery forms at an elementary level.

Evaluate how changes in throwing execution, choice of materials, and application of glazes might impact pottery forms.

Examine one’s own artistic point of view through critique.

CHOOSE AND APPLY A VARIETY OF INFORMATIONAL RESOURCES FOR RESEARCH(SLO#5)

Incorporate information from museum/gallery trips, Internet research, library research and personal observation in the creation of pottery forms.

Support and defend their own observations and opinions regarding ceramic art forms.

ART 395 Wheel Thrown Ceramics, Intermediate

Units: 3
Hours: 36 hours LEC; 54 hours LAB
Prerequisite: ART 394 with a grade of “C” or better, or placement through the assessment process.
Transferable: CSU; UC
Catalog Date: June 1, 2020

This course is an intermediate class in wheel thrown ceramics. The course will provide students with opportunities to further explore the technical and creative processes of ceramic pottery-making, such as, Raku and primitive firing processes and experimentation of different surface treatments.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

DEMONSTRATE PROFICIENT PHYSICAL SKILLS/DEXTERITY IN THE CREATION OF CERAMIC WHEEL THROWN FORMS(SLO#1)

Create functional ceramic vessel forms, exploring the technical and creative processes of pottery making beyond the use of basic techniques.

Conceive and develop more personal artistic concepts to be expressed in the creation of ceramic vessel forms.

Experiment with alternative throwing, building, glazing and firing techniques.

Systematize practices to achieve a higher degree of craftsmanship, functionality and aesthetics while creating ceramic vessel forms.
Incorporate the usage of multiple thrown forms to build composite pieces.

- MANAGE THE ABILITY TO DISCUSS WORKS OF ART PUBLICLY(SLO#2)

Utilize ceramic art terminology that reflects additional building, throwing, glazing and firing techniques learned in the Intermediate Wheel Thrown Ceramics class.

- Evaluate the functionality and aesthetics of pottery forms commensurate with skills acquired in the Intermediate Wheel Thrown Ceramics class.

- Formulate questions pertaining to aspects of throwing techniques used, choice of materials, and firing process used in the creation of pottery forms commensurate with the Intermediate Wheel Thrown Ceramics class.

- STRUCTURE A HISTORICAL, GEOGRAPHICAL, AND CHRONOLOGICAL CONTEXT FOR CERAMIC FORMS(SLO#3)

Examine and discuss the historical trends of ceramic throwing/building techniques, firing and glazing materials/methods, practiced in various cultures.

- Analyze the utilitarian nature of pottery forms throughout history and how it affected the design and evolution of those forms.

- Incorporate culturally distinct motifs and ornamentation techniques in the development of their own artistic statements.

- INVESTIGATE SELF-ANALYSIS AND EXTERNAL ANALYSIS TECHNIQUES THROUGH THE ACTIVITY OF “CRITIQUE”(SLO#4)

Critique finished vessel forms and discuss the decision making process used during the creation of those forms.

- Assess and evaluate the functionality and aesthetic attributes of pottery forms.

- Verify attributes of craftsmanship in pottery forms at a level commensurate with the Intermediate Wheel Thrown Ceramics class.

- Evaluate how changes in throwing execution, choice of materials, and application of glazes might impact pottery forms.

- Examine the degree to which the student executed a more personalized artistic expression through their functional pottery forms.

- Examine one's own individual artistic point of view through critique.

- CHOOSE AND APPLY A VARIETY OF INFORMATIONAL RESOURCES FOR RESEARCH(SLO#5)

Incorporate information from museum/gallery trips, Internet research, library research and personal observation in the creation of pottery forms.

- Support and defend their own observations and opinions regarding ceramic art forms.

**ART 396 Wheel Thrown Ceramics, Advanced**

**Units:** 3

**Hours:** 36 hours LEC; 54 hours LAB

**Prerequisite:** ART 395 with a grade of “C” or better

**Transferable:** CSU; UC

**Catalog Date:** June 1, 2020

This course is an advanced class in wheel thrown ceramics. The class will provide students with individual approaches to create their own unique pottery forms. Emphasis will be placed on more aesthetic approaches to pottery-making. Students will be able to express individual artistic concepts and ideas through pottery forms using various advanced ceramic techniques, which include glazing, firing, and surface treatment.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- **DEMONSTRATE MASTERY OF PHYSICAL SKILLS/DEXTERITY IN THE CREATION OF WHEEL THROWN FORMS(SLO#1)**

Create functional ceramic vessel forms, exploring the technical and creative processes of pottery making beyond the use of intermediate techniques.

- Conceive and develop more personal artistic concepts to be expressed in the creation of ceramic vessel forms.

- Experiment with alternative throwing, building, glazing and firing techniques.

- Systematize practices to achieve a higher degree of craftsmanship, functionality and aesthetics while creating ceramic vessel forms.

- Produce ceramic vessel forms that are ready to exhibit in professional settings.
MANAGE THE ABILITY TO DISCUSS WORKS OF ART PUBLICLY (SLO#2)

Utilize ceramic art terminology that reflects additional building, throwing, glazing and firing techniques learned in the Advanced Wheel Thrown Ceramic class.

Evaluate the functionality and aesthetics of pottery forms commensurate with skills acquired in the Advanced Wheel Thrown Ceramics class.

Formulate questions pertaining to of throwing techniques used, choice of materials, and firing process used in the creation pottery forms commensurate with the Advanced Wheel Thrown Ceramics class.

STRUCTURE A HISTORICAL, GEOGRAPHICAL, AND CHRONOLOGICAL CONTEXT FOR CERAMIC FORMS (SLO#3)

Examine and discuss the historical trends of ceramic throwing/building techniques, firing and glazing materials/methods, practiced in various cultures.

Analyze the utilitarian nature of pottery forms throughout history and how it affected the design and evolution of those forms.

Incorporate culturally distinct motifs and ornamentation techniques in the development of one's own artistic statements.

INVESTIGATE SELF-ANALYSIS AND EXTERNAL ANALYSIS TECHNIQUES THROUGH THE ACTIVITY OF “CRITIQUE” (SLO#4)

Critique finished vessel forms and discuss the decision making process used during the creation of those forms.

Assess and evaluate the functionality and aesthetic attributes of pottery forms.

Verify attributes of craftsmanship in pottery forms at a level commensurate with the Advanced Wheel Thrown Ceramics class.

Evaluate how changes in throwing execution, choice of materials, and application of glazes might impact pottery forms.

Examine the degree to which the student executed a more personalized artistic expression through their functional pottery forms.

Examine and explore one's own artistic point of view through critique.

FORMULATE A CONCEPTUAL FRAMEWORK FOR THE FUTURE BY APPLYING ANALYTICAL SKILLS (SLO#5)

Categorize their artistic style, and assess the logistics, audience/venues, and budget for the monetary/time constraints affecting their work.

Research the factors involved with exhibiting in professional settings and/or establishing a personal ceramic studio.

Investigate criteria influencing competition juries and apply this to the conceptualization of projects.

Design projects and accompanying presentations for juried art competitions/professional exhibitions.

CHOOSE AND APPLY A VARIETY OF INFORMATIONAL RESOURCES FOR RESEARCH (SLO #6)

Incorporate information from museum/gallery trips, Internet research, library research and personal observation in the creation of pottery forms.

Support and defend one's own observations and opinions regarding ceramic art forms.

---

ART 402 Beginning Clay Sculpture

**Units:** 3  
**Hours:** 36 hours LEC; 54 hours LAB  
**Prerequisite:** None.  
**Transferable:** CSU; UC  
**Catalog Date:** June 1, 2020

This course is an introduction to the basic hand-building techniques and methods. The class includes glazing and firing processes used in clay sculpture. Lectures and group discussions will be conducted in connection with the course.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- **DEMONSTRATE THE FUNDAMENTAL PHYSICAL SKILLS/DEXTERITY IN THE CREATION OF CERAMIC SCULPTURAL FORMS (SLO#1)**
  - Create three dimensional ceramic sculptural forms implementing basic hand building techniques.
  - Integrate knowledge of the properties, limitations and tendencies of the material, clay.
  - Produce structurally sound ceramic sculptural forms by executing appropriate designing and building techniques.
• Determine informed choices in color, texture, design and pattern in the basic application of glaze to bisqued sculptural forms.

• MANAGE THE ABILITY TO DISCUSS WORKS OF ART PUBLICLY (SLO#2)

• Utilize the basic vocabulary of ceramic art.

• Design standards to evaluate the aesthetic value of ceramic sculptural forms through guided discussion.

• Report observations regarding the aesthetic value and potential ceramic sculptural forms have to convey ideas, messages or social statements.

• Formulate questions pertaining to aspects of ceramic building techniques used, choice of materials, and firing process used in the creation of ceramic sculptural forms.

• STRUCTURE A HISTORICAL, GEOGRAPHICAL, AND CHRONOLOGICAL CONTEXT FOR SCULPTURAL CERAMIC FORMS (SLO#3)

• Examine and discuss historical, geographical, and cultural references in the evolution of contemporary ceramic sculptures.

• Correlate the aesthetic trends and stylistic devices apparent in examples of contemporary ceramic sculptures with those from various historical, geographic, and cultural sources.

• INVESTIGATE SELF-ANALYSIS AND EXTERNAL ANALYSIS TECHNIQUES THROUGH THE ACTIVITY OF "CRITIQUE" (SLO#4)

• Critique ceramic sculptural forms and discuss the decision making process used during the creation of those forms.

• Assess and evaluate the aesthetic attributes of ceramic sculptural forms.

• Evaluate the strength and clarity of any message or symbolism present in a ceramic sculptural form.

• Judge points of craftsmanship in ceramic sculptural forms at an elementary level.

• Examine and explore one's own artistic point of view through critique.

• CHOOSE AND APPLY A VARIETY OF INFORMATIONAL RESOURCES FOR RESEARCH (SLO#5)

• Incorporate information from museum/gallery trips, Internet research, library research and personal observation in the conceptualization of ceramic sculptural forms.

• Support and defend one's own observations and opinions regarding ceramic art forms.

ART 404 Intermediate Clay Sculpture

Units: 3
Hours: 36 hours LEC; 54 hours LAB
Prerequisite: ART 402 with a grade of "C" or better
Transferable: CSU; UC
Catalog Date: June 1, 2020

This course is an intermediate class in ceramic sculpture techniques and methods. The class will include glazing, surface treatment and various firing processes used in clay sculpture. Focus will be placed on in-depth examination of contemporary ceramic sculpture.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• DEMONSTRATE PROFICIENT PHYSICAL SKILLS/DEXTERITY IN THE CREATION OF CERAMIC SCULPTURAL FORMS (SLO#1)

• Create three dimensional ceramic sculptural forms while exploring the technical and creative processes of ceramic sculpture building beyond the use of basic techniques.

• Integrate knowledge of the properties, limitations and tendencies of the material, clay

• Produce structurally sound ceramic sculptural forms by executing appropriate designing and building techniques.

• Integrate alternative glazing techniques that increase the opportunity to execute greater, more precise personalized expression.

• Systematize assemblage methods to achieve a higher degree of craftsmanship and aesthetics while creating ceramic sculptural forms.

• MANAGE THE ABILITY TO DISCUSS WORKS OF ART PUBLICLY (SLO#2)

• Utilize ceramic art terminology that reflects additional building, glazing, ornamentation, and firing techniques learned in the Intermediate Clay Sculpture class.

• Evaluate the aesthetics and presentation of sculptural forms commensurate with the Intermediate Clay Sculpture class.
Formulate questions pertaining to aspects of ceramic building techniques used, choice of materials, and the firing processes used in the creation of ceramic sculptural forms.

STRUCTURE A HISTORICAL, GEOGRAPHICAL, AND CHRONOLOGICAL CONTEXT FOR SCULPTURAL CERAMIC FORMS (SLO#3)

Examine and discuss historical, geographical, and cultural references in the evolution of contemporary ceramic sculptures.

Correlate the aesthetic trends and stylistic devices apparent in examples of contemporary ceramic sculptures with those from various historic, geographic, and cultural sources.

Incorporate culturally distinct motifs and ornamentation techniques in the development of one's own artistic statement.

INVESTIGATE SELF-ANALYSIS AND EXTERNAL ANALYSIS TECHNIQUES THROUGH THE ACTIVITY OF “CRITIQUE” (SLO#4)

Critique ceramic sculptural forms and discuss the decision making process used during the creation of those forms.

Assess and evaluate the aesthetic attributes of ceramic sculptural forms.

Evaluate the strength and clarity of any message or symbolism present in a ceramic sculptural form.

Judge points of craftsmanship in ceramic sculptural forms at a level beyond what is considered basic.

Examine and explore one's own artistic point of view through critique.

FORMULATE A CONCEPTUAL FRAMEWORK FOR THE FUTURE BY APPLYING ANALYTICAL SKILLS (SLO#5)

Research the factors involved with exhibiting in professional settings and/or establishing a personal ceramic studio.

Investigate criteria influencing competition juries and apply this to the conceptualization of projects.

Design projects and accompanying presentations for juried art competitions/professional exhibitions.

CHOOSE AND APPLY A VARIETY OF INFORMATIONAL RESOURCES FOR RESEARCH (SLO#6)

Incorporate information from museum/gallery trips, Internet research, library research and personal observation in the conceptualization of ceramic sculptural forms.

Support and defend one's own observations and opinions regarding ceramic art forms.

ART 430 Art and Children

This is a course that investigates the relationship of children and art emphasizing the three aspects of art: seeing and analyzing visual relationships, developing techniques of producing works of art, and exploring historical and contemporary art objects. The framework for developing art curriculum that is age and grade level appropriate will be outlined. Suggested for recreational leadership, preschool or elementary teachers, and caregivers. Field trips may be scheduled.

Upon completion of this course, the student will be able to:

CONSTRUCT A FRAMEWORK FOR AGE AND GRADE LEVEL APPROPRIATE ART CURRICULUM. SLO #1

Assemble a sequential plan for art education that utilizes appropriate visuals and artistic materials for specific groups of children in preschool and elementary programs.

Incorporate CA K-12 art standards in the art curriculum design.

Evaluate and apply various child development theories as they relate to the child's ability and artistic expression.

SYNTHESIZE ANALYTICAL SKILLS AND DEVELOP A CONCEPTUAL FRAMEWORK FOR DISCUSSING ART. SLO #2

Combine the concepts and language of visual art when analyzing or assessing art objects.

Generate an awareness of the historical, cultural and social uses of art.

DIFFERENTIATE COMMON ART MATERIALS AND THE VARIOUS APPLICATIONS AND TECHNIQUES FOR HANDLING THOSE MATERIALS. SLO #3
- Distinguish art materials for two-dimensional art (e.g. drawing, painting) and three-dimensional art (e.g. sculpture).
- Assess the appropriateness of materials and techniques to age-related projects.
- VALIDATE, SUPPORT AND DIRECT THE CREATIVE POTENTIAL OF THE CHILD. SLO #4
- Design a stimulating art program.
- Integrate a variety of motivational techniques as an impetus for developing creativity.

**ART 443 Art Gallery Operations**

- **Units:** 3
- **Hours:** 36 hours LEC; 54 hours LAB
- **Course Family:** Gallery Management
- **Prerequisite:** None.
- **Enrollment Limitation:** Two college art courses from art studio (ART) or art history (ARTH).
- **Transferable:** CSU
- **Catalog Date:** June 1, 2020

This first-semester course involves gallery preparation and maintenance as students learn gallery fundamentals in the visual arts. Included are experiences in planning and installing exhibitions, inventory and maintenance of art, participation in staffing and docent activities, and gallery and student outreach programs. A field trip to a museum or gallery is required.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- DEVELOP ANALYTICAL SKILLS AND A CONCEPTUAL FRAMEWORK FOR THE FUTURE. SLO #1
- recognize and demonstrate an understanding of gallery procedures.
- assess and solve problems associated with displaying, cataloging, preserving and documenting works of art.
- plan and install exhibitions.
- differentiate the relationship between professional gallery and museum procedures and the artist whose work is exhibited, including preparing and analyzing professional artist's presentation portfolios.
- ANALYZE WORKS OF ART PUBLICLY. SLO #2
- relate to the public in a gallery setting and provide relevant information regarding the exhibition.
- distinguish and utilize terminology associated with the visual arts when discussing and writing about historical and contemporary works of art.
- CONSTRUCT AN HISTORICAL, GEOGRAPHICAL, AND CHRONOLOGICAL CONTEXT OF ART. SLO #3
- demonstrate knowledge of the cultural history of museum and gallery institutions.
- UTILIZE A VARIETY OF INFORMATIONAL SOURCES. SLO #4
- integrate practical knowledge and language learned in both art history and art studio courses to course content and projects.
- research appropriate information for each exhibition to develop marketing strategies, create resources for the viewer or organize public programs.

**ART 494 Topics in Art**

- **Units:** 0.5 - 4
- **Hours:** 36 hours LEC; 54 hours LAB
- **Prerequisite:** None.
- **Transferable:** CSU
- **Catalog Date:** June 1, 2020

This course is designed to give students an opportunity to study topics not included in current course offerings.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:
Choose a variety of creative and planning approaches to developing visual ideas. SLO #1.

Integrate their knowledge and understanding of various medium through select projects. SLO #2.

Evaluate art work and assess the aesthetics of diverse medium. SLO #3.

ART 495 Independent Studies in Art

Units: 1 - 3
Hours: 54 - 162 hours LAB
Prerequisite: None.
Transferable: CSU
Catalog Date: June 1, 2020

An independent studies project involves an individual student or small group of students in study, research, or activities beyond the scope of regularly offered courses. See the current catalog section of “Special Studies” for full details of Independent Studies.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- **SLO #1:** Actively engage in intellectual inquiry beyond that required in order to pass a course of study (College Wide Learning Outcome – Area 4).
  - Discuss and outline a proposal of study (that can be accomplished within one semester term) with a supervising instructor qualified within the discipline.
  - Design an independent study (to be completed individually or by collaboration of a small group) to foster special knowledge, skills, and experience that are not available in any one regularly scheduled course.
  - Use information resources to gather discipline-specific information.

- **SLO #2:** Utilize modes of analysis and critical thinking to apply theoretical perspectives and/or concepts in the major discipline of study to significant problems and/or educational activities (College Wide Learning Outcome – Area 3).
  - Analyze and apply the knowledge, skills and experience that are involved in the independent study to theoretical perspectives and/or concepts in the major discipline of study.
  - Explain the importance of the major discipline of study in the broader picture of society.

- **SLO #3:** Communicate a complex understanding of content matter of the major discipline of study (College Wide Outcome – Area 3).
  - Demonstrate competence in the skills essential to mastery of the major discipline of study that are necessary to accomplish the independent study.

- **SLO #4:** Identify personal goals and pursue these goals effectively (College Wide Outcome – Area 4).
  - Utilize skills from the “academic tool kit” including time management, study skills, etc., to accomplish the independent study within one semester term.

Art History (ARTH)

**ARTH 300 Introduction to Art**

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Transferable: CSU; UC
General Education: AA/AS Area I; CSU Area C1; IGETC Area 3A
C-ID: C-ID ARTH 100
Catalog Date: June 1, 2020

This is an overview of the visual arts including: drawing, sculpture, artifacts, architecture, painting, and printmaking. We will examine the materials, methods, and design principles of creating. This course is recommended as a basis for the understanding of art. Local field trips may be required.

**Student Learning Outcomes**
Upon completion of this course, the student will be able to:

- Formulate standards of judgement based upon reference to the history, purpose, and aesthetics of art (SLO #1).
- Differentiate art historical methodologies as well as historical periods and styles of art.
- Demonstrate an understanding of the materials and techniques in the production of art.
- Incorporate problem solving and analytical skills in completing class writing and art projects (SLO #2).
- Evaluate the basic visual and design elements in art utilizing art vocabulary and concepts.
- Apply knowledge from lectures in creating simple art objects.
- Manage the ability to discuss works of art publicly (SLO #3).
- Practice the visual analysis of art objects before an audience utilizing art vocabulary.
- Compare related art objects speaking clearly and using visual aids.
- Develop an appreciation for the arts and cultural practices of people from the past to the present (SLO #4).
- Understand art as a creative human expression found since humans exist.
- Identify common art themes in different global cultures.
- Choose and apply scholarly sources for research and express thoughts clearly in writing (SLO #5).
- Differentiate between scholarly and not scholarly sources.
- Practice writing about art in short essays and papers utilizing art vocabulary.

ARTH 303 Art Survey: Ancient to 14th Century

This course traces the developments in art from pre-historic times through the 14th Century. Emphasis will be given to artifacts, architecture, painting, and sculpture.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- Demonstrate an appreciation of artistic endeavors, cultural expressions, ideas and/or institutions through non-empirical, analytic, interpretive studies and critical thinking projects (SLO #1).
- Identify an array of art objects and monuments created from the pre-historic period to the 1300’s in Europe and the Near East.
- Manage the ability to discuss works of art publicly (SLO #2).
- Practice the visual analysis of art objects and monuments using art historical vocabulary.
- Compare related art objects or monuments from different periods and regions up to the 1300’s.
- Structure an historical, geographical and chronological context of art (SLO #3).
- Express clearly their own analyses and interpretations of arts, ideas, skills (including language), and/or institutions, and will properly use the vocabulary appropriate to the field (SLO #4).
- Compose a formal, iconographic, and functional analysis of objects and monuments within their social and historical contexts.
- Recognize the influence of culture, society and religion on art production and architecture.
- Recognize intercultural relations and influences of artistic themes and stylistic elements.
- Choose and apply a variety of scholarly sources for research and express thoughts clearly in writing (SLO #5).
• develop an appreciation for the arts and cultural practices of people of the past (SLO #6).

ARTH 307 Italian Renaissance Art

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Advisory: ENGR 301 or 302
Transferable: CSU; UC
General Education: AA/AS Area I; CSU Area C1; IGETC Area 3A
Catalog Date: June 1, 2020

This course introduces the visual arts and architecture of Italy in the Renaissance, from duecento (13th century) through cinquecento (16th century). Topics include the relationship between the visual arts and culture and artists and their works from the periods and styles known as the Proto-Renaissance, Renaissance, High Renaissance, and Mannerism. Relationships between Italy and other cultures, including New World civilizations, are also made.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• identify works of art and architecture in the Early Modern period, from the duecento (13th century) through the cinquecento (16th century) in Italy and related cultures (SLO #1)
• compare and contrast the characteristics of artistic styles common in the Early Modern period in Italy and related cultures (SLO #2)
• identify the main stylistic and formal components of visual arts in Italy in the periods of the Renaissance
• recognize intercultural influences and/or appropriation of art themes and stylistic elements.
• examine the relationship between the visual arts and the social, economic, and ideological environment of Italy during the Renaissance (SLO #3)
• detect the historic reasons why Italy has developed such works of art and architecture during this period.
• manage the ability to discuss works of art publicly (SLO #4).
• practice the visual analysis of art objects and monuments using art historical vocabulary.
• choose and apply a variety of scholarly sources for research and express thoughts clearly in writing (SLO #5).

ARTH 309 Art Survey: Renaissance to 19th Century

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Advisory: ENGR 300 with a grade of "C" or better
Transferable: CSU; UC
General Education: AA/AS Area I; CSU Area C1; IGETC Area 3A
C-ID: Part of C-ID ARTH 120
Catalog Date: June 1, 2020

This course covers the architecture, sculpture, artifacts, painting and graphic art of world cultures, in particular of Western art from the Renaissance period through the 19th Century. This is a required class for art history major students.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• demonstrate an appreciation of artistic endeavors, cultural expressions, ideas and/or institutions through non-empirical, analytic, interpretive studies and critical thinking projects (SLO #1).
• identify an array of art objects and monuments created in Europe and the United States in the period from 1400's (Renaissance) to the mid 1800's.
• identify important art objects and monuments created by non-Western cultures in the period from 1400's to the 1800's.
• manage the ability to discuss works of art publicly (SLO #2).
practice the visual analysis of art objects and monuments using art historical vocabulary.

- compare related art objects or monuments from different periods from early Renaissance to mid-19th century using visual aids.

- structure an historical, geographical and chronological context of art (SLO #3).

- identify the main stylistic and formal components of visual arts in Western Europe in the periods of Renaissance, Baroque, Rococo, Neoclassicism and Romanticism (1400- mid 1800's).

- express clearly personal analyses and interpretations of arts, ideas, techniques, skills, and/or institutions, and will properly use the vocabulary appropriate to the field (SLO #4).

- detect the reasons why cultures have created works of art and architecture.

- compose a formal, iconographic, and functional analysis of art objects and monuments within their social and historical contexts.

- recognize the influence of culture, society and religion on art production and architecture.

- recognize intercultural influences and/or appropriation of art themes and stylistic elements.

- choose and apply a variety of scholarly sources for research and express thoughts clearly in writing (SLO #5).

- develop an appreciation for arts and cultural practices of people of the past (SLO #6).

**ARTH 311 Art Survey: Modern Art**

**Units:** 3  
**Hours:** 54 hours LEC  
**Prerequisite:** None  
**Transferable:** CSU; UC  
**General Education:** AA/AS Area I; CSU Area C1; IGETC Area 3A  
**C-ID:** C-ID ARTH 150; Part of C-ID ARTH 120  
**Catalog Date:** June 1, 2020

This course covers diverse art forms including painting, sculpture and architecture in Europe and America from the 19th, 20th, and 21st centuries. Styles discussed will include Neoclassicism, Romanticism, Realism, Impressionism, Post-Impressionism, Symbolism, Art Nouveau and all the major Modern art movements of the 20th century such as Fauvism, Cubism, Expressionism, Dada, Surrealism, American Modernism, Pop Art, Happenings, Conceptual and Installation Art. This class will also cover Post-Modernism, Neo-Expressionism, Video Installations, and Globalization. A field trip to an art museum is required.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- demonstrate an appreciation of artistic endeavors and cultural expressions through non-empirical, analytic, interpretive studies and critical thinking projects (SLO #1).

- display knowledge of the two major art periods of Modernism and Postmodernism and of the most significant artists of the period.

- develop an appreciation for the aesthetic principles and stylistic considerations that guide the creation of Modern and Postmodern art.

- engage in art discourse and employ critical thinking

- formulate an historical, geographical and chronological context of art (SLO #2).

- list an array of art objects and monuments created in the 19th, 20th, and 21st centuries in Europe, the United States and the rest of the world.

- explain the origins and development of art styles of the Avant-garde

- compare related art objects or monuments from different periods and countries.

- discuss works of art publicly (SLO #3).

- practice the visual analysis of art objects and monuments in oral presentations.

- express clearly their own analyses and interpretations of arts, ideas, techniques, skills, and institutions, and use the vocabulary appropriate to the field (SLO #4).

- compose a formal, iconographic, and functional analysis of art objects and monuments within their social and historical contexts and employ the vocabulary specific to the discipline of art history.

- evaluate the influence of culture, society, and technology on art production and architecture.
• demonstrate a basic understanding of the technical processes involved in the creation of art objects (e.g. fresco painting, engraving, photography, video installation, digital media, etc).

• identify intercultural relations, influences and appropriation of artistic themes and styles in the work of later artists.

• analyze the function and intention of art exhibitions, and the role of museums and art galleries.

• choose and apply a variety of scholarly sources for research and express thoughts clearly in writing (SLO #5).

• research an art history topic, synthesize the information, and write a research paper with footnotes and bibliography.

• develop an appreciation for the diversity and inclusiveness of contemporary artistic and cultural practices (SLO #6).

• evaluate the scope and variety of works of art.

• interpret art as expression of individual and human values within a technologically ever-changing, global society

ARTh 312 Women in Art

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Transferable: CSU; UC
General Education: AA/AS Area I; CSU Area C7; IGETC Area 3A
Catalog Date: June 1, 2020

This is a survey course of women's art from the Middle Ages to the present; including the art of both European and non-European cultures. ARTH 312 is presented through slide lecture and discussion which will include historical and cultural context, limitations imposed by society, and the differences and similarities of other artists in each period.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• demonstrate an appreciation of artistic endeavors, cultural expressions, ideas and institutions of female artists (SLO #1).

• identify an array of art objects and/or buildings created by female artists

• express clearly orally and/or in writing an understanding of the value of art produced by women.

• recognize issues particular to the art production, education, training, and professional success of women artists

• structure an historical, geographical and chronological context of art works produced by female artists (SLO #2).

• recognize the development of female artistic production from the late Middle Ages to the present.

• identify art works by women artists from Western and non-Western cultures.

• exercise critical thinking in understanding the importance of gender in connection with patronage, economics, education and art production.

• develop awareness of the obstacles imposed by society, religion, and culture on the life and art of female artists.

• manage the ability to discuss works of art created by female artists publicly (SLO #3).

• practice the visual analysis of art objects using Art History vocabulary.

• compare stylistically related art objects by female artists to the art of contemporaneous male artists.

• interact and learn the dynamics of group work while creating joint projects.

• choose and apply a variety of scholarly sources for research and express thoughts clearly in writing (SLO #4).

• differentiate written and web sources particular to Feminist Art History and Women Studies and apply them in research

ARTh 324 Art of the Americas
This course focuses on the study of the indigenous arts and cultures of the Americas before the arrival of Columbus in the New World. Emphasis is on the Pre-Contact peoples of Meso-America and South America, such as the Aztec, Maya, and Inca cultures, and their contributions to colonial and modern art forms.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- Demonstrate an appreciation for the arts and cultures of Mesoamerica and South America. (SLO #1)
- identify the art and architecture of major American cultures including the Inca, Olmec, Maya and Aztec.
- recognize the distinctive contributions that indigenous cultures of the Americas have made to the contemporary culture of the Americas.
- relate pre-contact American art forms to the rest of the world in terms of material contribution.
- Formulate an historical, geographical and chronological context of American art. (SLO # 2)
- debate stylistic developments and discuss forms in the arts and architecture of various regions from ancient times to the post-contact eras.
- analyze social, philosophical, and cultural constructs and ideals in America as they are reflected in American art and architecture.
- Express clearly their own analyses and interpretations of arts, ideas, techniques, skills, and institutions, and use the vocabulary appropriate to the field. (SLO # 3)
- formulate and analyze meanings and functions of art objects and buildings.
- engage in formal analysis of art objects employing the vocabulary specific to the discipline of art history.
- demonstrate a basic understanding in the art media and the technical processes involved in the creation of art (woodcarving, basketry, ceramics, textiles etc).
- critique intercultural connections between pre-contact American and Western art and the resulted art forms of the post-contact era.
- Manage the ability to discuss works of art publicly. (SLO # 4)
- practice the visual analysis of art objects and monuments during oral presentations.
- associate the images of your chosen artwork to the art discussed in class.
- Choose and apply a variety of scholarly sources for research and express thoughts clearly in writing. (SLO # 5)
- research an art history topic on pre-contact American art or architecture using scholarly published and internet sources.
- synthesize the information and ideas and write a research paper with footnotes and bibliography.

ARTH 325 Native American Art History

This course studies the arts and culture of Native peoples of North America. It discusses the artistic traditions of native peoples of the Ancient and Eastern Woodlands, the Plains, the Southwest, California, the Northwest Coast, and the Arctic and Subarctic regions as well as examples of contemporary Native American art. Comparisons will be made between individual Native American cultures and between Native and Euro-centric cultures.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- 3
- 54 hours LEC
- None.
- CSU; UC
- AA/AS Area I; AA/AS Area VI; CSU Area C3; IGETC Area 3A
- June 1, 2020
- Demonstrate an appreciation for the arts and traditions of the Native North Americans. (SLO #1)
- Identify the arts and architecture of major Native American cultures including the ancient cultures of the Hopewell, the Mississippian, the Anasazi, as well as later ones such as the Navajo, Cheyenne, Chumash, and Inuit.
- Enumerate the wide variety of Native American cultures.
- Formulate an historical, geographical and chronological context of Native American art. (SLO # 2)
- Discuss forms in the arts and architecture of various regions of North America from the ancient to contemporary times.
- Debate stylistic developments from the ancient to contemporary times.
- Critique and analyze the contribution of Native American artists in contemporary arts.
- Express clearly their own analyses and interpretations of arts, ideas, techniques, skills, and institutions, and use the vocabulary appropriate to the field. (SLO # 3)
- Formulate and analyze meaning and purpose of art objects and buildings.
- Demonstrate a basic understanding in the material and the technical processes involved in the creation of art (woodcarving, basketry, ceramics, textiles etc).
- Contrast and critique the artistic products of Native cultures with more Eurocentric cultures.
- Manage the ability to discuss works of art publicly. (SLO # 4)
- Practice the visual analysis of art objects and monuments during oral presentations.
- Examine and place the art objects in its cultural and social context.
- Compare the images of your chosen art objects to those made by other Native cultures.
- Apply a variety of scholarly sources for research and express thoughts clearly in writing. (SLO # 5)
- Synthesize the information and ideas from your research and write a paper with footnotes and bibliography.

**ARTH 328 Survey of African Art**

**Units:** 3

**Hours:** 54 hours LEC

**Prerequisite:** None.

**Transferable:** CSU; UC

**General Education:** AA/AS Area I; AA/AS Area VI; CSU Area C1; CSU Area C2; IGETC Area 3A; IGETC Area 3B

**Catalog Date:** June 1, 2020

This course is an introduction to the art and architecture of Africa in terms of its cultural and philosophical background; its materials and techniques; its aesthetic considerations; and its impact on 20th Century Western art.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- Demonstrate an appreciation for the arts and cultures of Africa. (SLO #1)
- Identify the art and architecture of major African cultures including ancient Egypt and Nubia, Ife, or Benin.
- Relate African art forms to the rest of the world in terms of material contribution.
- Formulate an historical, geographical and chronological context of African art. (SLO # 2)
- Differentiate between art and architecture of different geographic regions such as the Mediterranean, Sub-Saharan, tropics etc.
- Discuss art forms and stylistic developments in the arts and architecture of various regions of Africa from ancient times to the 20th century.
- Express clearly their own analyses and interpretations of arts, ideas, techniques, skills, and institutions, and use the vocabulary appropriate to the field. (SLO # 3)
- Formulate and analyze meanings and functions of art forms throughout Africa.
engage in formal analysis of art objects employing the vocabulary specific to the discipline of art history.

demonstrate a basic understanding in the media and the technical processes involved in the creation of art objects (woodcarving, basketry, ceramics, textiles etc).

critique intercultural connections between African and Western art, in particular the impact of African art on 20th century Western art.

manage the ability to discuss works of art publicly. (SLO # 4)

practice the visual analysis of art objects and monuments during oral presentations.

compare the images of your chosen artwork to those discussed in class.

Choose and apply a variety of scholarly sources for research and express thoughts clearly in writing. (SLO # 5)

research an art history topic on African art or architecture using scholarly published and internet sources.

synthesize the information and write a research paper with footnotes and bibliography.

**ARTH 332 Asian Art**

**Units:** 3

**Hours:** 54 hours LEC

**Prerequisite:** None.

**Advisory:** ENGWR 300 with a grade of "C" or better

**Transferable:** CSU; UC

**General Education:** AA/AS Area I; AA/AS Area VI; CSU Area C; IGETC Area 3A

**C-ID:** C-ID ARTH 130

**Catalog Date:** June 1, 2020

This course is an introduction to and comparative survey of the major forms and trends in the arts, architecture and artifacts of Asia from the Neolithic to the contemporary. The role of secular and religious ideas and ideals are examined, the similarities and differences among the cultures are assessed and the contributions to world culture will be appraised to create understanding, appreciation and tolerance. A regional or local field trip may be required.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- structure an historical, geographical and chronological context of art (SLO #1).
- differentiate stylistically among the arts of various regions of Asia, such as India, Southeast Asia, China and Japan, from antiquity to 1900.
- recognize the affect of Asian art and culture within contemporary global cultures.
- demonstrate an appreciation of artistic endeavors, cultural expressions, ideas and/or institutions through non-empirical, analytic, interpretive studies and critical thinking projects (SLO #2).
- reflect on the influence of culture, society philosophy and religion of a region upon art production and architecture.
- recognize and exercise critical thinking in cultural co-relationships and influences between Asian countries/regions but also between Asia and the West.
- apply a variety of scholarly sources for research within clearly written communication.
- recognize intercultural relations and influences of art themes and styles.
- manage the ability to discuss works of art publicly (SLO #3).
- discuss and clearly present observations of the form, style, and content within a range of works of art.
- analyze and interpret art based on the history, religion and ideology of Asian countries and properly use the vocabulary appropriate to the field.

**ARTH 333 Introduction to Islamic Art**
This is a survey course that studies works of art and architecture produced by artists of Muslim countries and regions from the period of the early caliphates (c. 700) to the heights of the Islamic empires (c. 1700.) It provides fundamental information on the formation of Islamic art, its history and philosophy but also deals with the relationships between the Islamic, Asian, and Western artistic traditions. This course includes but is not limited to visual examples from the Middle East, Iran, India, North Africa and Spain.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- demonstrate an awareness of the definition of "Islamic art"; detect and discuss the stereotyping challenges of the study of Islamic art (SLO #1).
- recognize and analyze the influential elements in the formation of Islamic art and assess the social and historical backdrop against which Islamic art flourished (SLO #2).
- identify the Biblical connections that trace Islam back to the other two Abrahamic traditions and their visual expression in art and architecture.
- recognize the principles of the Islamic faith and assess their direct impact on specific examples of art and architecture (e.g. the creation of the prayer niche or Mihrab).
- discuss the development of Islamic dynastic rules and their contribution to the Islamic culture; identify main schools of thought within the religion and analyze their impact on the building and expansion of empires and on their artistic production.
- evaluate the more unorthodox approach within the Islamic faith and its influence on the development of Islamic art and architecture through the conception of its own symbolic language (e.g. Sufi mystic dances, and the establishing of the Sufi sanctuaries).
- analyze examples of religious and secular architecture, and identify the different elements in the building plans and their functions, as well as their decorative elements (SLO #3).
- compare regional stylistic changes and periods to reveal artistic innovations.
- discuss the issue of patronage, limitations that regulated the artistic production, formation of guilds and religious endowments.
- incorporate the concept of methodology as it applies to the visual arts, particularly with respect to the Western vision of the Islamic east, "Orientalism," and the role of colonialism.
- demonstrate knowledge of the various types of books produced as well as types of visual arts involved such as calligraphy and book illumination (SLO #4).
- analytically address the issues of "figurative" and "non-figurative" art within the various regions impacted by Islam.
- recognize the importance of the development of libraries.
- assess the mutual impact of Islam and other cultures (SLO #5).
- examine similarities and difference reflected in the artwork produced in Asia and identify the Islamic and Asian elements.
- evaluate examples of art within Western traditions, specifically that of Christianity and Judaism, and identify the elements of mutual appropriation in their visual art.
- incorporate the concept of methodology as it applies to the visual arts, particularly with respect to the Western vision of the Islamic east, "Orientalism," and the role of colonialism.
- choose and apply a variety of scholarly sources for research and express thoughts clearly in writing (SLO #6).
- manage the ability to discuss works of art publicly (SLO #7).
- practice the visual analysis of Islamic art and architecture using art historical vocabulary.
Automotive Mechanics Technology
| Cosumnes River College

The Automotive Mechanics Technology program emphasizes developing skills required for efficient diagnosis, maintenance, and repair of the automobile and its components. This program and its instructors are Automotive Service Excellence (ASE) certified. The college offers both theoretical and practical training relating to all phases of the automobile.

Dean
 (916) 691-4300
 HarrisC2@crc.losrios.edu

Associate Degrees

A.S. in Automotive Mechanics Technology (Ford ASSET)

The Ford Automotive Student Service Education Training (ASSET) Program is a two-year Associate's Degree program in Automotive Mechanics Technology. This program is designed to help students develop the skills necessary to efficiently and accurately maintain, diagnose, and service/repair all major systems of the automobile.

The Ford ASSET Program is a partnership between Cosumnes River College (CRC) and Ford Motor Company. Ford ASSET is the only program that includes an in dealership cooperative work experience component. Students will rotate between school and the dealership for the duration of the two-year program, giving them invaluable hands-on experience while they learn.

Courses within the Ford ASSET program allow students to earn Service Technician Specialty Training (STST) certifications from Ford Motor Company in the following areas:
• Electrical Systems
• Brake Systems
• Steering & Suspension
• Climate Control
• Automatic Transmissions
• Gasoline Engine Repair
• Gasoline Engine Performance
• Diesel Engine Repair
• Diesel Engine Performance
• Manual Transmissions

Instructors for this program are Ford STST certified as required by Ford Motor Company standards.

Completion of this degree also represents completion of a National Automotive Technicians Education Foundation (NATEF) accredited Master Automotive Service Technology (MAST) program. Instructors for this program are Automotive Service Excellence (ASE) certified as required by NATEF standards.

Upon successful completion of this program, students are well qualified for placement as service technicians in Ford and/or Lincoln dealerships. Students may apply units earned by the successful completion of this program to one or more of the specialized certificates as well as the Associate's degree.

Catalog Date: June 1, 2020

Degree Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>First Year - Fall Semester:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>AMT 370</td>
<td>Ford ASSET Automotive Fundamentals and Dealership Practices</td>
<td>4</td>
</tr>
<tr>
<td>COURSE CODE</td>
<td>COURSE TITLE</td>
<td>UNITS</td>
</tr>
<tr>
<td>-------------</td>
<td>----------------------------------------------------------------</td>
<td>-------</td>
</tr>
<tr>
<td>AMT 371</td>
<td>Ford ASSET Automotive Electrical/Electronic Systems</td>
<td>3</td>
</tr>
<tr>
<td>AMT 372</td>
<td>Ford ASSET Automotive Brake Systems</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>A minimum of 3 units from the following:</td>
<td></td>
</tr>
<tr>
<td>AMT 498</td>
<td>Work Experience in Automotive Mechanics Technology (1 - 4)</td>
<td>3</td>
</tr>
</tbody>
</table>

**First Year - Spring Semester:**

| AMT 374     | Ford ASSET Automotive Suspension and Steering                  | 3     |
| AMT 375     | Ford ASSET Automotive Wheel Alignment                          | 3     |
| AMT 376     | Ford ASSET Automotive Heating and Air Conditioning             | 3     |
|             | A minimum of 3 units from the following:                       |       |
| AMT 498     | Work Experience in Automotive Mechanics Technology (1 - 4)     | 3     |

**First Year - Summer Semester:**

| AMT 378     | Ford ASSET Automatic Transmissions/Transaxles                  | 3     |
| AMT 130     | Ford ASSET Advanced Automatic Transmission Diagnosis           | 1.5   |
| AMT 379     | Ford ASSET Automotive Engine Repair                            | 3     |
| AMT 385     | Ford ASSET Automotive Manual Drive Train and Axles             | 1.5   |

**Second Year - Fall Semester:**

| AMT 381     | Ford ASSET Electronic Engine Control                           | 4     |
| AMT 382     | Ford ASSET Gasoline Engine Performance                         | 3     |
| AMT 383     | Ford ASSET Advanced Gasoline Engine Performance                | 3     |
|             | A minimum of 3 units from the following:                       |       |
| AMT 498     | Work Experience in Automotive Mechanics Technology (1 - 4)     | 3     |

**Second Year - Spring Semester:**

| AMT 131     | Ford ASSET Diesel Engine Performance                           | 3     |
| AMT 340     | Emission Control Inspection and Repair                         | 5     |
| WELD 160    | Welding Technology for the Automotive Industry                 | 1.5   |
|             | A minimum of 3 units from the following:                       |       |
| AMT 498     | Work Experience in Automotive Mechanics Technology (1 - 4)     | 3     |

**Total Units:** 59.5

The Automotive Mechanics Technology (Ford ASSET) Associate in Science (A.S.) degree may be obtained by completion of the required program, plus general education requirements, plus sufficient electives to meet a 60-unit total. See CRC graduation requirements.

**Enrollment Eligibility**

To be eligible for enrollment in the program, the student must meet the following criteria:

- Eligibility for ENGWR 101.
- Eligibility for MATH 100.
- Possess a valid driver's license with a driving record that is suitable for the sponsoring dealership's insurance requirements.
- Able to operate a vehicle equipped with a manual transmission.
- Meet sponsoring dealership hiring requirements which may include submitting to a drug test and/or criminal background check.
Completion of an application for the Ford ASSET Program (can be found at http://www.crc.losrios.edu/cars).

Enrollment Process

Eligible students are selected for the program according to the following steps:

- Students are selected from the applicant pool in the order in which they are received.
- Only students who meet the stated eligibility requirements will be considered for the program.

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- PSLO 1: Understand the fundamental purpose, components, and operation of major automotive systems to include gasoline engines, automatic transmissions and transaxles, manual transmissions, drive trains, and axles, suspension and steering systems, brake systems, electrical and electronic systems, heating and air conditioning systems, and engine performance systems.
- PSLO 2: Understand the proper use of tools, equipment, and publications used for automotive diagnosis and repair.
- Understand typical new car dealership hierarchy, structure, and standard procedures.
- Prepare and write repair orders to include: customer information, vehicle identifying information, customer concerns, related service history, cause, and correction.
- PSLO 3: Diagnose engine mechanical concerns, conduct diagnostic testing procedures, and perform the procedures and techniques involved in typical engine repairs and overhauls.
- PSLO 4: Demonstrate the ability to diagnose, service, and repair automatic transmissions and transaxles.
- PSLO 5: Demonstrate the ability to diagnose and repair manual transmissions, transaxles, and drive train concerns.
- PSLO 6: Demonstrate the ability to diagnose and repair automotive suspension and steering concerns.
- PSLO 7: Demonstrate the ability to diagnose and repair automotive brake systems.
- PSLO 8: Demonstrate the ability to diagnose and repair automotive electrical and electronic concerns.
- PSLO 9: Demonstrate the ability to diagnose and repair automotive heating, ventilation, and air conditioning (HVAC) system concerns.
- PSLO 10: Demonstrate the ability to diagnose, service, and repair gasoline engine performance systems and their components.
- Verify the outcome of the repair through a test drive analysis or system self-test.

Career Information

- Automotive Technician • Light Duty Diesel Technician • Ford/Lincoln Specialized Technician (in any of the Service Technician Specialty Training [STST] areas) • Ford/Lincoln Engine Master Technician • Ford/Lincoln Chassis Master Technician • Ford/Lincoln Drivetrain Master Technician • Ford/Lincoln Senior Master Technician Students who successfully complete the program will: • Earn an Associate’s degree in Automotive Mechanics Technology. • Be granted Ford Service Technician Specialty Training (STST) credentials. • Be prepared for Automotive Service Excellence (ASE) certification in all Automobile series areas. • Be eligible to sit for testing for both the California SMOG Inspector and SMOG Repair licenses.

A.S. in Automotive Mechanics Technology

This program emphasizes developing skills required for efficient diagnosis, maintenance, and repair of the automobile and its components. Completion of this degree also represents completion of a National Automotive Technicians Education Foundation (NATEF) accredited Master Automotive Service Technology (MAST) program. Instructors for this program are Automotive Service Excellence (ASE) certified as required by NATEF standards.

Upon successful completion of the program, students are qualified for placement as technicians in the automotive industry. Students may apply units earned by successful completion of Automotive Mechanics Technology courses to one or more of the specialized certificates and/or the Associate Degree in Automotive Mechanics Technology.
Degree Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMT 300</td>
<td>Automotive Fundamentals and Shop Procedures</td>
<td>4</td>
</tr>
<tr>
<td>AMT 303</td>
<td>Automotive Electrical &amp; Electronic Systems</td>
<td>4</td>
</tr>
<tr>
<td>AMT 304</td>
<td>Automotive Manual Drive Train and Axles</td>
<td>3</td>
</tr>
<tr>
<td>AMT 310</td>
<td>Engine Performance</td>
<td>3</td>
</tr>
<tr>
<td>AMT 314</td>
<td>Wheel Alignment</td>
<td>3</td>
</tr>
<tr>
<td>AMT 316</td>
<td>Automotive Brakes</td>
<td>3</td>
</tr>
<tr>
<td>AMT 322</td>
<td>Engine Repair</td>
<td>3</td>
</tr>
<tr>
<td>AMT 324</td>
<td>Electronic Fuel Injection</td>
<td>3</td>
</tr>
<tr>
<td>AMT 326</td>
<td>Automotive Heating and Air Conditioning</td>
<td>3</td>
</tr>
<tr>
<td>AMT 330</td>
<td>Automatic Transmissions/Transaxles</td>
<td>3</td>
</tr>
<tr>
<td>AMT 332</td>
<td>Automotive Computerized Controls</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>A minimum of 5 units from the following:</td>
<td>5</td>
</tr>
<tr>
<td>AMT 140</td>
<td>Automotive Service (1)</td>
<td></td>
</tr>
<tr>
<td>AMT 301</td>
<td>Automotive Service Management (3)</td>
<td></td>
</tr>
<tr>
<td>AMT 305</td>
<td>Survey of Alternative Fueled &amp; Hybrid Vehicles (3)</td>
<td></td>
</tr>
<tr>
<td>AMT 306</td>
<td>Small Engine Repair (3)</td>
<td></td>
</tr>
<tr>
<td>AMT 308</td>
<td>Late Model Car Care and Maintenance (3)</td>
<td></td>
</tr>
<tr>
<td>AMT 498</td>
<td>Work Experience in Automotive Mechanics Technology (1 - 4)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>A minimum of 3 units from the following:</td>
<td>3</td>
</tr>
<tr>
<td>AMT 321</td>
<td>Advanced Automotive Electrical &amp; Hybrid Vehicle Systems (3)</td>
<td></td>
</tr>
<tr>
<td>AMT 328</td>
<td>Light Duty Diesel Engine Performance (3)</td>
<td></td>
</tr>
<tr>
<td>AMT 336</td>
<td>Advanced Service Management (3)</td>
<td></td>
</tr>
<tr>
<td>AMT 340</td>
<td>Emission Control Inspection and Repair (5)</td>
<td></td>
</tr>
</tbody>
</table>

Total Units: 43

The Automotive Mechanics Technology Associate in Science (A.S.) degree may be obtained by completion of the required program, plus general education requirements, plus sufficient electives to meet a 60-unit total. See CRC graduation requirements.

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- **PSLO 1**: Understand the fundamental purpose, components, and operation of major automotive systems to include gasoline engines, automatic transmissions and transaxles, manual transmissions, drivetrains, and axles, suspension and steering systems, brake systems, electrical and electronic systems, heating and air conditioning systems, and engine performance systems.

- **PSLO 2**: Understand the proper use of tools, equipment, and publications used for automotive diagnosis and repair.
• Understand typical automotive shop hierarchy, structure, and standard procedures.

• Prepare and write repair orders to include: customer information, vehicle identifying information, customer concerns, related service history, cause, and correction.

• PSLO 3: Diagnose engine mechanical concerns, conduct diagnostic testing procedures, and perform the procedures and techniques involved in typical engine repairs and overhauls.

• PSLO 4: Demonstrate the ability to diagnose, service, and repair automatic transmissions and transaxles.

• PSLO 5: Demonstrate the ability to diagnose and repair manual transmissions, transaxles, and drive train concerns.

• PSLO 6: Demonstrate the ability to diagnose and repair automotive suspension and steering concerns.

• PSLO 7: Demonstrate the ability to diagnose and repair automotive brake systems.

• PSLO 8: Demonstrate the ability to diagnose and repair automotive electrical and electronic concerns.

• PSLO 9: Demonstrate the ability to diagnose and repair automotive heating, ventilation, and air conditioning (HVAC) system concerns.

• PSLO 10: Demonstrate the ability to diagnose, service, and repair gasoline engine performance systems and their components.

• Verify the outcome of the repair through a test drive analysis or system self-test.

Career Information

Auto Technician; Auto/Truck Specialist; Automotive Microcomputer Programmer & Operator; Field Service/Sales Representative; Inventory Controls Manager; Tune-up & Electrical Specialist. ASE certified in the areas of Brakes, Electrical/Electronic Systems, Engine Performance, Suspension and Steering, Automatic Transmission/Transaxle, Engine Repair, Heating and Air Conditioning, and Manual Drive Train and Axles.

Courses in the general automotive program are designed to emphasize skills development in efficient diagnosis, maintenance, and repair of the automobile. A wide variety of makes and models of vehicles are used in laboratory practice. Students can enter the General Program in Automotive Mechanics Technology at any semester, summer, fall, or spring. Certificate programs as well as an A.S. degree in Automotive Mechanics Technology are available.

Certificates of Achievement

Automatic Transmissions and Transaxles Certificate

The curriculum is designed for students interested in seeking employment in the diagnosis and repair of automatic transmissions/transaxles.

Catalog Date: June 1, 2020

Certificate Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMT 300</td>
<td>Automotive Fundamentals and Shop Procedures</td>
<td>4</td>
</tr>
<tr>
<td>AMT 303</td>
<td>Automotive Electrical &amp; Electronic Systems</td>
<td>4</td>
</tr>
<tr>
<td>AMT 304</td>
<td>Automotive Manual Drive Train and Axles</td>
<td>3</td>
</tr>
<tr>
<td>AMT 330</td>
<td>Automatic Transmissions/Transaxles</td>
<td>3</td>
</tr>
<tr>
<td>Total Units:</td>
<td></td>
<td>14</td>
</tr>
</tbody>
</table>

Student Learning Outcomes

Upon completion of this program, the student will be able to:

• Identify components and systems that require periodic inspection and/or maintenance.

• Explain the proper use of service publications used in diagnostic procedures.

• Recognize electronic principles and how they relate to particular automotive systems.

• Perform the necessary repair procedure for a certain set electrical/electronic diagnostic problems.
Understand the operation of clutches, manual transmissions, transaxles, transfer cases, drive shafts, and axle assemblies (powertrain).

Demonstrate the ability to diagnose manual powertrain concerns.

Understand theory and operation of automatic transmissions/transaxles.

Demonstrate the ability to repair automatic transmissions/transaxles.

Automatic Transmissions/Transaxles (Ford ASSET) Certificate

This certificate represents a subset of the Ford Automotive Student Service Education Training (ASSET) Program and is intended for students wishing to specialize in automatic transmissions and transaxles. This certificate is designed to help students develop the skills necessary to efficiently and accurately maintain, diagnose, and service/repair automatic transmissions and transaxles.

Catalog Date: June 1, 2020

Certificate Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMT 370</td>
<td>Ford ASSET Automotive Fundamentals and Dealership Practices</td>
<td>4</td>
</tr>
<tr>
<td>AMT 371</td>
<td>Ford ASSET Automotive Electrical/Electronic Systems</td>
<td>3</td>
</tr>
<tr>
<td>AMT 378</td>
<td>Ford ASSET Automatic Transmissions/Transaxles</td>
<td>3</td>
</tr>
<tr>
<td>AMT 130</td>
<td>Ford ASSET Advanced Automatic Transmission Diagnosis</td>
<td>1.5</td>
</tr>
<tr>
<td>AMT 498</td>
<td>Work Experience in Automotive Mechanics Technology (1 - 4)</td>
<td>3</td>
</tr>
</tbody>
</table>

A minimum of 3 units from the following:

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMT 498</td>
<td>Work Experience in Automotive Mechanics Technology (1 - 4)</td>
</tr>
</tbody>
</table>

Total Units: 14.5

Enrollment Eligibility

To be eligible for enrollment in the program, the student must meet the following criteria:

- Eligibility for ENGWR 101.
- Eligibility for MATH 100.
- Possess a valid driver's license with a driving record that is suitable for the sponsoring dealership's insurance requirements.
- Able to operate a vehicle equipped with a manual transmission.
- Meet sponsoring dealership hiring requirements which may include submitting to a drug test and/or criminal background check.
- Completion of an application for the Ford ASSET Program (can be found at http://www.crc.losrios.edu/cars).

Enrollment Process

Eligible students are selected for the program according to the following steps:

- Students are selected from the applicant pool in the order in which they are received.
- Only students who meet the stated eligibility requirements will be considered for the program.

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- SLO 1: Understand the proper use of tools, equipment, and publications used for automotive diagnosis and repair.
• Understand typical new car dealership hierarchy, structure, and standard procedures.
• Prepare and write repair orders to include: customer information, vehicle identifying information, customer concerns, related service history, cause, and correction.
• SLO 2: Understand the fundamental purpose, components, and operation of automatic transmissions and transaxles.
• SLO 3: Demonstrate the ability to diagnose, service, and repair automatic transmissions and transaxles.
• Verify the outcome of the repair through a test drive analysis or system self-test.

Career Information

• Automotive Maintenance / Light Repair Technician • Automatic Transmission Technician • Ford/Lincoln Specialized Technician (in Service Technician Specialty Training [STST] area 37-Automatic Transmissions)

Automotive Brakes (Ford ASSET) Certificate

This certificate represents a subset of the Ford Automotive Student Service Education Training (ASSET) Program and is intended for students wishing to specialize in automotive brake systems. This certificate is designed to help students develop the skills necessary to efficiently and accurately maintain, diagnose, and service/repair automotive brake systems.

Catalog Date: June 1, 2020

Certificate Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMT 370</td>
<td>Ford ASSET Automotive Fundamentals and Dealership Practices</td>
<td>4</td>
</tr>
<tr>
<td>AMT 371</td>
<td>Ford ASSET Automotive Electrical/Electronic Systems</td>
<td>3</td>
</tr>
<tr>
<td>AMT 372</td>
<td>Ford ASSET Automotive Brake Systems</td>
<td>3</td>
</tr>
<tr>
<td>A minimum of 3 units from the following:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>AMT 498</td>
<td>Work Experience in Automotive Mechanics Technology (1 - 4)</td>
<td>3</td>
</tr>
<tr>
<td>Total Units:</td>
<td></td>
<td>13</td>
</tr>
</tbody>
</table>

Enrollment Eligibility

To be eligible for enrollment in the program, the student must meet the following criteria:

• Eligibility for ENGWR 101.
• Eligibility for MATH 100.
• Possess a valid driver’s license with a driving record that is suitable for the sponsoring dealership’s insurance requirements.
• Able to operate a vehicle equipped with a manual transmission.
• Meet sponsoring dealership hiring requirements which may include submitting to a drug test and/or criminal background check.
• Completion of an application for the Ford ASSET Program (can be found at http://www.crc.losrios.edu/cars).

Enrollment Process

Eligible students are selected for the program according to the following steps:

• Students are selected from the applicant pool in the order in which they are received.
• Only students who meet the stated eligibility requirements will be considered for the program.
Student Learning Outcomes

Upon completion of this program, the student will be able to:

- SLO 1: Understand the proper use of tools, equipment, and publications used for automotive diagnosis and repair.
- Understand typical new car dealership hierarchy, structure, and standard procedures.
- Prepare and write repair orders to include: customer information, vehicle identifying information, customer concerns, related service history, cause, and correction.
- SLO 2: Understand the fundamental purpose, components, and operation of automotive brake systems.
- SLO 3: Demonstrate the ability to diagnose and repair automotive brake systems.
- Verify the outcome of the repair through a test drive analysis or system self-test.

Career Information

- Automotive Maintenance / Light Repair Technician • Brake System Technician • Ford/Lincoln Specialized Technician (in Service Technician Specialty Training [STST] area 38-Brakes)

Automotive Brakes Certificate

This curriculum is designed for students interested in seeking employment in the repair and installation of automotive brakes systems.

Catalog Date: June 1, 2020

Certificate Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMT 300</td>
<td>Automotive Fundamentals and Shop Procedures</td>
<td>4</td>
</tr>
<tr>
<td>AMT 303</td>
<td>Automotive Electrical &amp; Electronic Systems</td>
<td>4</td>
</tr>
<tr>
<td>AMT 310</td>
<td>Engine Performance</td>
<td>3</td>
</tr>
<tr>
<td>AMT 316</td>
<td>Automotive Brakes</td>
<td>3</td>
</tr>
<tr>
<td>AMT 332</td>
<td>Automotive Computerized Controls</td>
<td>3</td>
</tr>
<tr>
<td>Total Units:</td>
<td></td>
<td>17</td>
</tr>
</tbody>
</table>

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- Describe the fundamentals of automotive systems to include engine operation and repair, automatic transmissions/transaxles, manual drive train and axles, suspension and steering, brakes, electrical and electronic systems, heating and air conditioning, and engine performance.
- Describe the fundamentals of diagnosing automotive systems.
- Explain how to perform fundamental diagnostic procedures as outlined in manufacture service publications.
- Describe the theory and operation of Automotive Electrical/Electronic Systems.
- Recall and apply step-by-step diagnostic procedures.
- Repair automotive electrical/electronic systems relating to Brake Systems.
- Understand theory and operation of automotive brake systems.
- Explain the operation of conventional, anti-lock, traction control and electronic stability assist brake systems.
- Demonstrate the ability to repair automotive brake systems.
- Explain theory and operations of automotive computerized controls.
Perform inspection, testing, disassembly, component replacement, reassembly, and confirmation of repair on automotive computerized control systems.

Automotive Electrical Systems (Ford ASSET) Certificate

This certificate represents a subset of the Ford Automotive Student Service Education Training (ASSET) Program and is intended for students wishing to specialize in automotive electrical systems. This certificate is designed to help students develop the skills necessary to efficiently and accurately maintain, diagnose, and service/repair automotive electrical systems.

Catalog Date: June 1, 2020

Certificate Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMT 370</td>
<td>Ford ASSET Automotive Fundamentals and Dealership Practices</td>
<td>4</td>
</tr>
<tr>
<td>AMT 371</td>
<td>Ford ASSET Automotive Electrical/Electronic Systems</td>
<td>3</td>
</tr>
<tr>
<td>AMT 381</td>
<td>Ford ASSET Electronic Engine Control</td>
<td>4</td>
</tr>
<tr>
<td>A minimum of 3 units from the following:</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>AMT 498</td>
<td>Work Experience in Automotive Mechanics Technology (1 - 4)</td>
<td></td>
</tr>
<tr>
<td>Total Units:</td>
<td></td>
<td>14</td>
</tr>
</tbody>
</table>

Enrollment Eligibility

To be eligible for enrollment in the program, the student must meet the following criteria:

- Eligibility for ENGWR 101.
- Eligibility for MATH 100.
- Possess a valid driver's license with a driving record that is suitable for the sponsoring dealership's insurance requirements.
- Able to operate a vehicle equipped with a manual transmission.
- Meet sponsoring dealership hiring requirements which may include submitting to a drug test and/or criminal background check.
- Completion of an application for the Ford ASSET Program (can be found at http://www.crc.losrios.edu/cars).

Enrollment Process

Eligible students are selected for the program according to the following steps:

- Students are selected from the applicant pool in the order in which they are received.
- Only students who meet the stated eligibility requirements will be considered for the program.

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- SLO 1: Understand the proper use of tools, equipment, and publications used for automotive diagnosis and repair.
- Understand typical new car dealership hierarchy, structure, and standard procedures.
- Prepare and write repair orders to include: customer information, vehicle identifying information, customer concerns, related service history, cause, and correction.
- SLO 2: Understand the fundamental purpose, components, and operation of automotive electrical and electronic systems.
- SLO 3: Demonstrate the ability to diagnose, service, and repair automotive electrical and electronic systems.
Career Information

- Automotive Technician (Electrical Specialist) • Ford/Lincoln Specialized Technician (in Service Technician Specialty Training [STST] area 34-Electrical Systems)

Automotive Electrical Systems Certificate

This curriculum is designed for students interested in seeking employment in the diagnosis and repair of automotive electrical systems.

Catalog Date: June 1, 2020

Certificate Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMT 300</td>
<td>Automotive Fundamentals and Shop Procedures</td>
<td>4</td>
</tr>
<tr>
<td>AMT 303</td>
<td>Automotive Electrical &amp; Electronic Systems</td>
<td>4</td>
</tr>
<tr>
<td>AMT 310</td>
<td>Engine Performance</td>
<td>3</td>
</tr>
<tr>
<td>AMT 321</td>
<td>Advanced Automotive Electrical &amp; Hybrid Vehicle Systems</td>
<td>3</td>
</tr>
<tr>
<td>AMT 332</td>
<td>Automotive Computerized Controls</td>
<td>3</td>
</tr>
<tr>
<td>Total Units</td>
<td></td>
<td>17</td>
</tr>
</tbody>
</table>

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- Describe the fundamentals of automotive systems to include engine operation and repair, automatic transmissions/transaxles, manual drive train and axles, suspension and steering, brakes, electrical and electronic systems, heating and air conditioning, and engine performance.
- Explain how to perform fundamental diagnostic procedures as outlined in manufacture service publications.
- Describe the theory and operation of Automotive Electrical/Electronic Systems.
- Perform the necessary repair procedure for a certain set electrical/electronic diagnostic problems.
- Describe the theory and the operation of automotive ignition systems.
- Apply test procedures on automotive ignition systems and components
- Describe the theory and operation of Electronic Control Systems.
- Diagnose automotive electronic control system concerns.
- Explain the relationships between input sensors, processing and output sensors.
- Perform the necessary repair procedures for a certain set of automotive computerized control diagnostic problems.

Automotive Emission Control Certificate

This curriculum is designed for students who are interested in seeking employment in the inspection, diagnosis, and/or repair of automotive emission control systems. Students completing this program may be eligible to pursue licensing as a California SMOG Check Inspector and/or California SMOG Check Repair Technician.

Catalog Date: June 1, 2020

Certificate Requirements
<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMT 300</td>
<td>Automotive Fundamentals and Shop Procedures</td>
<td>4</td>
</tr>
<tr>
<td>AMT 303</td>
<td>Automotive Electrical &amp; Electronic Systems</td>
<td>4</td>
</tr>
<tr>
<td>AMT 310</td>
<td>Engine Performance</td>
<td>3</td>
</tr>
<tr>
<td>AMT 324</td>
<td>Electronic Fuel Injection</td>
<td>3</td>
</tr>
<tr>
<td>AMT 332</td>
<td>Automotive Computerized Controls</td>
<td>3</td>
</tr>
<tr>
<td>AMT 340</td>
<td>Emission Control Inspection and Repair</td>
<td>5(^1)</td>
</tr>
</tbody>
</table>

Total Units: 22

\(^1\)A current advanced emission control smog license will meet the requirement for AMT 340. ASE (Automotive Service Excellence) Certification in A6, A8, and L1 will meet requirements for AMT 303, 310, 332. No units will be earned for requirements met through licensing or certification exams. In these cases fewer total units are required.

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- Recognize electronic principles and how they relate to particular automotive systems.
- Diagnose automotive engine performance concerns.
- Demonstrate the ability to diagnose electronic fuel injection.
- Diagnose automotive computerized control concerns.
- Identify the fundamentals of automotive emission systems to include electrical, vacuum, computerized vehicle emission components, emission regulations, emission testing, emission reduction systems, and emission inspection/diagnostic equipment.

Automotive Engine Performance (Ford ASSET) Certificate

This certificate represents a subset of the Ford Automotive Student Service Education Training (ASSET) Program and is intended for students wishing to specialize in gasoline engine performance systems. This certificate is designed to help students develop the skills necessary to efficiently and accurately maintain, diagnose, and service/repair gasoline engine performance systems.

Catalog Date: June 1, 2020

Certificate Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMT 371</td>
<td>Ford ASSET Automotive Electrical/Electronic Systems</td>
<td>3</td>
</tr>
<tr>
<td>AMT 381</td>
<td>Ford ASSET Electronic Engine Control</td>
<td>4</td>
</tr>
<tr>
<td>AMT 382</td>
<td>Ford ASSET Gasoline Engine Performance</td>
<td>3</td>
</tr>
<tr>
<td>AMT 383</td>
<td>Ford ASSET Advanced Gasoline Engine Performance</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Units: 13

Enrollment Eligibility

To be eligible for enrollment in the program, the student must meet the following criteria:

- Eligibility for ENGWR 101.
- Eligibility for MATH 100.
- Possess a valid driver’s license with a driving record that is suitable for the sponsoring dealership’s insurance requirements.
Able to operate a vehicle equipped with a manual transmission.
Meet sponsoring dealership hiring requirements which may include submitting to a drug test and/or criminal background check.
Completion of an application for the Ford ASSET Program (can be found at http://www.crclosrios.edu/cars).

Enrollment Process
Eligible students are selected for the program according to the following steps:

- Students are selected from the applicant pool in the order in which they are received.
- Only students who meet the stated eligibility requirements will be considered for the program.

Student Learning Outcomes
Upon completion of this program, the student will be able to:

- SLO 1: Understand the proper use of tools, equipment, and publications used for automotive diagnosis and repair.
- Demonstrate the use of special tools necessary to repair gasoline engine performance systems and their components.
- Prepare and write repair orders to include: customer information, vehicle identifying information, customer concerns, related service history, cause, and correction.
- SLO 2: Understand the fundamental purpose, components, and operation of gasoline engine performance systems.
- SLO 3: Demonstrate the ability to diagnose, service, and repair gasoline engine performance systems and their components.
- Verify the outcome of the repair through a test drive analysis or system self-test.

Career Information
- Automotive Technician (Drivability Specialist) • Ford/Lincoln Specialized Technician (in Service Technician Specialty Training [STST] area 31-Gasoline Engine Performance)

Automotive Engine Performance Certificate
This curriculum is designed for students who are interested in seeking employment in the inspection, maintenance, diagnosis, and repair of automotive engine performance systems.

Catalog Date: June 1, 2020

Certificate Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMT 300</td>
<td>Automotive Fundamentals and Shop Procedures</td>
<td>4</td>
</tr>
<tr>
<td>AMT 303</td>
<td>Automotive Electrical &amp; Electronic Systems</td>
<td>4</td>
</tr>
<tr>
<td>AMT 306</td>
<td>Small Engine Repair (3)</td>
<td>3</td>
</tr>
<tr>
<td>or AMT 322</td>
<td>Engine Repair (3)</td>
<td></td>
</tr>
<tr>
<td>AMT 310</td>
<td>Engine Performance</td>
<td>3</td>
</tr>
<tr>
<td>AMT 321</td>
<td>Advanced Automotive Electrical &amp; Hybrid Vehicle Systems</td>
<td>3</td>
</tr>
<tr>
<td>AMT 324</td>
<td>Electronic Fuel Injection</td>
<td>3</td>
</tr>
<tr>
<td>AMT 332</td>
<td>Automotive Computerized Controls (3)</td>
<td>3 - 5</td>
</tr>
<tr>
<td>or AMT 340</td>
<td>Emission Control Inspection and Repair (5)</td>
<td></td>
</tr>
</tbody>
</table>

Total Units: 23 - 25
Student Learning Outcomes
Upon completion of this program, the student will be able to:

- Recognize electronic principles and how they relate to particular automotive systems.
- Explain the proper use of technical service publications used in the diagnostic procedure.
- Repair automotive engine performance systems.
- Describe theory and the operation of automotive ignition systems.
- Diagnose automotive electronic control system concerns.
- Diagnose engine mechanical concerns and conduct diagnostic testing procedures.
- Understand theory and operation of electronic fuel injection.
- Perform the necessary repair procedures for a certain set of automotive computerized control diagnostic problems.
- Identify the fundamentals of automotive emission systems to include electrical, vacuum, computerized vehicle emission components, emission regulations, emission testing, emission reduction systems, and emission inspection/diagnostic equipment.

Automotive Engine Repair (Ford ASSET) Certificate
This certificate represents a subset of the Ford Automotive Student Service Education Training (ASSET) Program and is intended for students wishing to specialize in automotive engine repair. This certificate is designed to help students develop the skills necessary to efficiently and accurately maintain, diagnose, and service/repair automotive engines.

Catalog Date: June 1, 2020

Certificate Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMT 370</td>
<td>Ford ASSET Automotive Fundamentals and Dealership Practices</td>
<td>4</td>
</tr>
<tr>
<td>AMT 379</td>
<td>Ford ASSET Automotive Engine Repair</td>
<td>3</td>
</tr>
<tr>
<td>AMT 382</td>
<td>Ford ASSET Gasoline Engine Performance</td>
<td>3</td>
</tr>
<tr>
<td>A minimum of 3 units from the following:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>AMT 498</td>
<td>Work Experience in Automotive Mechanics Technology (1 - 4)</td>
<td>3</td>
</tr>
<tr>
<td>Total Units:</td>
<td></td>
<td>13</td>
</tr>
</tbody>
</table>

Enrollment Eligibility
To be eligible for enrollment in the program, the student must meet the following criteria:

- Eligibility for ENGWR 101.
- Eligibility for MATH 100.
- Possess a valid driver’s license with a driving record that is suitable for the sponsoring dealership’s insurance requirements.
- Able to operate a vehicle equipped with a manual transmission.
- Meet sponsoring dealership hiring requirements which may include submitting to a drug test and/or criminal background check.
- Completion of an application for the Ford ASSET Program (can be found at http://www.crc.losrios.edu/cars).

Enrollment Process
Eligible students are selected for the program according to the following steps:
Students are selected from the applicant pool in the order in which they are received.

Only students who meet the stated eligibility requirements will be considered for the program.

**Student Learning Outcomes**

Upon completion of this program, the student will be able to:

- SLO 1: Understand the proper use of tools, equipment, and publications used for automotive diagnosis and repair.
- Understand typical new car dealership hierarchy, structure, and standard procedures.
- Prepare and write repair orders to include: customer information, vehicle identifying information, customer concerns, related service history, cause, and correction.
- SLO 2: Understand the fundamental purpose, components, and operation of automotive engines.
- SLO 3: Diagnose engine mechanical concerns, conduct diagnostic testing procedures, and perform the procedures and techniques involved in typical engine repairs and overhauls.
- Verify the outcome of the repair through a test drive analysis or system self-test.

**Career Information**

- Automotive Technician (Engine Repair Specialist) • Ford/Lincoln Specialized Technician (in Service Technician Specialty Training [STST] area 32-Gasoline Engine Repair)

**Automotive Engine Repair Certificate**

This curriculum is designed for students interested in seeking employment in the engine overhaul and engine repair field.

**Catalog Data:** June 1, 2020

**Certificate Requirements**

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMT 300</td>
<td>Automotive Fundamentals and Shop Procedures</td>
<td>4</td>
</tr>
<tr>
<td>AMT 306</td>
<td>Small Engine Repair</td>
<td>3</td>
</tr>
<tr>
<td>AMT 322</td>
<td>Engine Repair</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>A minimum of 3 units from the following:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Any other Automotive Mechanics Technology course</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total Units:</td>
<td>13</td>
</tr>
</tbody>
</table>

**Student Learning Outcomes**

Upon completion of this program, the student will be able to:

- SLO 1: Understand the proper use of tools, equipment, and publications used for automotive diagnosis and repair.
- Understand typical automotive repair shop hierarchy, structure, and standard procedures.
- Prepare and write repair orders to include: customer information, vehicle identifying information, customer concerns, related service history, cause, and correction.
- SLO 2: Understand the fundamental purpose, components, and operation of automotive engines.
- SLO 3: Diagnose engine mechanical concerns, conduct diagnostic testing procedures, and perform the procedures and techniques involved in typical engine repairs and overhauls.
- Verify the outcome of the repair through a test drive analysis or system self-test.
Automotive Heating and Air Conditioning (Ford ASSET) Certificate

This certificate represents a subset of the Ford Automotive Student Service Education Training (ASSET) Program and is intended for students wishing to specialize in automotive heating and air conditioning systems. This certificate is designed to help students develop the skills necessary to efficiently and accurately maintain, diagnose, and service/repair automotive heating and air conditioning systems.

Catalog Date: June 1, 2020

Certificate Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMT 370</td>
<td>Ford ASSET Automotive Fundamentals and Dealership Practices</td>
<td>4</td>
</tr>
<tr>
<td>AMT 371</td>
<td>Ford ASSET Automotive Electrical/Electronic Systems</td>
<td>3</td>
</tr>
<tr>
<td>AMT 376</td>
<td>Ford ASSET Automotive Heating and Air Conditioning</td>
<td>3</td>
</tr>
<tr>
<td>AMT 379</td>
<td>Ford ASSET Automotive Engine Repair</td>
<td>3</td>
</tr>
<tr>
<td>Total Units</td>
<td></td>
<td>13</td>
</tr>
</tbody>
</table>

Enrollment Eligibility

To be eligible for enrollment in the program, the student must meet the following criteria:

- Eligibility for ENGWR 101.
- Eligibility for MATH 100.
- Possess a valid driver’s license with a driving record that is suitable for the sponsoring dealership’s insurance requirements.
- Able to operate a vehicle equipped with a manual transmission.
- Meet sponsoring dealership hiring requirements which may include submitting to a drug test and/or criminal background check.
- Completion of an application for the Ford ASSET Program (can be found at http://www.crc.losrios.edu/cars).

Enrollment Process

Eligible students are selected for the program according to the following steps:

- Students are selected from the applicant pool in the order in which they are received.
- Only students who meet the stated eligibility requirements will be considered for the program.

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- SLO 1: Understand the proper use of tools, equipment, and publications used for automotive diagnosis and repair.
- Understand typical new car dealership hierarchy, structure, and standard procedures.
- Prepare and write repair orders to include: customer information, vehicle identifying information, customer concerns, related service history, cause, and correction.
- SLO 2: Understand the fundamental purpose, components, and operation of automotive heating and air conditioning systems.
- SLO 3: Demonstrate the ability to diagnose and repair automotive heating, ventilation, and air conditioning (HVAC) system concerns.
- Verify the outcome of the repair through a test drive analysis or system self-test.
Career Information

• Automotive Maintenance / Light Repair Technician • Automotive HVAC Technician • Ford/Lincoln Specialized Technician (in Service Technician Specialty Training [STST] area 35-Climate Control)

Automotive Heating and Air Conditioning Certificate

This curriculum is designed for students interested in seeking employment in the automotive heating and air conditioning repair/installation field.

Catalog Date: June 1, 2020

Certificate Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMT 300</td>
<td>Automotive Fundamentals and Shop Procedures</td>
<td>4</td>
</tr>
<tr>
<td>AMT 303</td>
<td>Automotive Electrical &amp; Electronic Systems</td>
<td>4</td>
</tr>
<tr>
<td>AMT 310</td>
<td>Engine Performance</td>
<td>3</td>
</tr>
<tr>
<td>AMT 326</td>
<td>Automotive Heating and Air Conditioning</td>
<td>3</td>
</tr>
<tr>
<td>AMT 332</td>
<td>Automotive Computerized Controls</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Total Units:</strong></td>
<td><strong>17</strong></td>
</tr>
</tbody>
</table>

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- Describe the fundamentals of diagnosing automotive systems.
- Explain the proper use of service publications used in diagnostic procedures.
- Recognize electronic principles and how they relate to particular automotive systems.
- Perform the necessary repair procedure for a certain set electrical/electronic diagnostic problems.
- Understand the basic operation of automotive air conditioning (A/C) and engine cooling systems.
- Repair automotive air conditioning (A/C) and cooling systems.

Automotive Mechanics Technology (Ford ASSET) Certificate

The Ford Automotive Student Service Education Training (ASSET) Program is a two-year program in Automotive Mechanics Technology. This program is designed to help students develop the skills necessary to efficiently and accurately maintain, diagnose, and service/repair all major systems of the automobile.

The Ford ASSET Program is a partnership between Cosumnes River College (CRC) and Ford Motor Company. Ford ASSET is the only program that includes an in dealership cooperative work experience component. Students will rotate between school and the dealership for the duration of the two-year program, giving them invaluable hands-on experience while they learn.
Courses within the Ford ASSET program allow students to earn Service Technician Specialty Training (STST) certifications from Ford Motor Company in the following areas:

- Electrical Systems
- Brake Systems
- Steering & Suspension
- Climate Control
- Automatic Transmissions
- Gasoline Engine Repair
- Gasoline Engine Performance
- Diesel Engine Repair
- Diesel Engine Performance
- Manual Transmissions

Instructors for this program are Ford STST certified as required by Ford Motor Company standards.

Completion of this certificate also represents completion of a National Automotive Technicians Education Foundation (NATEF) accredited Master Automotive Service Technology (MAST) program. Instructors for this program are Automotive Service Excellence (ASE) certified as required by NATEF standards.

Upon successful completion of this program, students are well qualified for placement as service technicians in Ford and/or Lincoln dealerships. Students may apply units earned by the successful completion of this program to one or more of the specialized certificates as well as the Associate’s degree.

**Catalog Date:** June 1, 2020

### Certificate Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMT 370</td>
<td>Ford ASSET Automotive Fundamentals and Dealership Practices</td>
<td>4</td>
</tr>
<tr>
<td>AMT 371</td>
<td>Ford ASSET Automotive Electrical/Electronic Systems</td>
<td>3</td>
</tr>
<tr>
<td>AMT 372</td>
<td>Ford ASSET Automotive Brake Systems</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>A minimum of 3 units from the following:</td>
<td>3</td>
</tr>
<tr>
<td>AMT 498</td>
<td>Work Experience in Automotive Mechanics Technology (1 - 4)</td>
<td></td>
</tr>
<tr>
<td>AMT 374</td>
<td>Ford ASSET Automotive Suspension and Steering</td>
<td>3</td>
</tr>
<tr>
<td>AMT 375</td>
<td>Ford ASSET Automotive Wheel Alignment</td>
<td>3</td>
</tr>
<tr>
<td>AMT 376</td>
<td>Ford ASSET Automotive Heating and Air Conditioning</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>A minimum of 3 units from the following:</td>
<td>3</td>
</tr>
<tr>
<td>AMT 498</td>
<td>Work Experience in Automotive Mechanics Technology (1 - 4)</td>
<td></td>
</tr>
<tr>
<td>AMT 378</td>
<td>Ford ASSET Automatic Transmissions/Transaxles</td>
<td>3</td>
</tr>
<tr>
<td>AMT 130</td>
<td>Ford ASSET Advanced Automatic Transmission Diagnosis</td>
<td>1.5</td>
</tr>
<tr>
<td>AMT 379</td>
<td>Ford ASSET Automotive Engine Repair</td>
<td>3</td>
</tr>
<tr>
<td>AMT 385</td>
<td>Ford ASSET Automotive Manual Drive Train and Axles</td>
<td>1.5</td>
</tr>
<tr>
<td>AMT 381</td>
<td>Ford ASSET Electronic Engine Control</td>
<td>4</td>
</tr>
<tr>
<td>AMT 382</td>
<td>Ford ASSET Gasoline Engine Performance</td>
<td>3</td>
</tr>
<tr>
<td>AMT 383</td>
<td>Ford ASSET Advanced Gasoline Engine Performance</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>A minimum of 3 units from the following:</td>
<td>3</td>
</tr>
<tr>
<td>AMT 498</td>
<td>Work Experience in Automotive Mechanics Technology (1 - 4)</td>
<td></td>
</tr>
<tr>
<td>AMT 131</td>
<td>Ford ASSET Diesel Engine Performance</td>
<td>3</td>
</tr>
<tr>
<td>AMT 340</td>
<td>Emission Control Inspection and Repair</td>
<td>5</td>
</tr>
<tr>
<td>WELD 160</td>
<td>Welding Technology for the Automotive Industry</td>
<td>1.5</td>
</tr>
<tr>
<td></td>
<td>A minimum of 3 units from the following:</td>
<td>3</td>
</tr>
<tr>
<td>AMT 498</td>
<td>Work Experience in Automotive Mechanics Technology (1 - 4)</td>
<td></td>
</tr>
</tbody>
</table>
To be eligible for enrollment in the program, the student must meet the following criteria:

- Eligibility for ENGWR 101.
- Eligibility for MATH 100.
- Possess a valid driver’s license with a driving record that is suitable for the sponsoring dealership’s insurance requirements.
- Able to operate a vehicle equipped with a manual transmission.
- Meet sponsoring dealership hiring requirements which may include submitting to a drug test and/or criminal background check.
- Completion of an application for the Ford ASSET Program (can be found at http://www.crc.losrios.edu/cars).

Eligible students are selected for the program according to the following steps:

- Students are selected from the applicant pool in the order in which they are received.
- Only students who meet the stated eligibility requirements will be considered for the program.

Upon completion of this program, the student will be able to:

- PSLO 1: Understand the fundamental purpose, components, and operation of major automotive systems to include gasoline engines, automatic transmissions and transaxles, manual transmissions, drivetrains, and axles, suspension and steering systems, brake systems, electrical and electronic systems, heating and air conditioning systems, and engine performance systems.
- PSLO 2: Understand the proper use of tools, equipment, and publications used for automotive diagnosis and repair.
- Understand typical new car dealership hierarchy, structure, and standard procedures.
- Prepare and write repair orders to include: customer information, vehicle identifying information, customer concerns, related service history, cause, and correction.
- PSLO 3: Diagnose engine mechanical concerns, conduct diagnostic testing procedures, and perform the procedures and techniques involved in typical engine repairs and overhauls.
- PSLO 4: Demonstrate the ability to diagnose, service, and repair automatic transmissions and transaxles.
- PSLO 5: Demonstrate the ability to diagnose and repair manual transmissions, transaxles, and drive train concerns.
- PSLO 6: Demonstrate the ability to diagnose and repair automotive suspension and steering concerns.
- PSLO 7: Demonstrate the ability to diagnose and repair automotive brake systems.
- PSLO 8: Demonstrate the ability to diagnose and repair automotive electrical and electronic concerns.
- PSLO 9: Demonstrate the ability to diagnose and repair automotive heating, ventilation, and air conditioning (HVAC) system concerns.
- PSLO 10: Demonstrate the ability to diagnose, service, and repair gasoline engine performance systems and their components.
- Verify the outcome of the repair through a test drive analysis or system self-test.
• Automotive Technician • Light Duty Diesel Technician • Ford/Lincoln Specialized Technician (in any of the Service Technician Specialty Training [STST] areas) • Ford/Lincoln Engine Master Technician • Ford/Lincoln Chassis Master Technician • Ford/Lincoln Drivetrain Master Technician • Ford/Lincoln Senior Master Technician

Students who successfully complete the program will: • Earn a certificate in Automotive Mechanics Technology. • Be granted Ford Service Technician Specialty Training (STST) credentials. • Be prepared for Automotive Service Excellence (ASE) certification in all Automobile series areas. • Be eligible to sit for testing for both the California SMOG Inspector and SMOG Repair licenses.

Automotive Mechanics Technology Certificate

This one-year curriculum is designed for students who are seeking basic job entry skills for employment in the automotive field. Subsequent certificates and/or an Associate degree in Automotive Mechanics Technology can be earned without the need to repeat courses completed as part of this certificate. Completion of this certificate also represents completion of a National Automotive Technicians Education Foundation (NATEF) accredited Master Automotive Service Technology (MAST) program. Instructors for this program are Automotive Service Excellence (ASE) certified as required by NATEF standards.

Catalog Date: June 1, 2020

Certificate Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMT 300</td>
<td>Automotive Fundamentals and Shop Procedures</td>
<td>4</td>
</tr>
<tr>
<td>AMT 303</td>
<td>Automotive Electrical &amp; Electronic Systems</td>
<td>4</td>
</tr>
<tr>
<td>AMT 304</td>
<td>Automotive Manual Drive Train and Axles</td>
<td>3</td>
</tr>
<tr>
<td>AMT 310</td>
<td>Engine Performance</td>
<td>3</td>
</tr>
<tr>
<td>AMT 314</td>
<td>Wheel Alignment</td>
<td>3</td>
</tr>
<tr>
<td>AMT 316</td>
<td>Automotive Brakes</td>
<td>3</td>
</tr>
<tr>
<td>AMT 322</td>
<td>Engine Repair</td>
<td>3</td>
</tr>
<tr>
<td>AMT 324</td>
<td>Electronic Fuel Injection</td>
<td>3</td>
</tr>
<tr>
<td>AMT 326</td>
<td>Automotive Heating and Air Conditioning</td>
<td>3</td>
</tr>
<tr>
<td>AMT 330</td>
<td>Automatic Transmissions/Transaxles</td>
<td>3</td>
</tr>
<tr>
<td>AMT 332</td>
<td>Automotive Computerized Controls</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>A minimum of 5 units from the following:</td>
<td></td>
</tr>
<tr>
<td>AMT 140</td>
<td>Automotive Service (1)</td>
<td></td>
</tr>
<tr>
<td>AMT 301</td>
<td>Automotive Service Management (3)</td>
<td></td>
</tr>
<tr>
<td>AMT 305</td>
<td>Survey of Alternative Fueled &amp; Hybrid Vehicles (3)</td>
<td></td>
</tr>
<tr>
<td>AMT 306</td>
<td>Small Engine Repair</td>
<td></td>
</tr>
<tr>
<td>AMT 308</td>
<td>Late Model Car Care and Maintenance (3)</td>
<td></td>
</tr>
<tr>
<td>AMT 498</td>
<td>Work Experience in Automotive Mechanics Technology (1 - 4)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>A minimum of 3 units from the following:</td>
<td></td>
</tr>
<tr>
<td>AMT 321</td>
<td>Advanced Automotive Electrical &amp; Hybrid Vehicle Systems (3)</td>
<td></td>
</tr>
<tr>
<td>AMT 328</td>
<td>Light Duty Diesel Engine Performance (3)</td>
<td></td>
</tr>
<tr>
<td>AMT 336</td>
<td>Advanced Service Management (3)</td>
<td></td>
</tr>
<tr>
<td>AMT 340</td>
<td>Emission Control Inspection and Repair (5)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total Units:</td>
<td>43</td>
</tr>
</tbody>
</table>

Student Learning Outcomes
Upon completion of this program, the student will be able to:

- **PSLO 1**: Understand the fundamental purpose, components, and operation of major automotive systems to include gasoline engines, automatic transmissions and transaxles, manual transmissions, drivetrains, and axles, suspension and steering systems, brake systems, electrical and electronic systems, heating and air conditioning systems, and engine performance systems.

- **PSLO 2**: Understand the proper use of tools, equipment, and publications used for automotive diagnosis and repair.

- Understand typical automotive shop hierarchy, structure, and standard procedures.

- Prepare and write repair orders to include: customer information, vehicle identifying information, customer concerns, related service history, cause, and correction.

- **PSLO 3**: Diagnose engine mechanical concerns, conduct diagnostic testing procedures, and perform the procedures and techniques involved in typical engine repairs and overhauls.

- **PSLO 4**: Demonstrate the ability to diagnose, service, and repair automatic transmissions and transaxles.

- **PSLO 5**: Demonstrate the ability to diagnose and repair manual transmissions, transaxles, and drive train concerns.

- **PSLO 6**: Demonstrate the ability to diagnose and repair automotive suspension and steering concerns.

- **PSLO 7**: Demonstrate the ability to diagnose and repair automotive brake systems.

- **PSLO 8**: Demonstrate the ability to diagnose and repair automotive electrical and electronic concerns.

- **PSLO 9**: Demonstrate the ability to diagnose and repair automotive heating, ventilation, and air conditioning (HVAC) system concerns.

- **PSLO 10**: Demonstrate the ability to diagnose, service, and repair gasoline engine performance systems and their components.

- Verify the outcome of the repair through a test drive analysis or system self-test.

### Career Information

Auto Technician; Auto/Truck Specialist; Automotive Microcomputer Programmer & Operator; Field Service/Sales Representative; Inventory Controls Manager; Tune-up & Electrical Specialist. ASE certified in the areas of Brakes, Electrical/Electronic Systems, Engine Performance, Suspension and Steering, Automatic Transmission/Transaxle, Engine Repair, Heating and Air Conditioning, and Manual Drive Train and Axles.

### Automotive Suspension and Steering (Ford ASSET) Certificate

This certificate represents a subset of the Ford Automotive Student Service Education Training (ASSET) Program and is intended for students wishing to specialize in automotive suspension and steering systems. This certificate is designed to help students develop the skills necessary to efficiently and accurately maintain, diagnose, and service/repair automotive suspension and steering systems.

**Catalog Date:** June 1, 2020

### Certificate Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMT 370</td>
<td>Ford ASSET Automotive Fundamentals and Dealership Practices</td>
<td>4</td>
</tr>
<tr>
<td>AMT 371</td>
<td>Ford ASSET Automotive Electrical/Electronic Systems</td>
<td>3</td>
</tr>
<tr>
<td>AMT 374</td>
<td>Ford ASSET Automotive Suspension and Steering</td>
<td>3</td>
</tr>
<tr>
<td>AMT 375</td>
<td>Ford ASSET Automotive Wheel Alignment</td>
<td>3</td>
</tr>
<tr>
<td>Total Units</td>
<td></td>
<td>13</td>
</tr>
</tbody>
</table>

### Enrollment Eligibility

To be eligible for enrollment in the program, the student must meet the following criteria:

- Eligibility for ENGWR 101.
Eligibility for MATH 100.

- Possess a valid driver's license with a driving record that is suitable for the sponsoring dealership's insurance requirements.
- Able to operate a vehicle equipped with a manual transmission.
- Meet sponsoring dealership hiring requirements which may include submitting to a drug test and/or criminal background check.
- Completion of an application for the Ford ASSET Program (can be found at http://www.crc.losrios.edu/cars).

Enrollment Process

Eligible students are selected for the program according to the following steps:

- Students are selected from the applicant pool in the order in which they are received.
- Only students who meet the stated eligibility requirements will be considered for the program.

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- SLO 1: Understand the proper use of tools, equipment, and publications used for automotive diagnosis and repair.
- Understand typical new car dealership hierarchy, structure, and standard procedures.
- Prepare and write repair orders to include: customer information, vehicle identifying information, customer concerns, related service history, cause, and correction.
- SLO 2: Understand the fundamental purpose, components, and operation of automotive suspension and steering systems.
- SLO 3: Demonstrate the ability to diagnose and repair automotive suspension and steering systems.
- Verify the outcome of the repair through a test drive analysis or system self-test.

Career Information

- Automotive Maintenance / Light Repair Technician
- Ford/Lincoln Specialized Technician (in Service Technician Specialty Training [STST] area 33-Steering and Suspension)

Automotive Suspension and Steering Certificate

This curriculum is designed for students interested in seeking employment in the automotive suspension, steering, or wheel alignment fields.

Catalog Date: June 1, 2020

Certificate Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMT 300</td>
<td>Automotive Fundamentals and Shop Procedures</td>
<td>4</td>
</tr>
<tr>
<td>AMT 303</td>
<td>Automotive Electrical &amp; Electronic Systems</td>
<td>4</td>
</tr>
<tr>
<td>AMT 310</td>
<td>Engine Performance</td>
<td>3</td>
</tr>
<tr>
<td>AMT 314</td>
<td>Wheel Alignment</td>
<td>3</td>
</tr>
<tr>
<td>AMT 332</td>
<td>Automotive Computerized Controls</td>
<td>3</td>
</tr>
<tr>
<td>Total Units:</td>
<td></td>
<td>17</td>
</tr>
</tbody>
</table>

Student Learning Outcomes
Upon completion of this program, the student will be able to:

- Explain the proper use of service publications used in diagnostic procedures.
- Recognize electronic principles and how they relate to particular automotive systems.
- Diagnose vehicle alignment angle concerns.
- Explain theory and operations of automotive computerized controls.

Manual Drive Train and Axles (Ford ASSET) Certificate

This certificate represents a subset of the Ford Automotive Student Service Education Training (ASSET) Program and is intended for students wishing to specialize in manual transmissions/transaxles, drive trains, and axles. This certificate is designed to help students develop the skills necessary to efficiently and accurately maintain, diagnose, and service/repair manual transmissions/transaxles, drive trains, and axles.

**Catalog Date:** June 1, 2020

Certificate Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMT 370</td>
<td>Ford ASSET Automotive Fundamentals and Dealership Practices</td>
<td>4</td>
</tr>
<tr>
<td>AMT 378</td>
<td>Ford ASSET Automatic Transmissions/Transaxles</td>
<td>3</td>
</tr>
<tr>
<td>AMT 385</td>
<td>Ford ASSET Automotive Manual Drive Train and Axles</td>
<td>1.5</td>
</tr>
<tr>
<td>AMT 498</td>
<td>Work Experience in Automotive Mechanics Technology (1 - 4)</td>
<td>3</td>
</tr>
</tbody>
</table>

A minimum of 3 units from the following:

<table>
<thead>
<tr>
<th>AMT 498</th>
</tr>
</thead>
<tbody>
<tr>
<td>Work Experience in Automotive Mechanics Technology (1 - 4)</td>
</tr>
</tbody>
</table>

**Total Units:** 11.5

Enrollment Eligibility

To be eligible for enrollment in the program, the student must meet the following criteria:

- Eligibility for ENGWR 101.
- Eligibility for MATH 100.
- Possess a valid driver's license with a driving record that is suitable for the sponsoring dealership's insurance requirements.
- Able to operate a vehicle equipped with a manual transmission.
- Meet sponsoring dealership hiring requirements which may include submitting to a drug test and/or criminal background check.
- Completion of an application for the Ford ASSET Program (can be found at http://www.crclosrios.edu/cars).

Enrollment Process

Eligible students are selected for the program according to the following steps:

- Students are selected from the applicant pool in the order in which they are received.
- Only students who meet the stated eligibility requirements will be considered for the program.

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- **SLO 1:** Understand the proper use of tools, equipment, and publications used for automotive diagnosis and repair.
- Understand typical new car dealership hierarchy, structure, and standard procedures.
Prepare and write repair orders to include: customer information, vehicle identifying information, customer concerns, related service history, cause, and correction.

SLO 2: Understand the fundamental purpose, components, and operation of manual transmissions/transaxles, drive trains, and axles.

SLO 3: Demonstrate the ability to diagnose and repair manual transmissions, transaxles, and drive train concerns.

Verify the outcome of the repair through a test drive analysis or system self-test.

Career Information

• Automotive Technician (Clutch Specialist) • Manual Transmission Technician • Ford/Lincoln Specialized Technician (in Service Technician Specialty Training [STST] area 36-Manual Transmissions)

Small Engine Repair Certificate

This curriculum is designed for students who are interested in obtaining skills necessary for the repair of small engines used in industry, home maintenance, landscape maintenance and recreation.

Catalog Date: June 1, 2020

Certificate Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMT 303</td>
<td>Automotive Electrical &amp; Electronic Systems</td>
<td>4</td>
</tr>
<tr>
<td>AMT 306</td>
<td>Small Engine Repair</td>
<td>3</td>
</tr>
<tr>
<td>AMT 310</td>
<td>Engine Performance</td>
<td>3</td>
</tr>
<tr>
<td>AMT 324</td>
<td>Electronic Fuel Injection</td>
<td>3</td>
</tr>
<tr>
<td>Total Units:</td>
<td></td>
<td>13</td>
</tr>
</tbody>
</table>

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- Recognize electronic principles and how they relate to particular automotive systems.
- Perform the necessary repair procedure for a certain set electrical/electronic diagnostic problems.
- Diagnose small engine operation concerns.
- Assess and repair small engine systems.
- Understand theory and operation of electronic fuel injection.
- Demonstrate the ability to repair electronic fuel injection systems.

Automotive Mechanics Technology (AMT)

AMT 101 Bureau of Automotive Repair (BAR) Emissions Update

Units: 1
Hours: 18 hours LEC
Prerequisite: None.
Advisory: Individuals taking this course should have a current or expired California Smog Check Inspection and/or Repair License.
Catalog Date: June 1, 2020
This Bureau of Automotive Repair (BAR) Emissions Update Course is an 18 hour course which meets the mandatory bi-annual educational update requirement for license renewal of Emission Repair technicians in the State of California. Technicians may take this course up to two years prior to license expiration.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO 1: Interpret State of California regulation changes within the Health and Safety code regarding vehicle emission certification.
- SLO 2: Analyze changes to required SMOG inspection processes.
- Implement new procedures into practice to ensure SMOG inspections are performed in compliance with statutes and regulations.
- SLO 3: Identify BAR regulatory changes in regards to vehicle emission inspection and repair.

AMT 130 Ford ASSET Advanced Automatic Transmission Diagnosis

| Units: | 1.5 |
| Hours: | 27 hours LEC |
| Prerequisite: | None |
| Enrollment Limitation: | Students taking this course must be enrolled in the Ford Automotive Student Service Education Training (ASSET) program due to prerequisite Ford Motor Company training requirements. |
| Catalog Date: | June 1, 2020 |

This course is offered to students enrolled in the Ford Automotive Student Service Education Training (ASSET) program. This course provides a review of electronically controlled automatic transmissions and transaxles to include electronic control system theory, hydraulic/mechanical system theory, electronic testing procedures, hydraulic testing procedures, mechanical testing procedures, module programming and configuration, and adaptive shift strategies. Students who successfully complete this course may be eligible for Ford Service Technician Specialty Training (STST) certification.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO 1: Understand the theory and operation of advanced electronically controlled automatic transmissions and transaxles.
- Explain the operation of advanced automatic transmission and transaxle electronic control systems.
- Explain the operation of advanced automatic transmission and transaxle hydraulic and mechanical systems.
- SLO 2: Demonstrate the ability to diagnose advanced automatic transmission and transaxle concerns.
- Identify advanced automatic transmission and transaxle components.
- Perform mechanical testing of advanced automatic transmission and transaxle concerns to evaluate component condition and/or system operation.
- Perform hydraulic testing of advanced automatic transmission and transaxle concerns to evaluate component condition and/or system operation.
- Perform electronic testing of advanced automatic transmission and transaxle concerns to evaluate component condition and/or system operation.
- SLO 3: Demonstrate the ability to repair advanced automatic transmission and transaxle concerns.
- Select, service, and replace advanced automatic transmission and transaxle components based upon inspection and measurement using manufacturer's specifications and procedures.
- Perform necessary module programming and/or configuration as part of the repair procedure.
- Perform necessary re-learn strategies after resetting adaptive shift strategies as part of the repair procedure.

AMT 131 Ford ASSET Diesel Engine Performance
This course is offered to students enrolled in the Ford Automotive Student Service Education Training (ASSET) program. This course provides a review of light duty diesel engine performance systems to include diesel engine theory, air induction systems, fuel systems, starting aid systems, emission controls, and exhaust after-treatment systems. Students who successfully complete this course may be eligible for Ford Service Technician Specialty Training (STST) certification.

Upon completion of this course, the student will be able to:

- SLO 1: Understand the basic operation of light duty diesel engines and associated systems.
  - Explain the operation of light duty four stroke cycle diesel engines.
  - Explain the operation of light duty diesel engine fuel supply and fuel injection systems.
  - Explain the operation of light duty diesel engine air induction systems.
  - Explain the operation of light duty diesel engine starting aid systems.
  - Explain the operation of light duty diesel engine emission control systems.
  - Explain the operation of light duty diesel engine exhaust after-treatment systems.
  - Explain the operation of light duty diesel electronic engine control systems.

- SLO 2: Demonstrate the ability to diagnose light duty diesel engine performance concerns.
  - Identify light duty diesel engine performance components.
  - Perform mechanical testing of light duty diesel engine performance concerns to evaluate component condition and/or system operation.
  - Perform electronic testing of light duty diesel engine performance concerns to evaluate component condition and/or system operation.

- SLO 3: Demonstrate the ability to repair light duty diesel engine performance concerns.
  - Select, service, and replace light duty diesel engine performance components based upon inspection and measurement using manufacturer's specifications and procedures.

This is a short-term course designed to enable students to gain skills in a specialized automotive area and to assist the student in preparation for state licensure requirements when applicable. Some of the service system topics that may be scheduled include: brakes, charging, alignment, brakes, automatic transmission, air conditioning and service management. Consult class schedule for specific topics being offered.

Upon completion of this course, the student will be able to:

- SLO 1: Describe industry standards for automotive service.
- Identify service publications that define service standards.
- Explain the importance service standards for effective repair.
- SLO 2: Appraise vehicle condition based upon industry standards.
- Perform basic mechanical diagnostic procedures for automotive service.
- Perform basic electronic diagnostic procedures for automotive service.
- SLO 3: Demonstrate the ability to perform service to industry standards.
- Select, service, and replace vehicle components based upon inspection and measurement using manufacturer’s specifications.
- Verify service quality in accordance with industry standards.

AMT 294 Topics in Automotive Mechanics Technology

<table>
<thead>
<tr>
<th>Units:</th>
<th>0.5 - 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hours:</td>
<td>9 - 72 hours LEC</td>
</tr>
<tr>
<td>Prerequisite:</td>
<td>None.</td>
</tr>
<tr>
<td>Catalog Date:</td>
<td>June 1, 2020</td>
</tr>
</tbody>
</table>

This course covers special topics not included in current automotive offerings in a timely manner. Topics may be offered in workshops or seminar presentations on timely subjects or targeted for specific audiences.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- (SLO1): Demonstrate the skills and competencies necessary for effective diagnosis of vehicle systems.
- (SLO2): Demonstrate the skills and competencies necessary for effective repair of vehicle systems.
- (SLO3): Demonstrate the skills and competencies necessary for effective customer service within the Automotive Industry.

AMT 295 Independent Studies in Automotive Mechanics Technology

<table>
<thead>
<tr>
<th>Units:</th>
<th>1 - 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hours:</td>
<td>54 - 162 hours LAB</td>
</tr>
<tr>
<td>Prerequisite:</td>
<td>None.</td>
</tr>
<tr>
<td>Catalog Date:</td>
<td>June 1, 2020</td>
</tr>
</tbody>
</table>

An independent studies project involves an individual student or small group of students in study, research, or activities beyond the scope of regularly offered courses. See the current catalog section of “Special Studies” for full details of Independent Studies.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO #1: Actively engage in intellectual inquiry beyond that required in order to pass a course of study (College Wide Learning Outcome – Area 4).
- Discuss and outline a proposal of study (that can be accomplished within one semester term) with a supervising instructor qualified within the discipline.
- Design an independent study (to be completed individually or by collaboration of a small group) to foster special knowledge, skills, and experience that are not available in any one regularly scheduled course.
- Use information resources to gather discipline-specific information.
- SLO #2: Utilize modes of analysis and critical thinking to apply theoretical perspectives and/or concepts in the major discipline of study to significant problems and/or educational activities (College Wide Learning Outcome – Area 3).
- Analyze and apply the knowledge, skills and experience that are involved in the independent study to theoretical perspectives and/or concepts in the major discipline of study.
- Explain the importance of the major discipline of study in the broader picture of society.
- SLO #3: Communicate a complex understanding of content matter of the major discipline of study (College Wide Outcome – Area 3).
- Demonstrate competence in the skills essential to mastery of the major discipline of study that are necessary to accomplish the independent study.
- SLO #4: Identify personal goals and pursue these goals effectively (College Wide Outcome – Area 4).
Utilize skills from the "academic tool kit" including time management, study skills, etc., to accomplish the independent study within one semester term.

AMT 300 Automotive Fundamentals and Shop Procedures

This course includes a basic study of vehicles and their mechanical systems including vehicle purchase, vehicle maintenance, vehicle safety systems and the principles and operation of the automotive engine, engine support systems, the drive train, steering, suspension and brakes. This class also explores consumers legal rights concerning vehicle purchase, repair, replacement and recalls. Hand tools, shop equipment and shop procedures will be demonstrated to familiarize the students with the automotive industry.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO #1: Describe the fundamentals of vehicle systems to include: vehicle safety systems, engine operation and repair, automatic transmissions/transaxles, manual drive train and axles, suspension and steering, brakes, electrical and electronic systems, heating and air conditioning, and engine performance.
- Explain the purpose and operation of specific vehicle systems.
- Identify the components of vehicle systems and their interaction with other systems and components.
- SLO #2: Describe the fundamentals of diagnosing vehicle systems.
- Identify common vehicle diagnostic equipment.
- Explain the proper use of service publications used in diagnostic procedures.
- Explain how to perform fundamental diagnostic procedures as outlined in manufacturer service publications.
- SLO #3: Describe and apply the fundamentals in repairs of major vehicle systems.
- Demonstrate knowledge of how to perform typical vehicle maintenance service.
- Explain how to follow a repair procedure as outlined in manufacturer service publications.
- Demonstrate knowledge of shop safety, OSHA, and hazardous materials procedures.
- SLO #4: Become an informed consumer that understands his or her legal rights and can make informed economic decisions related to vehicle purchase, maintenance, and repair by demonstrating competence in locating and evaluating information readily available to automotive consumers.
- Locate and interpret vehicle maintenance and service schedules in order to identify components and systems that require periodic inspection and/or maintenance.
- Compare maintenance and use costs of different vehicles using published information.
- Compare costs, coverage, and benefits/drawbacks of various warranty types including: manufacturer new-car warranties, extended warranties (both manufacturer and aftermarket), and emissions warranties.
- Evaluate vehicle purchase options including vehicle ergonomics, pricing, safety systems, warranty options, and financing.
- Examine legal rights of automotive consumers related to: vehicle purchasing, vehicle repair, vehicle lemon law, warranty denial, and consumers bill of rights concerning vehicle repair.

AMT 301 Automotive Service Management

| Units: | 3 |
| Hours: | 54 hours LEC |
| Prerequisite: | None. |
| Transferable: | CSU |
| Catalog Date: | June 1, 2020 |
This course provides a survey of automotive service operations, management strategies, economic importance, regulatory responsibilities, customer relations, and employment opportunities in the automotive service industry.

Student Learning Outcomes
Upon completion of this course, the student will be able to:

- SLO 1: Identify the major types of repair organizations that comprise the auto service industry.
- Evaluate the benefits and deficiencies of different types of service facilities.
- SLO 2: Calculate the total investment in facilities and equipment required to operate a service shop.
- Describe requirements and procedures necessary to start and open a small auto service business.
- Analyze methods of financial measurement of income, expenses, and compensation in the automotive service environment.
- SLO 3: Examine best automotive service practices in employee and customer relations.
- Evaluate the basic qualities that establish value in marketing an automotive product or service.
- SLO 4: Describe the implications of the repair order as a legal contract in California.
- Identify the major areas of legal responsibilities in customer transactions.

AMT 303 Automotive Electrical & Electronic Systems

This course is a study of the fundamental principles of electricity as used by the auto technician. Construction and function of automotive electrical/electronic components and systems will be discussed, including storage batteries, charging and starting systems, lighting, and accessory systems.

Student Learning Outcomes
Upon completion of this course, the student will be able to:

- SLO 1: Describe theory and operation of Automotive Electrical/Electronic Systems.
- Explain general electrical/electronic system principles.
- Explain battery systems and the relationship to electronic systems.
- Explain starting and charging systems.
- Identify components of automotive electrical systems.
- Explain lighting and driver information systems.
- Recognize electronic principles and how they relate to particular automotive systems.
- Identify electrical/electronic system failures.
- SLO 2: Diagnose automotive electrical/electronic concerns.
- Prepare and write repair orders to include: customer information, vehicle identifying information, customer concerns, related service history, cause and correction.
- Research applicable vehicle and service information, such as electrical/electronic system operation, system specifications, technical service bulletins, vehicle service history, and service precautions.
- Explain the proper use of technical service publications used in diagnostic procedures.
- Recall and apply step-by-step diagnostic procedures.
- Apply the use of scan-tools and digital multi meters (DMM) accurately.
- Perform road or system tests to verify customers concern.
SLO #3: Repair automotive electrical/electronic systems.
Perform the necessary repair procedure for a certain set of electrical/electronic diagnostic problems.
Perform disassembly, inspection, testing, and reassembly of automotive electronic/electrical systems.
Identify and apply the use of special tools necessary to repair automotive electrical/electronic systems.
Perform the outcome of the repair through the test drive analysis.

AMT 304 Automotive Manual Drive Train and Axles

| Units: | 3 |
| Hours: | 36 hours LEC; 54 hours LAB |
| Prerequisite: | None. |
| Advisory: | AMT 300 |
| Transferable: | CSU |
| Catalog Date: | June 1, 2020 |

This course covers the principles of operations of automotive power trains, including diagnosis and overhaul techniques of clutches, manual transmission/transaxles, transfer cases, drive lines and differentials.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO 1: Understand the operation of clutches, manual transmissions, transaxles, transfer cases, drive shafts, and axle assemblies (powertrain).
- Explain the use of torque in manual transmissions.
- Explain the relationship between torque, speed and gear ratios.
- Identify the components in manual transmissions, and transaxles.
- Identify the components of transfer cases, clutches, drive shafts, and axle assemblies.
- Explain the flow of power through manual transmissions and transaxles.
- Explain the flow of power through clutches and axle assemblies.
- SLO 2: Demonstrate the ability to diagnose manual powertrain concerns.
- Explain the proper use of technical service publications used in the diagnostic procedure.
- Perform noise diagnosis of the manual powertrain.
- Perform vibration diagnosis of the manual powertrain.
- Perform mechanical diagnosis of manual powertrain concerns.
- SLO 3: Demonstrate the ability to repair the manual powertrain system.
- Perform disassembly and reassembly of manual transmissions.
- Perform disassembly and reassembly of manual transaxles.
- Select, service, and replace powertrain components based upon inspection and measurement and manufacture's specifications.

AMT 305 Survey of Alternative Fueled & Hybrid Vehicles

| Units: | 3 |
| Hours: | 54 hours LEC |
| Prerequisite: | None. |
| Transferable: | CSU |
| Catalog Date: | June 1, 2020 |

This course will provide the students with resources and relevant information about the technologies of alternative fueled, electric and hybrid vehicle powertrains, as well as the impacts of their wider application in society. While the course will have a technical component, the larger focus of the course is targeted at both the automotive and non-automotive student. Access to a computer with Internet capabilities will be necessary for this course.
Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO 1: Explain the role of hybrid and alternative fuel vehicles in today's society.
- Research the technology used in hybrid and alternative fuel vehicles in contemporary society
- Evaluate the different types of hybrid and alternative-fueled vehicles.
- Assess alternatives to carbon-based fuels, including factors needed to reduce the carbon footprint.
- SLO 2: Analyze the operation of internal combustion, alternative fuel and hybrid powered vehicles.
- Assess current Internal Combustion Engine (ICE) technology.
- Identify major components and systems used in serial and parallel hybrid powertrains.
- SLO 3: Explain the safety procedures used while servicing alternative fuel and hybrid vehicles.

AMT 306 Small Engine Repair

This course focuses on operation and repair of small four-cycle engines. Special emphasis is placed on design and operation principles of internal combustion engines that support the student's understanding of automotive engines.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO 1: Describe the purpose of the small engines in current use.
- Identify the components of small engines.
- Explain the operation of the combustion cycle of small engines.
- Explain the mechanical operation of small engines.
- Determine correct small engine size for its intended application.
- SLO 2: Diagnose small engine operation concerns.
- Prepare repair orders to include customer information, engine identifying information, customer concern, related service history, cause and correction.
- Explain the proper use of technical service publications used in the diagnostic procedure.
- Perform noise and vibration diagnosis of concerns caused by engine operation or improper engine mounting.
- Perform mechanical diagnosis of small engine systems as described in service publications.
- Perform electronic diagnosis of small engine systems as described in service publications.
- SLO 3: Assess and repair small engine systems.
- Perform disassembly and reassembly of small engine components.
- Select, service, and replace small engine components based upon inspection and measurement using manufacturer's specifications and procedures.
- Verify repair using small engine in its intended application.
- Apply proper safety practices as outlined in service publications.
- List safety concerns related to hazardous materials with regards to current industry regulations and standards.
AMT 308 Late Model Car Care and Maintenance

This course is designed for the service technician and late model car owner wishing to perform or schedule car maintenance. This course will provide both men and women with basic automotive repair procedures and a fundamental understanding of how various automotive components and systems work. Use of the owner's manual, repair orders and other resources will be emphasized along with the development of a preventative maintenance schedule.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- understand how to service various automotive systems.
- develop preventative maintenance schedules.
- use the car's owner's manual.
- understand repair orders.
- perform basic car repairs that all car owners should know how to do.

AMT 310 Engine Performance

This course covers basic principles of the internal combustion engine and its related components, with an emphasis on complete electrical and fuel systems. The course will include the use of advanced types of testing equipment.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO #1: Demonstrate understanding of engine performance systems and their relationships.
- Identify major engine performance components and systems.
- Describe the relationships of mechanical, fuel, ignition and emissions systems to one another.
- SLO #2: Perform engine performance-related services and repairs.
- Perform mechanical services including component adjustments, removal and replacement.
- Perform ignition services, including component removal and replacement.
- Perform fuel system services, including cleaning, component removal and replacement.
- SLO #3: Diagnose engine performance systems.
- Perform basic engine diagnostic checks, such as engine condition and cooling system tests.
- Use the automotive exhaust gas analyzer to test the air/fuel ratio for better performance and fuel economy.
- Evaluate engine performance systems in relationship to manufacturer's specifications.
- Diagnose driveability problems using oscilloscope and scan-tool technology.

AMT 314 Wheel Alignment

3 Units:
54 hours LEC
None.
CSU
June 1, 2020
Catalog Date:

Student Learning Outcomes

3 Units:
36 hours LEC; 54 hours LAB
AMT 300, 306, or 322 with a grade of "C" or better
AMT 303
CSU
June 1, 2020
Catalog Date:

Student Learning Outcomes
This course offers an in-depth examination of alignment equipment and different vehicle manufacturer's alignment systems. It will cover diagnosis and repair of Wheel/Tire Systems, Steering Systems, Suspension Systems, and Wheel Alignment.

### Student Learning Outcomes

Upon completion of this course, the student will be able to:

- **SLO 1:** Describe the purpose of alignment procedures.
- **SLO 1:** Explain the relationship between caster, camber and toe.
- **SLO 1:** Recall and accurately apply the operation of alignment equipment.
- **SLO 1:** Identify the components of the suspension system.
- **SLO 1:** Explain adjustment angles.
- **SLO 2:** Diagnose vehicle alignment angle concerns.
- **SLO 2:** Prepare a work order to include customer information, vehicle identifying information, customer concern, related service history, cause and correction.
- **SLO 2:** Explain the proper use of technical service publications used in the diagnostic procedure.
- **SLO 2:** Perform noise diagnosis caused by alignment angles not within specifications.
- **SLO 2:** Perform vibration diagnosis of tires and wheels.
- **SLO 2:** Perform mechanical diagnosis of alignment angles.
- **SLO 3:** Apply the adjustment of alignment angles.
- **SLO 3:** Perform disassembly and reassembly suspension components.
- **SLO 3:** Perform four wheel alignment(s).
- **SLO 3:** Select, service, and replace alignment components based upon inspection and measurement and manufacturer's specifications.
- **SLO 3:** Demonstrate proper safety practices as outlined in service publications.
- **SLO 3:** Demonstrate the proper use of special tools as directed in service publications.
- **SLO 3:** List safety concerns related to hazardous materials with regards to hazardous materials regulations.

---

**AMT 316 Automotive Brakes**

This course covers the principles of operation of automotive brakes and anti-lock brake systems, including diagnosis and overhaul techniques of power brake system components.

### Student Learning Outcomes

Upon completion of this course, the student will be able to:

- **SLO 1:** Understand theory and operation of automotive brake systems.
- **SLO 1:** Explain the purpose of conventional, anti-lock, traction control and electronic stability assist brake systems.
- **SLO 1:** Identify brake systems components.
- **SLO 1:** Explain the operation of conventional, anti-lock, traction control and electronic stability assist brake systems.
- Describe the effect the following principles have on brake system operation: vehicle speed-weight ratios, friction, simple hydraulics, brake fluid viscosity and composition.
- SLO 2: Demonstrate the ability to diagnose automotive brake systems.
- Demonstrate the ability to write repair orders to include: customer information, vehicle identifying information, customer concern, related service history, cause and correction.
- Research applicable vehicle and service information, such as engine management system operation, type of braking systems, vehicle service history, service precaution, and technical service bulletins.
- Explain the proper use of technical service publications used in the diagnostic procedure.
- Demonstrate the ability to follow step-by-step diagnostic procedures.
- Demonstrate the use of diagnostic equipment.
- Perform road test to verify the customer concern.
- SLO 3: Demonstrate the ability to repair automotive brake systems.
- Demonstrate the ability to test brake system components.
- Perform removal and replacement of brake system components.
- Perform bleeding procedure.
- Demonstrate adjustment procedures as outlined in the service manual.
- Demonstrate the use of special tools necessary to repair automotive brake systems.
- Perform the outcome of the repair through the test drive analysis.
- List safety concerns related to hazardous materials with regards to “Hazardous Materials Regulations”.

---

**AMT 321 Advanced Automotive Electrical & Hybrid Vehicle Systems**

**Units:** 3
**Hours:** 36 hours LEC; 54 hours LAB
**Prerequisite:** AMT 303 with a grade of “C” or better
**Transferable:** CSU
**Catalog Date:** June 1, 2020

This course is a study of the principles of electronic systems serviced by the automotive technician. Construction and function of automotive electronic components and systems will be discussed, including general system diagnosis, driver information systems, vehicle communication networks, hybrid vehicle propulsion technology and controls, and electronic accessory systems.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- SLO 1: Describe the theory and operation of Electronic Control Systems.
- Explain general electrical/electronic system principles.
- Explain hybrid electric vehicle propulsion systems and their relationship to electronic controls.
- Explain driver information systems and their relationship to electronic control systems.
- Identify the components of Electronic Control Systems.
- Explain vehicle communication network principles.
- Explain electronic accessory system principles.
- Recognize electronic principles and how they relate to hybrid vehicle automotive systems.
- Identify electronic system failures.
- SLO 2: Diagnose automotive electronic control system concerns.
- Prepare and write repair orders to include: customer information, vehicle identifying information, customer concerns, related service history, cause and correction.
- Research applicable vehicle and service information, such as electrical/electronic system operation, system specifications, technical service bulletins, vehicle service history, and service precautions.
- Explain the proper use of technical service publications used in diagnostic procedures.
- Recall and apply step-by-step diagnostic procedures.
- Apply the use of scan-tools and digital multi meters (DMM) accurately.
- Perform road or system tests to verify the customer's concern.
- SLO 3: Repair automotive electronic control systems.
- Perform the necessary repair procedure for a certain set of electronic control system diagnostic problems.
- Perform disassembly, inspection, testing, and reassembly of electronic control systems in gasoline and hybrid electric powered vehicles.
- Identify and apply the use of special tools necessary to repair automotive electronic control systems, and hybrid electric vehicle propulsion systems.
- Verify the outcome of the repair through the test drive analysis.

AMT 322 Engine Repair

**Units:** 3  
**Hours:** 36 hours LEC; 54 hours LAB  
**Prerequisite:** None.  
**Advisory:** AMT 300 and 306  
**Transferable:** CSU  
**Catalog Date:** June 1, 2020

This course focuses on the theory of operation and repair of the automotive internal combustion engine. Major emphasis will be on diagnosis, measurement, repair and assembly of the automotive engine.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- SLO 1: Understand the basic operation of automotive engines.  
- Explain the four stroke cycle.  
- Explain the relationship of mechanical components in the engine.  
- Explain how engines are classified.  
- SLO 2: Diagnose engine mechanical concerns and conduct diagnostic testing procedures.  
- Perform engine noise diagnosis.  
- Perform basic engine mechanical diagnostic procedures.  
- SLO 3: Perform the procedures and techniques involved in a gasoline engine overhaul.  
- Disassemble, clean, inspect and measure all components of the engine.  
- Perform machining operations on the engine block and cylinder heads to manufacture's specifications.  
- Select, service, and replace engine components based upon inspection and measurement and manufacture's specifications.  
- Reassemble the engine components.

AMT 324 Electronic Fuel Injection

**Units:** 3  
**Hours:** 36 hours LEC; 54 hours LAB  
**Prerequisite:** AMT 303 with a grade of "C" or better  
**Advisory:** AMT 310  
**Transferable:** CSU  
**Catalog Date:** June 1, 2020
This course focuses on the theory and operation, service, diagnostic procedures, and repair of electronic fuel injection systems. This course includes the various types of electronic fuel injection systems and the diagnostic equipment currently used in the automotive industry. In addition, also covered in this course are the theory and operation, and service of intake and exhaust systems, and forced induction systems such as superchargers and turbochargers.

Student Learning Outcomes
Upon completion of this course, the student will be able to:

- SLO 1: Understand theory and operation of electronic fuel injection.
- Explain the purpose of electronic fuel injection.
- Identify the components of electronic fuel injection.
- Explain the operation of electronic fuel injection.
- SLO 2: Demonstrate the ability to diagnose electronic fuel injection.
- Demonstrate the ability to write repair orders to include: customer information, vehicle identifying information, customer concern, related service history, cause and correction.
- Research applicable vehicle and service information, such as engine management system operation, vehicle service history, service precautions, and technical service bulletins.
- Explain the proper use of technical service publications used in the diagnostic procedure.
- Demonstrate the ability to follow step-by-step diagnostic procedures.
- Demonstrate the use of diagnostic equipment.
- Perform road test to verify the customer concern.
- SLO 3: Demonstrate the ability to repair electronic fuel injection.
- Demonstrate the ability to test fuel injection systems and components.
- Perform removal and replacement of electronic fuel injection components.
- Demonstrate adjustment procedures.
- Demonstrate the use of special tools necessary to repair electronic fuel injection.
- Perform the outcome of the repair through the test drive analysis.
- List safety concerns related to hazardous materials with regards to “Hazardous Materials Regulations”.

AMT 326 Automotive Heating and Air Conditioning

This course is a study of installation, operation and repair of vehicle air conditioning systems, cooling systems, and heating systems. The course will include a study of the systems for proper functioning of systems including heat transfer and air flow.

Student Learning Outcomes
Upon completion of this course, the student will be able to:

- SLO 1: Understand the basic operation of vehicle air conditioning (A/C) and engine cooling systems.
- Explain heat and pressure relationships.
- Identify A/C specific components on the vehicle.
- Explain the operation of A/C components.
- Explain cooling system operation.
- Identify A/C specific and general tools used in the diagnosis and repair of vehicle A/C and cooling systems.
- SLO 2: Diagnose vehicle air conditioning (A/C) and cooling system concerns.
- Prepare the vehicle for testing.
- Perform the visual and touch procedures to diagnose the A/C system.
- Perform mechanical diagnosis of the A/C and cooling systems.
- Perform electronic diagnosis of the A/C and cooling systems.
- Explain the proper use of technical service information.
- SLO 3: Repair vehicle air conditioning (A/C) and cooling systems.
- Identify and replace faulty components in the A/C system using industry accepted practices.
- Identify and replace faulty components in the cooling system using industry accepted practices.

AMT 328 Light Duty Diesel Engine Performance

<table>
<thead>
<tr>
<th>Units:</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hours:</td>
<td>36 hours LEC; 54 hours LAB</td>
</tr>
<tr>
<td>Prerequisite:</td>
<td>AMT 303 with a grade of &quot;C&quot; or better</td>
</tr>
<tr>
<td>Advisory:</td>
<td>AMT 300</td>
</tr>
<tr>
<td>Transferable:</td>
<td>CSU</td>
</tr>
<tr>
<td>Catalog Date:</td>
<td>June 1, 2020</td>
</tr>
</tbody>
</table>

This course introduces the student to light duty diesel engine performance systems to include diesel engine theory, air induction systems, fuel systems, starting aid systems, emission controls, and exhaust after-treatment systems.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO 1: Understand the basic operation of light duty diesel engines and associated systems.
- Explain the operation of light duty four stroke cycle diesel engines.
- Explain the operation of light duty diesel engine fuel supply and fuel injection systems.
- Explain the operation of light duty diesel engine air induction systems.
- Explain the operation of light duty diesel engine starting aid systems.
- Explain the operation of light duty diesel engine emission control systems.
- Explain the operation of light duty diesel engine exhaust after-treatment systems.
- Explain the operation of light duty diesel electronic engine control systems.
- SLO 2: Demonstrate the ability to diagnose light duty diesel engine performance concerns.
- Identify light duty diesel engine performance components.
- Perform mechanical testing of light duty diesel engine performance concerns to evaluate component condition and/or system operation.
- Perform electronic testing of light duty diesel engine performance concerns to evaluate component condition and/or system operation.
- SLO 3: Demonstrate the ability to repair light duty diesel engine performance concerns.
- Select, service, and replace light duty diesel engine performance components based upon inspection and measurement using manufacturer's specifications and procedures.

AMT 330 Automatic Transmissions/Transaxles
This course is a study of the fundamentals and theory of automatic transmissions/transaxles. The laboratory experience will include inspection, diagnosis and adjustments.

Student Learning Outcomes
Upon completion of this course, the student will be able to:

- SLO 1: Understand theory and operation of automatic transmissions/transaxles.
- Explain the use of torque in automatic transmissions/transaxles.
- Explain the relationship between torque, speed, and gear ratios.
- Identify components.
- Explain flow of power through automatic transmissions/transaxles.
- Explain operation of torque converters.
- Explain hydraulic principles.
- Understand how the electrical/electronic systems work.
- Understand how to identify types of transmissions/transaxles.
- SLO 2: Demonstrate the ability to diagnose automatic transmission/transaxle concerns.
- Demonstrate the ability to write repair orders to include: customer information, vehicle identifying information, customer concern, related service history, cause, and correction.
- Research applicable vehicle and service information, such as transmission/transaxle system operations, transmission/transaxle types, fluid type, vehicle service history, service precautions and technical service bulletins.
- Explain the proper use of technical service publications used in the diagnostic procedure.
- Demonstrate the ability to follow step-by-step diagnostic procedures.
- Demonstrate the use of scan tools and digital multi meters (DMM).
- Perform road test to verify the customer concern.
- SLO 3: Demonstrate the ability to repair automatic transmissions/transaxles.
- Perform the necessary repair procedure for a certain set of transmission diagnostic problems.
- Perform disassembly and reassembly of automatic transmissions/transaxles. Clean, inspect, measure, repair, adjust, or replace components.
- Demonstrate the use of special tools necessary to repair automatic transmissions/transaxles.
- Perform the outcome of the repair through the test drive analysis.
- List safety concerns related to hazardous materials with regards to "Hazardous Materials Regulations".

AMT 332 Automotive Computerized Controls
This course focuses on the study of automotive computerized controls and their application to the engine, chassis and braking systems. Students will learn how on board computers interact with modern vehicle systems.

Student Learning Outcomes
Upon completion of this course, the student will be able to:

- SLO #1: Explain theory and operations of automotive computerized controls.
- Explain the use of computers in engine system management.
- Explain the relationships between input sensors, processing and output sensors.
- Identify components within computerized controls.
- Explain the generations of government mandated diagnostics in relation to system operation.
- Describe how computerized electronic systems work.
- Identify various generations of computerized control systems.
- SLO #2: Diagnose automotive computerized control concerns.
- Prepare and write repair orders to include: customer information, vehicle identification information, customer concern, related service history, cause, and correction.
- Research applicable vehicle and service information, such as type of on board diagnostics, code structure, emission compliance level, monitor status, vehicle service history, service precautions, and technical service bulletins.
- Explain the proper use of technical service bulletins used in diagnostic procedures.
- Perform step-by-step diagnostic procedures.
- Apply the use of scan-tools and digital multi meters (DMM).
- Perform road test to verify the customer concern.
- SLO #3: Repair automotive computerized control systems
- Perform the necessary repair procedures for a certain set of automotive computerized control diagnostic problems.
- Perform inspection, testing, disassembly, component replacement, reassembly, and confirmation of repair on automotive computerized control systems.
- Demonstrate the use of specialized on board test sequences to repair automotive computerized control systems.
- Perform the outcome of the repair through data stream analysis.
- List safety concerns related to hazardous materials with regards to "hazardous materials regulations".

AMT 336 Advanced Service Management

| Units: | 3 |
| Hours: | 54 hours LEC |
| Prerequisite: | None. |
| Advisory: | AMT 301 |
| Transferable: | CSU |
| Catalog Date: | June 1, 2020 |

This course is a thorough examination of automotive service management. The course includes strategic planning, financial analysis, personnel management, and automotive service legal responsibilities.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO 1- Compare and contrast the major types of repair organizations that comprise the service industry.
- SLO 2- Define the major roles of strategic planning in automotive service management systems.
- Calculate the total investment required to properly equip and operate an auto service facility.
- Develop a plan to select and maintain appropriate employees for the service environment.
- SLO 3- Assess the importance of applying ethical standards to the management of an organization.
- SLO 4- Evaluate management of profit and the various ways profit is used in a service environment.
- Analyze the impact of various methods of controlling operating costs.
AMT 340 Emission Control Inspection and Repair

This course includes inspection, testing, diagnosis, and service of automotive emission control systems. The course is required for all students who plan to become licensed as a Smog Check Inspector. The course meets BAR Level 1 & 2 training requirements. Upon successful completion of this course, students are eligible to take the State of California Smog Check Inspector licensing exam and may be eligible to take the State of California Smog Check Repair Technician licensing exam.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO 1: Identify the fundamentals of vehicle emission systems to include electrical, vacuum, computerized vehicle emission components, emission regulations, emission testing, emission reduction systems, and emission inspection/diagnostic equipment.
- Explain the purpose of vehicle emission systems.
- Identify the components of vehicle emission systems.
- Explain the cause and effect of vehicle emissions.
- Identify components of the emission system that require visual and functional inspection and/or maintenance.
- SLO 2: Recognize the fundamentals of diagnosing vehicle emission systems.
- Identify diagnostic equipment.
- Explain the proper use of service publications used in diagnostic/testing procedures.
- Explain how to perform fundamental emission diagnostic/testing as outlined in both manufacture and industry publications.
- Describe the laws, regulations, and procedures associated with consumer authorization of inspections and the overall administration of the Smog Check Program.
- SLO 3: Apply the fundamentals of vehicle emission system repairs.
- Identify the proper service procedures as outlined in manufacturer's service manuals.
- Demonstrate knowledge of how to perform systematic flow chart diagnosis of vehicle emission systems.
- Explain how to repair specific vehicle emission systems.
- Demonstrate knowledge of shop safety, OSHA, and hazardous materials procedures.

AMT 370 Ford ASSET Automotive Fundamentals and Dealership Practices

Students taking this course must be enrolled in the Ford Automotive Student Service Education Training (ASSET) program. Some training materials utilized in this course require access to restricted Ford Motor Company websites obtained via enrollment in the Ford Automotive Student Service Education Training (ASSET) program and establishment of a Ford/Lincoln dealership sponsorship.
This course is offered to students enrolled in the Ford Automotive Student Service Education Training (ASSET) program. This course provides an introduction into the theory and operation of major automotive systems including: gasoline engines, electrical systems, transmissions and drivetrains, steering, suspension, and brakes. Common automotive hand tools, power tools, and equipment will also be introduced and demonstrated to familiarize students with a typical automotive shop. Typical new-car dealership hierarchy and structure along with standard practices will be investigated. Students who successfully complete this course may be eligible for Ford Service Technician Specialty Training (STST) certification.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO 1: Understand the fundamental purpose, components, and operation of major automotive systems.
- Explain the basic theory and operation of gasoline engines.
- Explain the basic theory and operation of automatic transmissions and transaxles.
- Explain the basic theory and operation of manual transmissions, drivetrains, and axles.
- Explain the basic theory and operation of suspension and steering systems.
- Explain the basic theory and operation of brake systems.
- Explain the basic theory and operation of electrical and electronic systems.
- Explain the basic theory and operation of heating and air conditioning systems.
- Explain the basic theory and operation of engine performance systems.
- SLO 2: Understand the proper use of tools, equipment, and publications used for automotive diagnosis and repair.
- Identify common hand tools, power tools, and diagnostic equipment, and their appropriate usage.
- Explain proper vehicle lifting procedures.
- Demonstrate knowledge of shop safety, OSHA, and hazardous materials procedures.
- Perform proper vehicle identification to ensure accurate diagnosis and repair.
- Locate and analyze service information in hard copy and electronic formats.
- Identify the proper maintenance interval schedule as outlined in the vehicle owner's manual.
- SLO 3: Understand typical new car dealership hierarchy, structure, and standard procedures.
- Identify and explain key job roles and chain-of-command in new car dealership parts and service departments.
- Demonstrate knowledge of Bureau of Automotive Repair (BAR) regulations relating to work/repair orders.
- Demonstrate knowledge of manufacturer warranty policies and procedures.
- Demonstrate knowledge of new car pre-delivery inspection procedures.

AMT 371 Ford ASSET Automotive Electrical/Electronic Systems

- Units: 3
- Hours: 36 hours LEC; 54 hours LAB
- Prerequisite: None.
- Enrollment Limitation: Students taking this course must be enrolled in the Ford Automotive Student Service Education Training (ASSET) program due to prerequisite Ford Motor Company training requirements.
- Transferable: CSU
- Catalog Date: June 1, 2020

This course is offered to students enrolled in the Ford Automotive Student Service Education Training (ASSET) program. This course is a study of the fundamental principles of electricity and electronic systems as used by the automotive technician. Construction and function of automotive electrical and electronic components will be discussed, including batteries, starting systems, charging systems, lighting systems, and power accessories. Students who successfully complete this course may be eligible for Ford Service Technician Specialty Training (STST) certification.

Student Learning Outcomes

Upon completion of this course, the student will be able to:
SLO 1: Describe the theory and operation of automotive electrical and electronic systems.

- Explain general electrical and electronic system principles to include the relationship between volts, amperes, and ohms.
- Explain battery systems and their relationship to electronic systems.
- Explain starting and charging systems.
- Identify components of automotive electrical systems.
- Explain lighting and driver information systems.
- Recognize electronic principles and how they relate to particular automotive systems.
- Identify typical electrical and electronic system failures.

SLO 2: Diagnose automotive electrical and electronic concerns.

- Prepare and write repair orders to include: customer information, vehicle identifying information, customer concerns, related service history, cause, and correction.
- Research applicable vehicle and service information, such as electrical and electronic system operation, system specifications, technical service bulletins, vehicle service history, and service precautions.
- Explain the proper use of technical service publications used in diagnostic procedures.
- Recall and apply step-by-step diagnostic procedures.
- Apply the use of scan-tools and digital multi-meters (DMM) accurately.
- Perform road tests or system self-tests to verify the customer's concern.

SLO 3: Repair automotive electrical and electronic systems.

- Perform the necessary repair procedure for electrical and electronic circuit faults.
- Perform disassembly, inspection, testing, and reassembly of automotive electronic and electrical systems.
- Identify and apply the use of special tools necessary to repair automotive electrical and electronic systems.
- Verify the outcome of the repair through a test drive analysis or system self-test.

AMT 372 Ford ASSET Automotive Brake Systems

- 3 Units: 36 hours LEC; 54 hours LAB
- Prerequisite: None.
- Enrollment Limitation: Students taking this course must be enrolled in the Ford Automotive Student Service Education Training (ASSET) program. Some training materials utilized in this course require access to restricted Ford Motor Company websites obtained via enrollment in the Ford Automotive Student Service Education Training (ASSET) program and establishment of a Ford/Lincoln dealership sponsorship.
- Transferable: CSU
- Catalog Date: June 1, 2020

This course is offered to students enrolled in the Ford Automotive Student Service Education Training (ASSET) program. This course covers the theory, diagnosis, and repair of automotive brake systems, including anti-lock braking systems (ABS). Students who successfully complete this course may be eligible for Ford Service Technician Specialty Training (STST) certification.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO 1: Understand the theory and operation of automotive brake systems.
- Identify the purpose of conventional and anti-lock braking systems and components.
- Explain the basic theory and operation of conventional and anti-lock braking systems and components.
- Analyze the effects of basic physics principles on brake system operation, to include: inertia, weight transfer, friction, leverage, hydraulics, and energy conversions.
- List safety concerns related to hazardous materials.
- SLO 2: Demonstrate the ability to diagnose automotive brake systems.
Demonstrate the ability to write repair orders to include: customer information, vehicle identifying information, customer concern, related service history, cause and correction.

Research applicable vehicle and service information, such as engine management system operation, type of braking systems, vehicle service history, service precautions, and technical service bulletins.

Identify and explain the proper use of service information used in the diagnostic procedure.

Demonstrate the ability to follow step-by-step diagnostic procedures.

Demonstrate proper use of diagnostic equipment.

Perform a road test analysis to verify the customer concern.

SLO 3: Demonstrate the ability to repair automotive brake systems.

Perform removal and replacement of brake system components.

Analyze component condition through inspection and measurement and determine the appropriate repair.

Perform hydraulic system bleeding procedures including anti-lock braking (ABS) bleeding.

Clean, inspect, service, and adjust brake components according to manufacturer's procedures.

Demonstrate the proper use of special tools and equipment needed for brake service.

Perform a road test analysis to verify the effectiveness of the repair procedure.

---

AMT 374 Ford ASSET Automotive Suspension and Steering

This course is offered to students enrolled in the Ford Automotive Student Service Education Training (ASSET) program. This course covers theory, diagnosis, and repair of automotive steering and suspension systems. Wheels, tires, and related systems will also be discussed, including power steering systems and electronically controlled steering and suspension systems. Students who successfully complete this course may be eligible for Ford Service Technician Specialty Training (STST) certification.

Upon completion of this course, the student will be able to:

- SLO 1: Describe the purpose of automotive suspension and steering systems.
- Identify the components of the suspension system.
- Explain the operation of the suspension system.
- Identify the components of various steering systems to include manual systems, hydraulic power steering systems, and electronic power steering systems.
- Explain the operation of various steering systems to include manual systems, hydraulic power steering systems, and electronic power steering systems.
- Describe fluid dynamics as it relates to steering and suspension systems.
- SLO 2: Diagnose automotive suspension and steering concerns.
- Prepare draft work orders to include customer information, vehicle identifying information, customer concern, related service history, cause, and correction.
- Explain the proper use of technical service publications used in the diagnostic procedure.
- Perform mechanical diagnosis of suspension and steering systems as described in service publications.
- Perform electronic diagnosis of suspension and steering systems as described in service publications.
- Perform noise, vibration, and harshness diagnosis caused by suspension and steering components not within specifications.

---

Units: 3
Hours: 36 hours LEC; 54 hours LAB
Prerequisite: AMT 371 with a grade of "C" or better
Enrollment Limitation: Students taking this course must be enrolled in the Ford Automotive Student Service Education Training (ASSET) program due to prerequisite Ford Motor Company training requirements.
Transferable: CSU
Catalog Date: June 1, 2020
- SLO 3: Assess and repair suspension and steering systems.
- Perform disassembly and reassembly of suspension and steering components.
- Select, service, and replace suspension and steering components based upon inspection and measurements using manufacturer's specifications and procedures.
- Verify repair utilizing a test drive analysis.
- Apply proper safety practices as outlined in service publications.
- List safety concerns related to hazardous materials with regards to hazardous materials regulations.

AMT 375 Ford ASSET Automotive Wheel Alignment

| Units: | 3 |
| Hours: | 36 hours LEC; 54 hours LAB |
| Prerequisite: | AMT 371 with a grade of "C" or better |
| Corequisite: | AMT 374 |
| Enrollment Limitation: | Students taking this course must be enrolled in the Ford Automotive Student Service Education Training (ASSET) program due to prerequisite Ford Motor Company training requirements. |
| Transferable: | CSU |
| Catalog Date: | June 1, 2020 |

This course is offered to students enrolled in the Ford Automotive Student Service Education Training (ASSET) program. This course covers various automotive wheel alignment equipment and procedures. Wheel alignment diagnosis and repair will be performed as well as maintenance and repair of related systems. Students who successfully complete this course may be eligible for Ford Service Technician Specialty Training (STST) certification.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO 1: Describe the purpose of steering and suspension system alignment angles and procedures
- Identify the purpose of caster, camber, and toe adjustments and their relationships to one another
- Identify proper alignment procedures and equipment usage
- Inspect vehicle for available adjustments to alignment angles
- Explain effects of the various alignment angles on vehicle stability and tracking, tire wear, and vehicle safety
- SLO 2: Diagnose concerns caused by incorrect wheel alignment
- Prepare a work order to include customer information, vehicle identifying information, customer concern, related service history, cause, and correction
- Explain the proper use of technical service publications used in the diagnostic procedure
- Perform mechanical diagnosis of alignment angles utilizing appropriate equipment
- Utilize abnormal tire tread wear patterns to identify wheel alignment concerns
- Perform noise, vibration, and harshness diagnosis to include wheel and tire balancing and road force variation measurements
- SLO 3: Adjust vehicle wheel alignment angles to proper specifications
- Perform pre-alignment inspection and safely prepare vehicle for wheel alignment procedures
- Select, service, and replace alignment components based upon inspection and measurements and manufacturer's specifications
- Identify specialized procedures or components necessary to obtain proper wheel alignment and prepare vehicle accordingly
- Demonstrate proper safety practices as outlined in service publications
- Demonstrate the proper use of special tools as directed in service publications
- List safety concerns related to hazardous materials with regards to hazardous materials regulations
AMT 376 Ford ASSET Automotive Heating and Air Conditioning

This course is offered to students enrolled in the Ford Automotive Student Service Education Training (ASSET) program. This course covers the theory, diagnosis, and repair of automotive heating and air conditioning systems, including air management sub-systems and an overview of engine cooling systems. Proper handling of common automotive refrigerants in accordance with EPA regulations will also be covered. Students who successfully complete this course may be eligible for Ford Service Technician Specialty Training (STST) certification.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO 1: Understand the basic operation of automotive heating, ventilation, and air conditioning (HVAC) systems
- Explain relationships between temperature and pressure
- Identify components of automotive heating and engine cooling systems
- Explain the operation of automotive heating and engine cooling systems
- Identify components of automotive air conditioning systems
- Explain the operation of automotive air conditioning systems
- Explain the characteristics and associated safety hazards of typical automotive refrigerants used in air conditioning systems in accordance with EPA regulations
- Identify special tools and equipment used in HVAC diagnosis, repair, and maintenance
- SLO 2: Diagnose automotive heating, ventilation, and air conditioning (HVAC) system concerns
- Prepare the vehicle for HVAC system performance testing
- Perform visual and touch procedures to diagnose the HVAC system
- Identify refrigerant used in the HVAC system
- Perform mechanical diagnosis of the HVAC system to include pressure testing, analyzing gauge readings, and monitoring compressor cycling times
- Perform electronic diagnosis of the HVAC system
- Explain the proper use of technical service information
- SLO 3: Repair automotive heating, ventilation, and air conditioning (HVAC) systems
- Perform refrigerant service to include refrigerant identification, recovery, evacuation, vacuum testing, and charging
- Identify and replace faulty components in the A/C system using industry accepted practices
- Identify and replace faulty components in the heating and engine cooling system using industry accepted practices
- Verify the effectiveness of the repair via HVAC system performance testing

AMT 378 Ford ASSET Automatic Transmissions/Transaxles

Units: 3
Hours: 36 hours LEC; 54 hours LAB
Prerequisite: AMT 371 with a grade of "C" or better
Enrollment Limitation: Students taking this course must be enrolled in the Ford Automotive Student Service Education Training (ASSET) program due to prerequisite Ford Motor Company training requirements.
Transferable: CSU
Catalog Date: June 1, 2020
Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO 1: Understand the theory and operation of automatic transmissions and transaxles.
- Explain the purpose and role of torque in the drive train.
- Explain the relationship between torque, speed and gear ratios.
- Identify the components in automatic transmissions and transaxles.
- Explain the operation of torque converters.
- Explain hydraulic principles as they apply to automatic transmissions and transaxles.
- Identify various types of automatic transmissions and transaxles.
- Explain the principles of electrical and electronic systems as they apply to automatic transmissions and transaxles.
- Explain the flow of power through automatic transmissions and transaxles.
- SLO 2: Demonstrate the ability to diagnose automatic transmissions and transaxles.
- Explain the proper use of technical service publications used in the diagnostic procedure.
- Perform mechanical testing of automatic transmission and transaxle concerns to evaluate component condition and/or system operation.
- Perform hydraulic testing of automatic transmission and transaxle concerns to evaluate component condition and/or system operation.
- Perform electronic testing of automatic transmission and transaxle concerns to evaluate component condition and/or system operation.
- Utilize clutch and band application charts to diagnose automatic transmission and transaxle concerns.
- Utilize solenoid operation charts to diagnose automatic transmission and transaxle concerns.
- SLO 3: Demonstrate the ability to service and repair automatic transmissions and transaxles.
- Demonstrate an understanding of proper automatic transmission maintenance and service.
- Perform disassembly and reassembly of automatic transmissions and transaxles.
- Demonstrate the use of special tools necessary to repair automatic transmissions and transaxles.
- Select, service, and replace automatic transmission and transaxle components based upon inspection and measurement using manufacturer's specifications and procedures.

AMT 379 Ford ASSET Automotive Engine Repair

This course is offered to students enrolled in the Ford Automotive Student Service Education Training (ASSET) program. This course covers the theory, diagnosis, and repair of automotive engines. Proper maintenance and service will also be covered. Complete engine overhaul procedures will be examined, but the primary focus will be on typical engine repairs. Students who successfully complete this course may be eligible for Ford Service Technician Specialty Training (STST) certification.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO 1: Understand the basic components and operation of automotive engines.
- Explain the four stroke (Otto) cycle.
- Explain the relationship of the various mechanical components within the engine.
- Explain various ways in which engines are classified (cylinder layout, number of strokes, fuel, ignition source, etc.).
- SLO 2: Diagnose engine mechanical concerns and conduct diagnostic testing procedures.
- Perform engine noise diagnosis.
- Perform basic engine mechanical diagnostic procedures.
- SLO 3: Perform the procedures and techniques involved in typical engine repairs and overhauls.
- Disassemble, clean, inspect, and measure all components of the engine.
- Demonstrate an understanding of machining operations performed on the engine block and cylinder heads to restore parts to manufacturer's specifications.
- Select, service, and replace engine components based upon inspection and measurement and manufacturer's specifications.
- Service camshaft timing mechanism components on various engines.
- Reassemble the engine.
- Demonstrate an understanding of proper engine installation, start-up, and break-in procedures.

**AMT 381 Ford ASSET Electronic Engine Control**

**Units:** 4

**Hours:** 63 hours LEC; 27 hours LAB

**Prerequisite:** AMT 371 with a grade of "C" or better

**Enrollment Limitation:** Students taking this course must be enrolled in the Ford Automotive Student Service Education Training (ASSET) program due to prerequisite Ford Motor Company training requirements.

**Transferable:** CSU

**Catalog Date:** June 1, 2020

This course is offered to students enrolled in the Ford Automotive Student Service Education Training (ASSET) program. This course is a study of Ford Electronic Engine Control systems, their components, and their relationship to other vehicle systems. Students who successfully complete this course may be eligible for Ford Service Technician Specialty Training (STST) certification.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- SLO 1: Understand the theory and operation of automotive electronic engine control (EEC) systems and their components.
- Explain the four basic computer functions: Input, Processing, Storage, and Output.
- Explain the theory and operation of various EEC inputs (sensors) to include switches, thermistors, potentiometers, speed/position sensors, pressure sensors, oxygen sensors, and mass air flow sensors.
- Explain the theory and operation of automotive computers and control modules.
- Explain the theory and operation of various EEC outputs (actuators) to include solenoids, relays, motors, and lights.
- Explain the relationship between various EEC components as it relates to the concept of a feedback loop.
- Explain the theory and operation of automotive computer and control module multiplexing and networking systems.
- SLO 2: Diagnose automotive electronic engine control (EEC) systems and their components.
- Retrieve diagnostic trouble codes and related data using a scan tool.
- Monitor and analyze parameter identification data using a scan tool.
- Analyze the status of on board diagnostic inspection and maintenance monitors.
- Perform electronic diagnostic testing using manufacturer's specifications and procedures.
- SLO 3: Demonstrate the ability to repair automotive electronic engine control (EEC) systems and their components.
- Select, service and repair components of the EEC system using manufacturer's specifications and procedures.
- Demonstrate an understanding of proper module replacement and programming procedures.
- Perform an on board diagnostics drive cycle and analyze the results to verify the effectiveness of a repair.

**AMT 382 Ford ASSET Gasoline Engine Performance**

**Units:** 3  
**Hours:** 36 hours LEC; 54 hours LAB  
**Prerequisite:** AMT 371 with a grade of "C" or better  
**Enrollment Limitation:** Students taking this course must be enrolled in the Ford Automotive Student Service Education Training (ASSET) program due to prerequisite Ford Motor Company training requirements.  
**Transferable:** CSU  
**Catalog Date:** June 1, 2020

This course is offered to students enrolled in the Ford Automotive Student Service Education Training (ASSET) program. This course offers a thorough examination of basic gasoline engine performance systems to include ignition systems, fuel systems, and emission controls. System maintenance, diagnosis, and repair will also be covered, including the use of specialized test equipment. Students who successfully complete this course may be eligible for Ford Service Technician Specialty Training (STST) certification.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- SLO 1: Understand the theory and operation of gasoline engine performance systems and their components.
- Explain the theory and operation of automotive ignition systems to include distributor ignition, waste spark, and coil on plug systems.
- Explain the theory and operation of electronic fuel injection systems to include throttle body injection, port fuel injection, and gasoline direct injection.
- Explain the theory and operation of automotive emission control systems to include catalytic converters, positive crankcase ventilation, evaporative emissions, and exhaust gas recirculation systems.
- SLO 2: Diagnose gasoline engine performance systems and their components.
- Explain the proper use of technical service publications used in the diagnostic procedure.
- Perform diagnosis of ignition system concerns using scan tool data and related test equipment.
- Perform diagnosis of electronic fuel injection system concerns using scan tool data and related test equipment.
- Perform diagnosis of emission control system concerns using scan tool data and related test equipment.
- SLO 3: Demonstrate the ability to service and repair gasoline engine performance systems and their components.
- Demonstrate an understanding of proper ignition system maintenance and service.
- Demonstrate an understanding of proper electronic fuel injection system maintenance and service.
- Demonstrate an understanding of proper emission control system maintenance and service.
- Perform removal and replacement of automotive ignition system components.
- Perform removal and replacement of electronic fuel injection system components.
- Perform removal and replacement of emission control system components.
- Perform adjustments as necessary to gasoline engine performance systems and their components.
- Demonstrate the use of special tools necessary to repair gasoline engine performance systems and their components.
- Select, service, and replace gasoline engine performance system components based upon inspection and measurement using manufacturer's specifications and procedures.

**AMT 383 Ford ASSET Advanced Gasoline Engine Performance**

Units: 3  
Hours: 36 hours LEC; 54 hours LAB  
Prerequisite: AMT 371 with a grade of "C" or better  
Enrollment Limitation: Students taking this course must be enrolled in the Ford Automotive Student Service Education Training (ASSET) program due to prerequisite Ford Motor Company training requirements.  
Transferable: CSU  
Catalog Date: June 1, 2020
This course is offered to students enrolled in the Ford Automotive Student Service Education Training (ASSET) program. This course offers an advanced analysis of gasoline engine performance systems to include ignition systems, fuel systems, and emission controls. New technologies and advances in these systems will be highlighted. This course places emphasis on advanced diagnostic techniques, use of specialized test equipment, and diagnostic strategies to be utilized when standard manufacturer's procedures are unable to properly diagnose or repair the vehicle. Students who successfully complete this course may be eligible for Ford Service Technician Specialty Training (STST) certification.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- **SLO 1**: Understand the theory and operation of advanced gasoline engine performance systems and their components.
- **SLO 2**: Diagnose intermittent and advanced gasoline engine performance system concerns.
- **SLO 3**: Demonstrate the ability to service and repair advanced gasoline engine performance systems and their components.

- Explain the advanced theory and operation of automotive ignition systems to include spark duration, peak kV, and secondary ignition pattern analysis.
- Explain the advanced theory and operation of electronic fuel injection systems to include injection timing strategies, piezoelectric injectors, return-less fuel systems, and low and high pressure fuel delivery/injection systems.
- Explain the advanced theory and operation of automotive emission control systems to include universal exhaust gas oxygen (wideband air/fuel ratio) sensors, variable camshaft timing systems, and electronic throttle control.
- Perform diagnosis of advanced ignition system concerns using oscilloscope patterns, spark duration data, and Mode 6 data.
- Perform diagnosis of advanced electronic fuel injection system concerns using fuel injector balance testing (relative injector flow), oscilloscope patterns, and oxygen sensor data.
- Perform diagnosis of advanced emission control system concerns using scan tool data, oscilloscope patterns, breakout boxes, and related test equipment.
- Perform diagnosis of intermittent drivability concerns.
- Perform diagnosis of drivability concerns that do not result in a diagnostic trouble code.
- Utilize critical thinking to develop and execute a diagnostic strategy when manufacturer's procedures fail to properly diagnose and repair the vehicle.
- Demonstrate the ability to service and repair advanced gasoline engine performance systems and their components.
- Demonstrate an understanding of proper gasoline engine performance system maintenance and service.
- Perform removal and replacement of gasoline engine performance system components.
- Perform adjustments as necessary to gasoline engine performance systems and their components.
- Demonstrate the use of special tools necessary to repair gasoline engine performance systems and their components.
- Select, service, and replace gasoline engine performance system components based upon inspection and measurement using manufacturer's specifications and procedures.

**AMT 385 Ford ASSET Automotive Manual Drive Train and Axles**

- **Units**: 3
- **Hours**: 36 hours LEC; 54 hours LAB
- **Prerequisite**: AMT 371 with a grade of "C" or better
- **Enrollment Limitation**: Students taking this course must be enrolled in the Ford Automotive Student Service Education Training (ASSET) program due to prerequisite Ford Motor Company training requirements.
- **Transferable**: CSU
- **Catalog Date**: June 1, 2020
This course is offered to students enrolled in the Ford Automotive Student Service Education Training (ASSET) program. This course covers the theory, diagnosis, and repair of clutches, manual transmissions and transaxles, transfer cases, drive lines, and differentials. Proper maintenance and service will also be covered. Students who successfully complete this course may be eligible for Ford Service Technician Specialty Training (STST) certification.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO 1: Understand the theory and operation of manual transmissions and transaxles and drive train components to include: clutches, transfer cases, drive shafts, and differential assemblies.
- Explain the purpose and role of torque in the drive train.
- Explain the relationship between torque, speed and gear ratios.
- Identify the components in manual transmissions and transaxles.
- Identify the components of transfer cases, clutches, drive shafts, and axle assemblies.
- Explain the flow of power through manual transmissions and transaxles.
- Explain the flow of power through clutches and axle assemblies.
- SLO 2: Demonstrate the ability to diagnose manual transmissions, transaxles, and drive train concerns.
- Explain the proper use of technical service publications used in the diagnostic procedure.
- Perform noise diagnosis of manual transmissions, transaxles, and drive train components.
- Perform vibration diagnosis of manual transmissions, transaxles, and drive train components.
- Perform mechanical diagnosis of manual transmissions, transaxles, and drive train components.
- SLO 3: Demonstrate the ability to repair manual transmissions, transaxles, and drive train concerns.
- Perform disassembly and reassembly of manual transmissions.
- Perform disassembly and reassembly of manual transaxles.
- Perform disassembly and reassembly of transfer cases.
- Perform disassembly and reassembly of differentials.
- Select, service, and replace drive train components based upon inspection and measurement and manufacturer's specifications.

AMT 495 Independent Studies in Automotive Mechanics Technology

Units: 1 - 3
Hours: 54 - 162 hours LAB
Prerequisite: None.
Transferable: CSU
Catalog Date: June 1, 2020

An independent studies project involves an individual student or small group of students in study, research, or activities beyond the scope of regularly offered courses. See the current catalog section of “Special Studies” for full details of Independent Studies.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO #1: Actively engage in intellectual inquiry beyond that required in order to pass a course of study (College Wide Learning Outcome – Area 4).
- Discuss and outline a proposal of study (that can be accomplished within one semester term) with a supervising instructor qualified within the discipline.
- Design an independent study (to be completed individually or by collaboration of a small group) to foster special knowledge, skills, and experience that are not available in any one regularly scheduled course.
- Use information resources to gather discipline-specific information.
SLO #2: Utilize modes of analysis and critical thinking to apply theoretical perspectives and/or concepts in the major discipline of study to significant problems and/or educational activities (College Wide Learning Outcome – Area 3).

Analyze and apply the knowledge, skills and experience that are involved in the independent study to theoretical perspectives and/or concepts in the major discipline of study.

Explain the importance of the major discipline of study in the broader picture of society.

SLO #3: Communicate a complex understanding of content matter of the major discipline of study (College Wide Outcome – Area 3).

Demonstrate competence in the skills essential to mastery of the major discipline of study that are necessary to accomplish the independent study.

SLO #4: Identify personal goals and pursue these goals effectively (College Wide Outcome – Area 4).

Utilize skills from the "academic tool kit" including time management, study skills, etc., to accomplish the independent study within one semester term.

AMT 498 Work Experience in Automotive Mechanics Technology

Units: 1 - 4
Hours: 60 - 300 hours LAB
Prerequisite: None.
Enrollment Limitation: Students must be in a paid or unpaid internship, volunteer position or job related to career goals in Automotive Mechanics Technology.
Transferable: CSU
General Education: AA/AS Area III(b)
Catalog Date: June 1, 2020

This course provides students with opportunities to develop marketable skills in preparation for employment in their major field of study or advancement within their career. It is designed for students interested in work experience and/or internships in transfer level degree occupational programs. Course content includes understanding the application of education to the workforce; completion of required forms which document the student's progress and hours spent at the work site; and developing workplace skills and competencies. Appropriate level learning objectives are established by the student and the employer. During the semester, the student is required to participate in a weekly orientation and 75 hours of related paid work experience, or 60 hours of unpaid work experience for one unit. An additional 75 or 60 hours of related work experience is required for each additional unit. Work Experience may be taken for a total of 16 units when there are new or expanded learning objectives. Only one Work Experience course may be taken per semester.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- DEMONSTRATE AN UNDERSTANDING AND APPLICATION OF PROFESSIONAL WORKPLACE BEHAVIOR IN A FIELD OF STUDY RELATED TO ONE'S CAREER.(SLO 1)

- Understand the effects time, stress, and organizational management have on performance.

- Demonstrate an understanding of consistently practicing ethics and confidentiality in a workplace.

- Examine the career/life planning process and relate its relevancy to the student.

- Demonstrate an understanding of basic communication tools and their appropriate use.

- Demonstrate an understanding of workplace etiquette.

- DESCRIBE THE CAREER/LIFE PLANNING PROCESS AND RELATE ITS RELEVANCY TO ONE'S CAREER.(SLO 2)

- Link personal goals to long term achievement.

- Display an understanding of creating a professional first impression.

- Understand how networking is a powerful job search tool.

- Understand necessary elements of a résumé.

- Understand the importance of interview preparation.

- Identify how continual learning increases career success.

- DEMONSTRATE APPLICATION OF INDUSTRY KNOWLEDGE AND THEORETICAL CONCEPTS AS WRITTEN IN LEARNING OBJECTIVES IN PARTNERSHIP WITH THE EMPLOYER WORK SITE SUPERVISOR.(SLO 3)
What do Ebola, hemophilia, DNA fingerprinting, sequoias, cuttlefish, intertidal zones, and global climate change have in common? These are a few examples of the diverse topics that are explored in Biology, which is the scientific study of living organisms including their structure, function, evolution, and interactions with other organisms and with the environment. The CRC Biology Department offers a variety of courses that are organized into the following three areas:

- General education courses for non-science majors who want to gain an understanding of the biological world (BIOL 300, 307, 310, 342, 350, 352, 390 and 485).
- Clinically related courses for students pursuing careers in nursing and allied health (BIOL 100, 102, 430, 431, 439 and 440).
- The first two years of a Biology major for those transferring to Bachelor Degree programs in fields related to the life sciences (BIOL 400, 410, and 420).

Students who transfer to four-year universities report a very high level of satisfaction with the education they received at CRC.

Associate Degrees for Transfer

A.S.-T. in Biology

The Associate in Science in Biology for Transfer Degree is designed to prepare students for a seamless transfer into the CSU system to complete a baccalaureate degree in Biology or a similar major. Students with this degree will receive priority admission with junior status to the California State University system. The Associate in Science in Nutrition and Dietetics for Transfer is comprised of lower division coursework typically required by CSU institutions. Students must complete the following Associate Degree for Transfer requirements (Pursuant to SB1440, §66746):

- Completion of 60 semester units or 90 quarter units that are eligible for transfer to the California State University.
- The Intersegmental General Education Transfer Curriculum (IGETC) pattern.
- A minimum of 18 semester units or 27 quarter units in a major or area of emphasis, as determined by the community college district.
- Obtainment of a minimum grade point average of 2.0.
- A grade of "C" or better in all courses required for the major or area of emphasis.

Completion of the AS-T degree may not prepare students to transfer to University of California biology programs that may have different requirements. If a student intends to transfer to University of California, additional courses in chemistry, physics, and math may be required.

Note to Transfer Students:

The Associate Degree for Transfer program is designed for students who plan to transfer to a campus of the California State University (CSU). Other than the required core, the courses you choose to complete this degree will depend to some extent on the selected CSU for transfer. In addition, some IGETC requirements can also be completed using courses required for this associate degree for transfer major (known as "double-counting"). Meeting with a counselor to determine the most appropriate course choices will facilitate efficient completion of a student's transfer requirements. For students wishing to transfer to other universities (UC System, private, or out-of-state), the Associate Degree for Transfer may not provide adequate preparation for upper-division transfer admissions, because many universities require more lower division courses than those in this degree. Even the CSUs that accept this transfer degree may likely require additional lower division courses to achieve the Bachelor degree. It is critical that students meet with a CRC counselor to select and plan the courses for the major, as programs vary widely in terms of the required preparation.

Catalog Date: June 1, 2020
BIOL 400  Principles of Biology  5  
BIOL 410  Principles of Botany  5  
BIOL 420  Principles of Zoology  5  
CHEM 400  General Chemistry I  5  
CHEM 401  General Chemistry II  5  
MATH 350  Calculus for the Life and Social Sciences I (3)  3 - 5  
or MATH 400  Calculus I (5)  
PHYS 350  General Physics  4  
PHYS 360  General Physics  4  
Total Units: 36 - 38

The Associate in Science in Biology for Transfer (AS-T) degree may be obtained by completion of 60 transferable, semester units with a minimum 2.0 GPA, including (a) the major or area of emphasis described in the Required Program, and (b) the Intersegmental General Education Transfer Curriculum for Science, Technology, Engineering, and Mathematics (IGETC for STEM).

Student Learning Outcomes
Upon completion of this program, the student will be able to:

- DEMONSTRATE UNDERSTANDING OF THE PROCESSES OF SCIENCE, THE SCIENTIFIC METHOD, AND THE RELATIONSHIP BETWEEN SCIENTIFIC RESEARCH AND ESTABLISHED KNOWLEDGE. This includes the ability to: • Elucidate the way in which research leads to generally accepted conclusions and the integration of new research data with the building of a body of scientific knowledge. • Recognize that the information presented in science textbooks and other established “authorities” is the result of research conducted in the field or the lab and is based on an accumulation of data. • Design a scientific inquiry, including use of proper controls and analyses • Demonstrate critical thinking skills by the analysis of data sets, recognition of the implications of perturbations to biological systems, and synthesis of information to draw conclusions.

- EXPRESS ONE’S SELF CLEARLY WHEN WRITING OR SPEAKING ABOUT BIOLOGY, DEMONSTRATING KNOWLEDGE OF BASIC BIOLOGICAL TERMINOLOGY AND UNDERSTANDING OF MAJOR BIOLOGICAL CONCEPTS. This includes the ability to produce: • Laboratory reports which address background information, procedures, results, and analysis of data developed during a laboratory exercise or inquiry project. • Essays explaining biological processes in clear and concise terms. • Reports and term papers which clearly explain biological processes and elucidate current theories explaining biological phenomena.

- DEMONSTRATE BOTH CONTENT KNOWLEDGE AND TEST TAKING SKILLS WHEN COMPLETING ESSAY, OBJECTIVE, AND MULTIPLE CHOICE EXAMS. This includes the ability to: • Demonstrate problem-solving abilities in the major content areas of biology including cell biology, anatomy, physiology, genetics, ecology, and evolution. • Analyze the logic of a multiple-choice question about biology and select the correct response from among related items. • Write clear responses to essay question prompts without including extraneous information or omitting information necessary to provide a clear answer. • Utilize test-taking skills such as critical analysis of information, test-time management and focused writing. • Demonstrate content knowledge in the broad areas of biology including cell biology, anatomy, physiology, genetics, ecology, and evolution.

- CHOOSE AND UTILIZE APPROPRIATE LABORATORY TECHNIQUES PROFICIENTLY. Biology majors’ lab techniques include: • Measurement (use of metric measures) • Microscopy • Pipetting • Gel electrophoresis • Dissection • Basic biochemical techniques such as pH testing, Biuret test, Benedict’s test, etc. • Ability to design a laboratory experiment, including the use of adequate controls and choice of analyses used to examine data, etc. Additional laboratory techniques relevant to biology majors can be found in the SLOs for the chemistry and physics courses required for this major.

- EVALUATE BIOLOGICAL DATA, DRAW REASONABLE CONCLUSIONS, RECOGNIZE THE ETHICAL IMPLICATIONS OF THESE CONCLUSIONS, AND APPLY THESE CONCLUSIONS TO PERSONAL, COMMUNITY, AND SCIENTIFIC PROBLEMS. This includes the ability to: • Choose what data to collect in order to address a specific hypothesis. • Collect data and keep organized records. • Conduct basic graphical and statistical analysis of data. • Reach and clearly express logical conclusions based on biological data. • Relate, in presentations and/or in written reports, how biological information is relevant to personal and community issues. • Recognize the ethical implications of biological research and the responsibility to use knowledge wisely.

- EMPLOY INFORMATION-GATHERING TOOLS TO INVESTIGATE BIOLOGICAL IDEAS. This includes the ability to: • Use the Internet in order to gather scientific information, including the ability to recognize the relevance and scientific validity (or lack thereof) of information when found. • Use the library in order to gather scientific information, including the ability to recognize the relevance and scientific validity (or lack thereof) of information when found.

Career Information
Research, Teaching, or Industrial Laboratory Careers in Molecular Biology, Microbiology, Biotechnology, Genetics, Wildlife Biology, Marine Biology, Pharmacy, Nutrition, Medicine, Dentistry, Veterinary, Optometry, etc. Some career options require more than two years of college study. Classes beyond the associate degree may be required for some career options or to fully prepare students for transfer to a university program.

## Associate Degrees

### A.S. in Biology: Pre-Nursing Option

CRC’s Biology, Pre-nursing option offers courses which satisfy general education requirements in Life Sciences, are prerequisites for a degree in Veterinary Technology, Medical Assisting, Health Information Technology, and Nursing, and prepare students for transfer opportunities to four-year programs in nursing, physical therapy, and programs leading to careers in allied health fields.

Highlights of the program include:
* Extensive laboratory experience
* Day and evening sections of pre-nursing classes
* A friendly faculty who have studied biology in South America, the Galapagos Islands, Africa and North America
* A Mathematics, Engineering and Science Achievement (MESA) program

Note: This degree is designed for students intending to transfer to a nursing program at a 4-year college or university. It does not prepare the student for immediate employment as a nurse. Students earning a nursing degree will need to complete several lower division nursing classes after transferring.

**Catalog Date:** June 1, 2020

### Degree Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 440</td>
<td>General Microbiology</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 430</td>
<td>Anatomy and Physiology</td>
<td>5</td>
</tr>
<tr>
<td>BIOL 431</td>
<td>Anatomy and Physiology</td>
<td>5</td>
</tr>
<tr>
<td>[ CHEM 305</td>
<td>Introduction to Chemistry (5)</td>
<td>5 - 10</td>
</tr>
<tr>
<td>and CHEM 306</td>
<td>Introduction to Organic and Biological Chemistry (5)</td>
<td></td>
</tr>
<tr>
<td>or CHEM 309</td>
<td>Integrated General, Organic, and Biological Chemistry (5)</td>
<td></td>
</tr>
<tr>
<td>NUTRI 300</td>
<td>Nutrition</td>
<td>3</td>
</tr>
<tr>
<td>FCS 324</td>
<td>Human Development: A Life Span</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 300</td>
<td>General Principles (3)</td>
<td>3</td>
</tr>
<tr>
<td>or PSYC 320</td>
<td>Social Psychology (3)</td>
<td></td>
</tr>
<tr>
<td>Total Units</td>
<td></td>
<td>28 - 33</td>
</tr>
</tbody>
</table>

1Note: This degree is designed for students intending to transfer to a nursing program at a 4-year college or university. It does not prepare the student for immediate employment as a nurse. Students earning a nursing degree will need to complete several lower division nursing classes after transferring.

The Biology: Pre-Nursing Option Associate in Science (A.S.) degree may be obtained by completion of the required program, plus general education requirements, plus sufficient electives to meet a 60-unit total. See CRC graduation requirements.

### Student Learning Outcomes

Upon completion of this program, the student will be able to:

- Demonstrate understanding of the processes of science, the scientific method, and the relationship between scientific research and established knowledge. This includes the ability to...
- Elucidate the way in which research leads to generally accepted conclusions and the integration of new research data with the building of a body of scientific knowledge.
- Recognize that the information presented in science textbooks and other established “authorities” is the result of research conducted in the field or the lab and is based on an accumulation of data.
- Design a scientific inquiry, including use of proper controls and analyses.
- Demonstrate critical thinking skills by the analysis of data sets, recognition of the implications of perturbations to biological systems, and synthesis of information to draw conclusions.
Express themselves clearly when writing or speaking about biology, demonstrating knowledge of basic biological terminology and understanding of major biological concepts. This includes the ability to produce: • Laboratory reports which address background information, procedures, results, and analysis of data developed during a laboratory exercise or inquiry project • Essays explaining biological processes in clear and concise terms • Reports and term papers which clearly explain biological processes and elucidate current theories explaining biological phenomena

Demonstrate both content knowledge and test taking skills when completing essay, objective, and multiple choice exams. This includes the ability to: • Demonstrate problem-solving abilities in the major content areas of biology including cell biology, anatomy, physiology, genetics, ecology, and evolution. • Analyze the logic of a multiple-choice question about biology and select the correct response from among related items. • Write clear responses to essay question prompts without including extraneous information or omitting information necessary to provide a clear answer • Utilize test-taking skills such as critical analysis of information, test-time management and focused writing • Demonstrate content knowledge in the broad areas of biology including cell biology, anatomy, physiology, genetics, ecology, and evolution.

Use appropriate laboratory techniques proficiently. Pre-nursing majors lab techniques include: • Measurement (use of metric measures) • Microscopy (including histology) • Identification of unknown microorganisms • Staining of bacteria • Use of equipment used to gather physiological data on humans • Additional laboratory techniques relevant to pre-nursing majors can be found in the SLOs for the chemistry courses required for this career option.

Evaluate biological data, draw reasonable conclusions, recognize the ethical implications of these conclusions, and apply these conclusions to personal, community, and scientific problems. This includes the ability to: • Choose what data to collect in order to address a specific hypothesis • Collect data and keep organized records • Conduct basic graphical and statistical analysis of data • Reach and clearly express logical conclusions based on biological data • Relate, in presentations and/or in written reports, how biological information is relevant to personal and community issues • Recognize the ethical implications of biological research and the responsibility to use knowledge wisely

Employ information-gathering tools investigate biological ideas. This includes the ability to... • Use the Internet in order to gather scientific information, including the ability to recognize the relevance and scientific validity (or lack thereof) of information when found. • Use the library in order to gather scientific information, including the ability to recognize the relevance and scientific validity (or lack thereof) of information when found.

Career Information

Nursing, Physician’s Assistant, Physical Therapy, etc. Some career options require more than two years of college study. Classes beyond the associate degree may be required for some career options or to fully prepare students for transfer to a university program.

A.S. in Biology

What do antibiotic resistance, hemophilia, DNA fingerprinting, sequoias, cuttlefish, intertidal zones, and global climate change have in common? These are a few examples of the diverse topics that are explored in biology, which is the scientific study of living organisms including their structure, function, evolution, and interactions with other organisms and with the environment.

Highlights of the program include:
• Extensive hands-on learning approach in laboratory courses that provide students with opportunities to use modern equipment and techniques.
• Small class sizes taught by enthusiastic biology professors who set high standards but who demonstrate how to achieve those standards.
• A high level of satisfaction with the education received at CRC is reported by students who transfer to 4-year universities.
• A Mathematics, Engineering and Science Achievement (MESA) program to help students develop academic and leadership skills.

Note to Transfer Students:
This degree is intended to prepare students for transfer to a University of California campus or other four-year institutions. It is critical that you meet with a counselor from your desired transfer institution to select and plan the courses for your major. Some UC programs may require calculus-based (not trigonometry based) physics with lab before graduation. Additionally, some UC programs may require statistics prior to graduation.

Colleges and universities vary widely in their requirements for degrees. The courses that CRC requires for an Associate’s degree may be different from the requirements for a Bachelor’s degree. Therefore, you are strongly encouraged to meet with both a CRC counselor and a counselor from your desired transfer institution in order to understand the lower division requirements for the program at the college or university you plan to attend.

Catalog Date: June 1, 2020

Degree Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 400</td>
<td>Principles of Biology</td>
<td>5</td>
</tr>
<tr>
<td>BIOL 410</td>
<td>Principles of Botany</td>
<td>5</td>
</tr>
<tr>
<td>BIOL 420</td>
<td>Principles of Zoology</td>
<td>5</td>
</tr>
<tr>
<td>COURSE CODE</td>
<td>COURSE TITLE</td>
<td>UNITS</td>
</tr>
<tr>
<td>-------------</td>
<td>---------------------------------------------------------------</td>
<td>-------</td>
</tr>
<tr>
<td>CHEM 400</td>
<td>General Chemistry I</td>
<td>5</td>
</tr>
<tr>
<td>CHEM 401</td>
<td>General Chemistry II</td>
<td>5</td>
</tr>
<tr>
<td>CHEM 420</td>
<td>Organic Chemistry I</td>
<td>5</td>
</tr>
<tr>
<td>CHEM 421</td>
<td>Organic Chemistry II</td>
<td>5</td>
</tr>
<tr>
<td>[[ MATH 350</td>
<td>Calculus for the Life and Social Sciences I (3)</td>
<td>6 - 10</td>
</tr>
<tr>
<td>and MATH 351]</td>
<td>Calculus for the Life and Social Sciences II (3)</td>
<td></td>
</tr>
<tr>
<td>or [ MATH 355</td>
<td>Calculus for Biology and Medicine I (4)</td>
<td></td>
</tr>
<tr>
<td>and MATH 356 ]</td>
<td>Calculus for Biology and Medicine II (4)</td>
<td></td>
</tr>
<tr>
<td>or [ MATH 400</td>
<td>Calculus I (5)</td>
<td></td>
</tr>
<tr>
<td>and MATH 401 ]</td>
<td>Calculus II (5)</td>
<td></td>
</tr>
</tbody>
</table>

Total Units: 41 - 45

The Biology Associate in Science (A.S.) degree may be obtained by completion of the required program, plus general education requirements, plus sufficient electives to meet a 60-unit total. See CRC graduation requirements.

Student Learning Outcomes

Upon completion of this program, the student will be able to:


- Elucidate the way in which research leads to generally accepted conclusions and the integration of new research data with the building of a body of scientific knowledge.

- Recognize that the information presented in science textbooks and other established “authorities” is the result of research conducted in the field or the lab and is based on an accumulation of data.

- Design a scientific inquiry, including use of proper controls and analyses.

- Demonstrate critical thinking skills by the analysis of data sets, recognition of the implications of perturbations to biological systems, and synthesis of information to draw conclusions.

- EXPRESS ONE’S SELF CLEARLY WHEN WRITING OR SPEAKING ABOUT BIOLOGY, DEMONSTRATING KNOWLEDGE OF BASIC BIOLOGICAL TERMINOLOGY AND UNDERSTANDING OF MAJOR BIOLOGICAL CONCEPTS. (PSLO 2)

- Produce laboratory reports which address background information, procedures, results, and analysis of data developed during a laboratory exercise or inquiry project.

- Produce essays explaining biological processes in clear and concise terms.

- Produce reports and term papers which clearly explain biological processes and elucidate current theories explaining biological phenomena.

- DEMONSTRATE BOTH CONTENT KNOWLEDGE AND TEST TAKING SKILLS WHEN COMPLETING ESSAY, OBJECTIVE, AND MULTIPLE CHOICE EXAMS. (PSLO 3)

- Demonstrate problem-solving abilities in the major content areas of biology including cell biology, anatomy, physiology, genetics, ecology, and evolution.

- Analyze the logic of a multiple-choice question about biology and select the correct response from among related items.

- Write clear responses to essay question prompts without including extraneous information or omitting information necessary to provide a clear answer.

- Utilize test-taking skills such as critical analysis of information, test-time management and focused writing.

- Demonstrate content knowledge in the broad areas of biology including cell biology, anatomy, physiology, genetics, ecology, and evolution.

- CHOOSE AND UTILIZE APPROPRIATE LABORATORY TECHNIQUES PROFICIENTLY. (PSLO 4)

- Demonstrate proficient use of measurement (use of metric measures).
• Demonstrate proficient use of microscopy.
• Demonstrate proficient use of pipetting.
• Demonstrate proficient use of gel electrophoresis.
• Demonstrate proficient use of dissection.
• Demonstrate proficient use of basic biochemical techniques such as pH testing, Biuret test, Benedict’s test, etc.
• Demonstrate the ability to design a laboratory experiment, including the use of adequate controls and choice of analyses used to examine data, etc.

EVALUATE BIOLOGICAL DATA, DRAW REASONABLE CONCLUSIONS, RECOGNIZE THE ETHICAL IMPLICATIONS OF THESE CONCLUSIONS, AND APPLY THESE CONCLUSIONS TO PERSONAL, COMMUNITY, AND SCIENTIFIC PROBLEMS. (PSLO 5)

• Choose what data to collect in order to address a specific hypothesis.
• Collect data and keep organized records.
• Conduct basic graphical and statistical analysis of data.
• Reach and clearly express logical conclusions based on biological data.
• Relate, in presentations and/or in written reports, how biological information is relevant to personal and community issues.
• Recognize the ethical implications of biological research and the responsibility to use knowledge wisely.

EMPLOY INFORMATION-GATHERING TOOLS TO INVESTIGATE BIOLOGICAL IDEAS. (PSLO 6)

• Use the Internet in order to gather scientific information, including the ability to recognize the relevance and scientific validity (or lack thereof) of information when found.
• Use the library in order to gather scientific information, including the ability to recognize the relevance and scientific validity (or lack thereof) of information when found.

Career Information

Research, Teaching, or Industrial Laboratory Careers in Molecular Biology, Microbiology, Biotechnology, Genetics, Wildlife Biology, Marine Biology, Pharmacy, Nutrition, Medicine, Dentistry, Veterinary, Optometry, etc. These career options require more than two years of college study. Classes beyond the associate degree may be required for career options or to fully prepare students for transfer to a university program.

A.S. in General Science

Areas of Study include:

• Physical Anthropology
• Astronomy
• Biology
• Chemistry
• Engineering
• Physical Geography
• Geology
• Physics

Eighteen (18) units of transfer level course work in science is required. Two laboratory courses must be included: one in the physical sciences and one in the biological sciences. Courses may be selected from astronomy, biology, chemistry, geology, physical geography, physical anthropology, and physics. The student, in consultation with a counselor, should choose science courses to meet his or her program, transfer, or general education requirements.

Students interested in transferring to a four-year university with a science major are encouraged to complete a science AS or AS-T degree such as Anthropology, Biology, Chemistry, Engineering, Geography, Geology, or Physics. This General Science degree may not include the majors-level transfer courses needed for many science majors. Students are strongly recommended to see a counselor for guidance.

Catalog Date: June 1, 2020

Degree Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
</table>

...
**A. Life Science with Lab:**

A minimum of 4 units from the following: 

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANTH 300</td>
<td>Biological Anthropology</td>
<td>3</td>
</tr>
<tr>
<td>and ANTH 301</td>
<td>Biological Anthropology Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>BIOL 307</td>
<td>Biology of Organisms</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 310</td>
<td>General Biology</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 400</td>
<td>Principles of Biology</td>
<td>5</td>
</tr>
<tr>
<td>BIOL 410</td>
<td>Principles of Botany</td>
<td>5</td>
</tr>
<tr>
<td>BIOL 420</td>
<td>Principles of Zoology</td>
<td>5</td>
</tr>
<tr>
<td>BIOL 430</td>
<td>Anatomy and Physiology</td>
<td>5</td>
</tr>
<tr>
<td>BIOL 431</td>
<td>Anatomy and Physiology</td>
<td>5</td>
</tr>
<tr>
<td>BIOL 440</td>
<td>General Microbiology</td>
<td>4</td>
</tr>
</tbody>
</table>

**B. Physical Science with Lab:**

A minimum of 3 units from the following: 

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASTR 400</td>
<td>Astronomy Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>and ASTR 300</td>
<td>Introduction to Astronomy</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 300</td>
<td>Beginning Chemistry</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 305</td>
<td>Introduction to Chemistry</td>
<td>5</td>
</tr>
<tr>
<td>CHEM 306</td>
<td>Introduction to Organic and Biological Chemistry</td>
<td>5</td>
</tr>
<tr>
<td>CHEM 309</td>
<td>Integrated General, Organic, and Biological Chemistry</td>
<td>5</td>
</tr>
<tr>
<td>CHEM 322</td>
<td>Environmental Chemistry Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>and CHEM 321</td>
<td>Environmental Chemistry</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 400</td>
<td>General Chemistry I</td>
<td>5</td>
</tr>
<tr>
<td>CHEM 401</td>
<td>General Chemistry II</td>
<td>5</td>
</tr>
<tr>
<td>CHEM 420</td>
<td>Organic Chemistry I</td>
<td>5</td>
</tr>
<tr>
<td>CHEM 421</td>
<td>Organic Chemistry II</td>
<td>5</td>
</tr>
<tr>
<td>GEOG 301</td>
<td>Physical Geography Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>and GEOG 300</td>
<td>Physical Geography: Exploring Earth's Environmental Systems</td>
<td>3</td>
</tr>
<tr>
<td>GEOL 301</td>
<td>Physical Geology Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>and GEOL 300</td>
<td>Physical Geology</td>
<td>3</td>
</tr>
<tr>
<td>GEOL 306</td>
<td>Earth Science Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>and GEOL 305</td>
<td>Earth Science</td>
<td>3</td>
</tr>
<tr>
<td>GEOL 311</td>
<td>Historical Geology Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>and GEOL 310</td>
<td>Historical Geology</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 304</td>
<td>How Things Work</td>
<td>3</td>
</tr>
<tr>
<td>PHYS 350</td>
<td>General Physics</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 360</td>
<td>General Physics</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 370</td>
<td>Introductory Physics - Mechanics and Thermodynamics</td>
<td>5</td>
</tr>
<tr>
<td>COURSE CODE</td>
<td>COURSE TITLE</td>
<td>UNITS</td>
</tr>
<tr>
<td>-------------</td>
<td>------------------------------------------------------------------------------</td>
<td>-------</td>
</tr>
<tr>
<td>PHYS 380</td>
<td>Introductory Physics - Electricity and Magnetism, Light and Modern Physics (5)</td>
<td></td>
</tr>
<tr>
<td>PHYS 411</td>
<td>Mechanics of Solids and Fluids (4)</td>
<td></td>
</tr>
<tr>
<td>PHYS 421</td>
<td>Electricity and Magnetism (4)</td>
<td></td>
</tr>
<tr>
<td>PHYS 431</td>
<td>Heat, Waves, Light and Modern Physics (4)</td>
<td></td>
</tr>
</tbody>
</table>

**C. Additional Science Courses:**

A minimum of 11 units from the following:

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANTH 300</td>
<td>Biological Anthropology (3)</td>
<td></td>
</tr>
<tr>
<td>ANTH 301</td>
<td>Biological Anthropology Laboratory (1)</td>
<td></td>
</tr>
<tr>
<td>ASTR 300</td>
<td>Introduction to Astronomy (3)</td>
<td></td>
</tr>
<tr>
<td>ASTR 400</td>
<td>Astronomy Laboratory (1)</td>
<td></td>
</tr>
<tr>
<td>BIOL 300</td>
<td>The Foundations of Biology (3)</td>
<td></td>
</tr>
<tr>
<td>BIOL 307</td>
<td>Biology of Organisms (4)</td>
<td></td>
</tr>
<tr>
<td>BIOL 310</td>
<td>General Biology (4)</td>
<td></td>
</tr>
<tr>
<td>BIOL 342</td>
<td>The New Plagues: New and Ancient Infectious Diseases Threatening World Health (3)</td>
<td></td>
</tr>
<tr>
<td>BIOL 350</td>
<td>Environmental Biology (3)</td>
<td></td>
</tr>
<tr>
<td>BIOL 352</td>
<td>Conservation Biology (3)</td>
<td></td>
</tr>
<tr>
<td>BIOL 390</td>
<td>Natural History Field Study (0.5 - 4)</td>
<td></td>
</tr>
<tr>
<td>BIOL 400</td>
<td>Principles of Biology (5)</td>
<td></td>
</tr>
<tr>
<td>BIOL 410</td>
<td>Principles of Botany (5)</td>
<td></td>
</tr>
<tr>
<td>BIOL 420</td>
<td>Principles of Zoology (5)</td>
<td></td>
</tr>
<tr>
<td>BIOL 430</td>
<td>Anatomy and Physiology (5)</td>
<td></td>
</tr>
<tr>
<td>BIOL 431</td>
<td>Anatomy and Physiology (5)</td>
<td></td>
</tr>
<tr>
<td>BIOL 440</td>
<td>General Microbiology (4)</td>
<td></td>
</tr>
<tr>
<td>BIOL 462</td>
<td>Genetics in Contemporary Human Society (3)</td>
<td></td>
</tr>
<tr>
<td>CHEM 300</td>
<td>Beginning Chemistry (4)</td>
<td></td>
</tr>
<tr>
<td>CHEM 305</td>
<td>Introduction to Chemistry (5)</td>
<td></td>
</tr>
<tr>
<td>CHEM 306</td>
<td>Introduction to Organic and Biological Chemistry (5)</td>
<td></td>
</tr>
<tr>
<td>CHEM 309</td>
<td>Integrated General, Organic, and Biological Chemistry (5)</td>
<td></td>
</tr>
<tr>
<td>CHEM 321</td>
<td>Environmental Chemistry (3)</td>
<td></td>
</tr>
<tr>
<td>CHEM 322</td>
<td>Environmental Chemistry Laboratory (1)</td>
<td></td>
</tr>
<tr>
<td>CHEM 400</td>
<td>General Chemistry I (5)</td>
<td></td>
</tr>
<tr>
<td>CHEM 401</td>
<td>General Chemistry II (5)</td>
<td></td>
</tr>
<tr>
<td>CHEM 420</td>
<td>Organic Chemistry I (5)</td>
<td></td>
</tr>
<tr>
<td>CHEM 421</td>
<td>Organic Chemistry II (5)</td>
<td></td>
</tr>
<tr>
<td>ENGR 304</td>
<td>How Things Work (3)</td>
<td></td>
</tr>
<tr>
<td>GEOG 300</td>
<td>Physical Geography: Exploring Earth's Environmental Systems (3)</td>
<td></td>
</tr>
<tr>
<td>COURSE CODE</td>
<td>COURSE TITLE</td>
<td>UNITS</td>
</tr>
<tr>
<td>-------------</td>
<td>--------------------------------------------------</td>
<td>-------</td>
</tr>
<tr>
<td>GEOG 301</td>
<td>Physical Geography Laboratory (1)</td>
<td></td>
</tr>
<tr>
<td>GEOG 305</td>
<td>Global Climate Change (3)</td>
<td></td>
</tr>
<tr>
<td>GEOG 306</td>
<td>Weather and Climate (3)</td>
<td></td>
</tr>
<tr>
<td>GEOL 300</td>
<td>Physical Geology (3)</td>
<td></td>
</tr>
<tr>
<td>GEOL 301</td>
<td>Physical Geology Laboratory (1)</td>
<td></td>
</tr>
<tr>
<td>GEOL 305</td>
<td>Earth Science (3)</td>
<td></td>
</tr>
<tr>
<td>GEOL 306</td>
<td>Earth Science Laboratory (1)</td>
<td></td>
</tr>
<tr>
<td>GEOL 310</td>
<td>Historical Geology (3)</td>
<td></td>
</tr>
<tr>
<td>GEOL 311</td>
<td>Historical Geology Laboratory (1)</td>
<td></td>
</tr>
<tr>
<td>GEOL 330</td>
<td>Introduction to Oceanography (3)</td>
<td></td>
</tr>
<tr>
<td>GEOL 390</td>
<td>Field Studies in Geology (1 - 4)</td>
<td></td>
</tr>
<tr>
<td>PHYS 310</td>
<td>Conceptual Physics (3)</td>
<td></td>
</tr>
<tr>
<td>PHYS 350</td>
<td>General Physics (4)</td>
<td></td>
</tr>
<tr>
<td>PHYS 360</td>
<td>General Physics (4)</td>
<td></td>
</tr>
<tr>
<td>PHYS 370</td>
<td>Introductory Physics - Mechanics and Thermodynamics (5)</td>
<td></td>
</tr>
<tr>
<td>PHYS 380</td>
<td>Introductory Physics - Electricity and Magnetism, Light and Modern Physics (5)</td>
<td></td>
</tr>
<tr>
<td>PHYS 411</td>
<td>Mechanics of Solids and Fluids (4)</td>
<td></td>
</tr>
<tr>
<td>PHYS 421</td>
<td>Electricity and Magnetism (4)</td>
<td></td>
</tr>
<tr>
<td>PHYS 431</td>
<td>Heat, Waves, Light and Modern Physics (4)</td>
<td></td>
</tr>
<tr>
<td><strong>Total Units:</strong></td>
<td></td>
<td><strong>18</strong></td>
</tr>
</tbody>
</table>

1Courses used in A or B above will not count towards C, except units exceeding the 4 or 3 unit minimum in A and B. For example, a student completing the 5 unit CHEM 309 under B could apply 2 of those units towards C. A total of 18 science units is required.

The General Science Associate in Science (A.S.) degree may be obtained by completion of the required program, plus general education requirements, plus sufficient electives to meet a 60-unit total. See CRC graduation requirements.

**Student Learning Outcomes**

Upon completion of this program, the student will be able to:

- explain the core perspectives of the scientific method and apply it to at least one scientific discipline. (SLO 1)
- solve introductory problems of a conceptual and/or numerical nature of at least one scientific discipline. (SLO 2)
- accurately apply the basic vocabulary and concepts of at least one scientific discipline verbally and in writing. (SLO 3)
- recognize the use and misuse of scientific concepts in society including politics and the media. (SLO 4)

**Biology (BIOL)**

**BIOL 100 Introduction to Concepts of Human Anatomy and Physiology**
This introductory course provides an overview of the basic anatomy and physiology of all body systems. It is designed as a non-transferable course for the Medical Assisting Programs and other related programs, and may be useful for other health-related technologies and for strengthening or developing a vocabulary in human anatomy and physiology.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- **SLO 1: EXPLAIN THE BASIC STRUCTURE OF CELLS AND TISSUES AND THE RELEVANCE OF THIS STRUCTURE TO HUMAN PHYSIOLOGY**
  - illustrate how pH, ions, and concentration gradients influence physiological processes
  - compare and contrast the anatomy of cells in order to explain the physiology of various cells
  - apply knowledge of tissues to organs and organ systems

- **SLO 2: DEMONSTRATE A FUNDAMENTAL UNDERSTANDING OF HOMEOSTASIS AND FEEDBACK LOOPS**
  - describe the mechanisms by which the human can self-regulate
  - compare and contrast positive and negative feedback loops
  - explain how homeostatic mechanisms involve multiple organ systems

- **SLO 3: IDENTIFY ANATOMICAL STRUCTURES**
  - describe the anatomical position and demonstrate the ability to use directional terms
  - utilize proper anatomical terms to name structures in various organ systems

- **SLO 4: DETERMINE GENERAL PHYSIOLOGY OF A STRUCTURE BASED ON ANATOMICAL OBSERVATIONS**
  - analyze structural distinctions and apply concepts of cellular physiology to organs and organ systems
  - determine functional relationships among various organ systems based upon their anatomical proximity or similarity

**BIOL 102 Essentials of Human Anatomy and Physiology**

Upon completion of this course, the student will be able to:

- **SLO 1: EXPLAIN THE BASIC STRUCTURE OF CELLS AND TISSUES AND THE RELEVANCE OF THIS STRUCTURE TO HUMAN PHYSIOLOGY**
  - illustrate how pH, ions, and concentration gradients influence physiological processes
  - compare and contrast the anatomy of cells in order to explain the physiology of various cells
  - apply knowledge of tissues to organs and organ systems

- **SLO 2: DEMONSTRATE A FUNDAMENTAL UNDERSTANDING OF HOMEOSTASIS AND FEEDBACK LOOPS**
  - describe the mechanisms by which the human can self-regulate
  - compare and contrast positive and negative feedback loops
**BIOL 295 Independent Studies in Biology**

**Units:** 1 - 3  
**Hours:** 54 - 162 hours LAB  
**Prerequisite:** None.  
**Catalog Date:** June 1, 2020

An independent studies project involves an individual student or small group of students in study, research, or activities beyond the scope of regularly offered courses. See the current catalog section of “Special Studies” for full details of Independent Studies.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- **SLO #1:** Actively engage in intellectual inquiry beyond that required in order to pass a course of study (College Wide Learning Outcome – Area 4).
  - Discuss and outline a proposal of study (that can be accomplished within one semester term) with a supervising instructor qualified within the discipline.
  - Design an independent study (to be completed individually or by collaboration of a small group) to foster special knowledge, skills, and experience that are not available in any one regularly scheduled course.
  - Use information resources to gather discipline-specific information.
- **SLO #2:** Utilize modes of analysis and critical thinking to apply theoretical perspectives and/or concepts in the major discipline of study to significant problems and/or educational activities (College Wide Learning Outcome – Area 3).
  - Analyze and apply the knowledge, skills and experience that are involved in the independent study to theoretical perspectives and/or concepts in the major discipline of study.
  - Explain the importance of the major discipline of study in the broader picture of society.
- **SLO #3:** Communicate a complex understanding of content matter of the major discipline of study (College Wide Outcome – Area 3).
  - Demonstrate competence in the skills essential to mastery of the major discipline of study that are necessary to accomplish the independent study.
- **SLO #4:** Identify personal goals and pursue these goals effectively (College Wide Outcome – Area 4).
  - Utilize skills from the “academic tool kit” including time management, study skills, etc., to accomplish the independent study within one semester term.
This course is a survey of major topics in the biological sciences for the non-science major with an emphasis on human biology. Units covered include cell structure and chemistry, metabolism, Mendelian and molecular genetics, genetic engineering, anatomy and physiology of humans, evolution, and ecology. Students interested in a general elective biology course are strongly advised to take either BIOL 300, BIOL 307, or BIOL 310 since some transfer institutions will provide credit for only one of the three courses.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- **SLO 1: EXPLAIN THE BASIC MECHANISMS BY WHICH ORGANISMS MAINTAIN HOMEOSTASIS**
  - distinguish the major cellular processes (e.g. cell membrane function, cellular respiration), and explain them using the correct biological terminology.
  - diagram major structures of human anatomy and explain the basic functioning of major human organ systems.
  - analyze the impact of damage to organs or organ systems on homeostasis and the health of individuals.
- **SLO 2: DESCRIBE THE BASIC PROCESSES OF GENETICS**
  - solve simple Mendelian genetic problems and discuss the implications of transmission genetics for families.
  - describe the basic processes of molecular genetics and the implications of these processes for society.
  - evaluate issues in modern biology such as genetic engineering, biotechnology, and reproductive technologies.
  - describe the cellular basis of reproduction, including meiosis.
- **SLO 3: ELUCIDATE THE BASIC PRINCIPLES OF EVOLUTION AND BIODIVERSITY**
  - explain the basic processes of evolution and the overall mechanism by which natural selection works.
  - describe the major types of organisms and the characteristics by which they are classified and draw conclusions about the relatedness of organisms from evolutionary data.
- **SLO 4: EVALUATE THE IMPACTS OF HUMANS ON ECOSYSTEMS**
  - assess the interactions of humans with the environment and other organisms.
  - evaluate the implications of human-environment interactions for local and regional communities.
  - analyze environmental data and draw reasonable conclusions.
- **SLO 5: APPRAISE THE IMPORTANCE OF THE SCIENTIFIC METHOD AND THINK CRITICALLY ABOUT BIOLOGICAL INFORMATION RELEVANT TO PERSONAL AND COMMUNITY ISSUES.**
  - choose terminology correctly and accurately define biological terms.
  - appraise biological information from a variety of sources and evaluate its validity.
  - construct examples of the relevance of biology to specific personal and community issues.
  - demonstrate an understanding of the scientific method as applied to current issues.
  - draw reasonable conclusions from biological data and evaluate conclusions presented by others as having a scientific basis.

**BIOL 307 Biology of Organisms**
This is a general biology course focusing on a survey of the plant and animal kingdoms with an emphasis on evolution and biodiversity. The course covers the general principles of biology including: methods of science, cell organization, genetics, evolution, ecology, biodiversity, and anatomy. These principles are explored in more depth through the examination of additional topics which may include: disease and epidemiology, physiological ecology, biotechnology, population growth and regulation, ecosystem ecology, and conservation biology. The course is designed for non-science majors and is especially useful for liberal studies, elementary education, environmental studies, recreation, and similar majors. Students interested in a general elective biology course are strongly advised to take either BIOL 300, BIOL 307, or BIOL 310 since some transfer institutions will provide credit for only one of the three courses.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO 1: ARTICULATE THE IMPORTANCE OF THE DIVERSITY OF ORGANISMS TO ECOSYSTEM FUNCTIONING.
  - elucidate the characteristics used to classify organisms into major taxonomic groups.
  - compare and contrast the roles of fungi, plants, and animals in communities and ecosystems.

- SLO 2: EXPLAIN THE BASIC MECHANISMS BY WHICH ORGANISMS SURVIVE, REPRODUCE, AND EVOLVE.
  - analyze the basic processes and components of prokaryotic and eukaryotic cells.
  - compare and contrast the ways in which fungi, plants and animals solve physiological problems.
  - describe the processes by which organisms maintain homeostasis.
  - solve Mendelian genetic problems using Punnett squares, pedigrees, and similar methods.
  - describe the basic processes of molecular genetics.
  - explain the process of evolution by natural selection.

- SLO 3: UTILIZE THE SCIENTIFIC METHOD AND EVALUATE THE SCIENTIFIC VALIDITY OF INFORMATION PRESENTED BY THE MEDIA AND OTHER SOURCES
  - utilize and correctly interpret the vocabulary of biology.
  - assess the results of scientific investigations into biological questions.
  - construct and conduct simple scientific inquiries into biological questions.
  - draw reasonable conclusions from biological data.

- SLO 4: APPRAISE THE IMPORTANCE OF BIOLOGY TO PERSONAL AND COMMUNITY ISSUES AND BE ABLE TO GATHER, AND THINK CRITICALLY ABOUT, BIOLOGICAL INFORMATION RELEVANT TO ONE'S LIFE.
  - evaluate the implications of genetic biotechnology and other developing biological techniques for modern life.
  - articulate the value of biological knowledge to human populations.
  - construct examples of the relevance of biology to personal interests and community issues.
  - assess the impact of environmental processes on human communities and vice versa.

BIOL 308 Contemporary Biology
This course is a survey of biological science intended to equip the student to think and act intelligently with respect to contemporary issues in biology. Biological topics are introduced in a framework of natural selection. The course is for those not intending to major in biological sciences, particularly liberal studies majors. Genetics is a significant focus of the course, as are origin of cellular life, cellular physiology, and diversity of organisms. An optional laboratory illustrating these introduced principles is offered as a separate, one-unit course (Biol 309).

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- **SLO 1: UTILIZE THE SCIENTIFIC METHOD AND EVALUATE SCIENTIFIC DATA.**
  - Construct simple scientific inquiries into biological questions, demonstrating an understanding of the scientific method and experimental design.
  - Develop reasonable conclusions after analyzing biological data.
  - Evaluate the validity of scientific information presented by the media and other sources.

- **SLO 2: EXPLAIN THE BASIC BIOCHEMICAL, CELLULAR, STRUCTURAL, AND PHYSIOLOGICAL MECHANISMS BY WHICH ORGANISMS MAINTAIN HOMEOSTASIS.**
  - Demonstrate knowledge of biologically important atoms and molecules.
  - Identify major components of eukaryotic and prokaryotic cells.
  - Give an overview of major cellular processes (e.g. osmosis, cellular respiration, photosynthesis, and cell division) underlying the physiological responses of organisms.
  - Describe the processes by which organisms respond to disease, with particular reference to human health and disease processes.
  - Delineate the basics of the anatomy and physiology of major human organ systems.

- **SLO 3: DELINEATE THE BASIC PROCESSES OF GENETICS, REPRODUCTION, AND DEVELOPMENT.**
  - Solve Mendelian genetics problems using Punnett squares, pedigrees, and similar methods.
  - Describe the basic processes of molecular genetics, such as DNA replication, transcription, and translation.
  - Describe key processes of human reproduction and development.

- **SLO 4: ELUCIDATE THE BASIC PRINCIPLES OF EVOLUTION, BIODIVERSITY, AND ECOLOGY.**
  - Explain the process of evolution by natural selection.
  - Describe the major types of organisms (e.g. the kingdoms of living things).
  - Evaluate the impact of environmental processes on human communities and vice versa.

- **SLO 5: APPRAISE THE IMPORTANCE OF, AND THINK CRITICALLY ABOUT, BIOLOGICAL INFORMATION RELEVANT TO ONE’S LIFE.**
  - Utilize the basic vocabulary of biology.
  - Evaluate the implications of genetic biotechnology and other developing biological techniques for modern life.
  - Articulate the value of biological knowledge to human populations.
  - Access biological information from a variety of sources.

**BIOL 309 Contemporary Biology Laboratory**
This course is an optional laboratory accompaniment to BIOL 308. The sessions will illustrate biological phenomena and their relationship to contemporary concerns and discoveries in biology.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- **SLO 1: UTILIZE THE SCIENTIFIC METHOD AND EVALUATE SCIENTIFIC DATA.**
  - Make observations and formulate testable hypotheses.
  - Construct and conduct simple scientific inquiries into biological questions, demonstrating an understanding of the scientific method and experimental design.
  - Present results in the format of graphs and tables.
  - Develop reasonable conclusions after analyzing biological data.

- **SLO 2: UTILIZE STANDARD BIOLOGICAL LABORATORY TECHNIQUES AND EQUIPMENT.**
  - Understand the importance and application of the microscope to view living organisms at the cellular level.
  - Use the appropriate equipment and/or tools to record measurements in the metric system.

- **SLO 3: INTEGRATE CONCEPTS FROM "CONTEMPORARY BIOLOGY" INTO THE HANDS-ON EXPERIENCE OF THE BIOLOGICAL LABORATORY.**
  - Explore basic biochemical, cellular, structural and physiological mechanisms.
  - Delineate the processes of genetics, reproduction, and development.
  - Elucidate the principles of evolution, biodiversity, and ecology.

- **SLO 4: APPRAISE THE IMPORTANCE OF, AND THINK CRITICALLY ABOUT, BIOLOGICAL INFORMATION RELEVANT TO ONE'S LIFE.**
  - Utilize the basic vocabulary of biology.
  - Evaluate the implications of genetic biotechnology and other developing biological techniques for modern life.
  - Articulate the value of biological knowledge to human populations.
  - Access biological information from a variety of sources.

**BIOL 310 General Biology**

<table>
<thead>
<tr>
<th>Units:</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hours:</td>
<td>54 hours LEC; 54 hours LAB</td>
</tr>
<tr>
<td>Prerequisite:</td>
<td>None</td>
</tr>
<tr>
<td>Advisory:</td>
<td>ESLR 320 and ESLW 310, OR ESL 325 with a grade of C or better; OR eligibility for ENGRD 310 AND ENGW 101.</td>
</tr>
<tr>
<td>Transferable:</td>
<td>CSU; UC (Transfer Credit Limitations: 1) BIOL 300, 307, 308, and 310 combined: maximum transfer credit is one course; 2) No credit for BIOL 300, BIOL 307, BIOL 308 or BIOL 310 if taken after BIOL 400, BIOL 420, BIOL 430 or BIOL 431)</td>
</tr>
<tr>
<td>General Education:</td>
<td>AA/AS Area IV; CSU Area B2; CSU Area B3; IGETC Area 5B; IGETC Area 5C</td>
</tr>
<tr>
<td>Catalog Date:</td>
<td>June 1, 2020</td>
</tr>
</tbody>
</table>

This is a survey of biological science with an emphasis on human biology. This course is intended for non-science majors. Topics covered include scientific inquiry, cell structure, transmission and molecular genetics, major organ systems, evolution, and ecology. Major biological principles are explored in each topic, but an emphasis is placed on human issues. The laboratory activities are designed to further investigate and illuminate each topic area. Students interested in a general elective biology course are strongly advised to take either BIOL 300, BIOL 307, or BIOL 310 since some transfer institutions will provide credit for only one of the three courses.
Upon completion of this course, the student will be able to:

- SLO1: EXPLAIN THE BASIC BIOCHEMICAL, CELLULAR, STRUCTURAL, AND PHYSIOLOGICAL MECHANISMS BY WHICH HUMANS MAINTAIN HOMEOSTASIS.
- demonstrate knowledge of biologically important atoms and molecules.
- identify major components of eukaryotic cells.
- give an overview of major cellular processes (e.g. osmosis, cellular respiration, and cell division) underlying the physiological responses of organisms.
- describe the processes by which organisms respond to disease, with particular reference to human health and disease processes.
- delineate the basics of the anatomy and physiology of major human organ systems.
- SLO2: DELINEATE THE BASIC PROCESSES OF GENETICS, REPRODUCTION, AND DEVELOPMENT.
- solve simple transmission (Mendelian) genetics problems.
- describe the basic processes of molecular genetics, such as DNA replication, transcription, and translation.
- examine current issues in modern biology, such as genetic engineering, biotechnology, reproductive technologies, stem cells, etc.
- describe key processes of human reproduction and development.
- SLO3: ELUCIDATE THE BASIC PRINCIPLES OF EVOLUTION, BIODIVERSITY, AND ECOLOGY.
- explain the mechanism of natural selection.
- describe the major types of organisms (e.g. the kingdoms of living things).
- evaluate the impact of humans on the environment and on other organisms.
- SLO4: UTILIZE THE SCIENTIFIC METHOD AND EVALUATE SCIENTIFIC DATA.
- conduct simple scientific investigations into biological questions, demonstrating an understanding of the scientific method and experimental design.
- develop reasonable conclusions after analyzing biological data.
- evaluate the validity of scientific information presented by the media and other sources.
- SLO5: APPRAISE THE IMPORTANCE OF, AND THINK CRITICALLY ABOUT, BIOLOGICAL INFORMATION RELEVANT TO ONE’S LIFE.
- utilize the basic vocabulary of biology.
- access biological information from a variety of sources.
- construct examples of the relevance of biology to specific personal and community issues.

BIOL 342 The New Plagues: New and Ancient Infectious Diseases Threatening World Health

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Advisory: ENGRD 312 and ENGWR 300
Transferable: CSU; UC
General Education: AA/AS Area IV; CSU Area B2; IGETC Area 5B
Catalog Date: June 1, 2020

This course will cover general biological concepts and the epidemiology and pathology of selected pathogens such as prions, viruses, bacteria, protozoa, and helminthes threatening public health on a global scale. The course explores the influence of human behavior and activities on the emergence of new infectious agents and the re-emergence of ancient plagues.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO #1: Examine the biology, pathogenesis, and transmission of infectious agents threatening global health.
Analyze the structure and function of bacteria, viral particles, fungi, helminths, protozoa, and prions.

- Compare and contrast the overall cell structure of prokaryotes and eukaryotes.
- SLO #2: Analyze how the human immune system responds to infectious agents.
- Assess the function and importance of skin, mucous membranes and normal flora.
- Evaluate the characteristics of non-specific immunity.
- Compare and contrast humoral and cell mediated immunity.
- SLO #3: Evaluate the factors leading to the emergence or re-emergence of infectious diseases worldwide.
- Compare mechanisms of genetic recombination in bacteria.
- Analyze the relevance of behavioral and social changes to the incidence of global infectious disease.
- SLO #4: Assess the various methods of control of infectious agents, including vaccination, antimicrobial therapy, behavioral, and social changes.
- Evaluate the effectiveness and discuss the history of various types of vaccinations.
- Compare and contrast the function and effectiveness of antibiotic, antiviral, antifungal and antiprotozoal therapy.
- SLO #5: Appraise the importance of the scientific method and think critically about biological and community issues.
- Assess biological information from a variety of sources and evaluate its validity.
- Construct examples of the relevance of biology to specific personal and community issues.
- Demonstrate an understanding of the scientific method as applied to current issues.
- Draw reasonable conclusions from biological data and evaluate conclusions presented by others as having a scientific basis.
- Choose terminology correctly and accurately define biological terms.

BIOL 350 Environmental Biology

- **Units:** 3
- **Hours:** 54 hours LEC
- **Prerequisite:** ENGRD 312 and ENGWR 101; or equivalent skills demonstrated through the assessment process.
- **Transferable:** CSU; UC
- **General Education:** AA/AS Area IV; CSU Area B2
- **Catalog Date:** June 1, 2020

This course provides an overview of ecosystems and natural resources. Major topics covered include ecological principles, ecosystem functioning, conservation biology, resource use and management, pollution and other human-caused environmental impacts. This course provides the background needed to understand major global and regional issues such as acid rain, global warming, hazardous waste disposal, deforestation and endangered species recovery. This course is especially useful for Environmental Science, Ecology, Recreation, and Political Science majors. Field trips, attendance at public meetings and/or a semester project may be required.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO #1-APPLY THE PRINCIPLES OF ECOLOGY TO THE ANALYSIS OF INDIVIDUAL ADAPTATION, POPULATIONS, COMMUNITIES, AND ECOSYSTEMS. This includes the ability to..
- delineate the major processes involved in ecosystem structure and stability.
- utilize the basic vocabulary of ecology.
- analyze community processes, including community stability and processes involving interactions between species (e.g. mutualism, commensalism, competition, and predation).
- construct graphs describing exponential and logistic population growth and assess the factors affecting each type of population growth.
- SLO #2-EVALUATE THE IMPACTS OF INTERACTIONS OF HUMAN POPULATIONS WITH OTHER SPECIES. This includes the ability to..
- analyze the components of effective resource management.
BIOL 351 Global Climate Change

This interdisciplinary course explores the natural and human factors causing the Earth’s climate to change. Whether alarmed, skeptical, or just curious about climate change, this course will provide the scientific tools to analyze the evidence that climate change is a looming threat. Through lectures, readings, discussions and projects, students will examine the Earth’s present and past climates as well as the influence of climate on the geographical distribution of plants, animals and human societies. This course is the same as GEOG 305, and only one may be taken for credit.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- **SLO 1: DEMONSTRATE AN UNDERSTANDING OF THE PHYSICAL FACTORS AFFECTING CLIMATE AND THE RESULTING GEOGRAPHIC VARIATION OF ENERGY RECEIPT, TEMPERATURE, PRECIPITATION, AND BIOMES.**
  - Explain the factors responsible for the latitudinal variation in energy receipt and its affects on global temperature and precipitation patterns.
  - Diagram the global energy balance, accounting for major sources of input and outputs, heat exchange and absorption.
  - Describe the various layers of the atmosphere and explain their role in producing the Greenhouse Effect and anthropogenic global warming.
  - Apply knowledge of meteorology as well as global oceanic circulation to hypothesize how terrestrial and marine biotic communities may be impacted by climate change.

- **SLO 2: DEMONSTRATE AN UNDERSTANDING OF HOW CLIMATE INFLUENCES THE DISTRIBUTION OF LIVING ORGANISMS.**
  - Explain the factors that determine the geographic distribution of the principal biomes.
  - Discuss the importance of physiological tolerance and species interactions in the structure, diversity, and stability of communities.
  - Use data from paleoclimatology to demonstrate how the geographic ranges of organisms may be affected by climate shifts.
  - Apply knowledge of the carbon cycle to explain the physical and biology factors that influence carbon dioxide levels in the atmosphere.
  - Outline how increasing atmospheric carbon dioxide levels may affect the acidity of oceans and the structure of marine communities.

- **SLO 3: APPLY SCIENTIFIC REASONING TO ASSESS THE EVIDENCE FOR HUMAN-INDUCED CLIMATE CHANGE.**
  - Describe how scientists collect data to determine the history of the earth’s climate and biogeography.
  - Outline how the study of paleoclimatology helps scientists predict future changes.
  - Present data that support and data that contradict the argument that current climate change is primarily due to human activities in contrast to natural forces.

- **SLO 4: ANALYZE THE COMPLEXITIES AND DIFFICULTIES IN CONSTRUCTING CLIMATE CHANGE MODELS.**
  - Diagram feedback loops involving atmospheric carbon dioxide and other greenhouse gases, albedo, photosynthesis, temperature, cloud cover, pollution, and other related variables.
  - Discuss the reasons why it is difficult to predict future climate change.

- **SLO 5: UNDERSTAND HOW CLIMATE CHANGE MAY AFFECT THEIR LIVES AND THE FUTURE OF LIFE ON EARTH.**
  - Describe the major principles of the Kyoto accord and discuss why it has failed to be adopted by major nations.
  - Identify how global warming may affect weather extremes, incidence of wildfires, availability of water, agriculture, human disease patterns, settlement patterns, economic, political stability, and other aspects of human society.
  - Outline effective short term and long term strategies for mitigating the effects of climate change.

BIOL 352 Conservation Biology
This introductory course covers biological and ecological principles involved in understanding and analyzing environmental problems and exploring scientifically sound conservation techniques. Major topics include the nature of science, basic principles of ecology, genetics and evolution, patterns of biodiversity and extinction, and the interdependence between humans and our environment. This course places emphasis on scientific processes and methodology and the application of science to conservation issues. Field trips and/or a semester project may be required.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO 1: APPLY BASIC PRINCIPLES OF ECOLOGY, GENETICS, AND EVOLUTION TO THE ANALYSIS OF CONSERVATION ISSUES. THIS INCLUDES THE ABILITY TO...
  - Utilize the vocabulary of biological sciences effectively.
  - Explain the basic concepts of population, community, and ecosystem ecology and apply these to the analysis of conservation issues.
  - Apply the basic concepts of population genetics and natural selection to the analysis of conservation issues.

- SLO 2: EXAMINE BIODIVERSITY IN TERMS OF THE STRUCTURE AND FUNCTION OF BIOLOGICAL SYSTEMS. THIS INCLUDES THE ABILITY TO...
  - Calculate measures of genetic and species diversity in the analysis of conservation issues.
  - Appraise patterns of community diversity and community stability.
  - Define the elements of landscape diversity and their importance for conservation.

- SLO 3: ANALYZE THE RELATIONSHIPS BETWEEN HUMAN POPULATIONS AND ECOSYSTEMS AS IT APPLIES TO THREATS TO BIODIVERSITY AND THE REDUCTION OF THOSE THREATS. THIS INCLUDES THE ABILITY TO...
  - Appraise the most common human impacts on species, communities and ecosystems.
  - Discuss aspects of economics, law, and resource consumption as these relate to impacts on conservation.
  - Evaluate the use of protected areas and ex situ conservation strategies in species conservation.

- SLO 4: USE THE SCIENTIFIC METHOD TO POSE QUESTIONS, ANALYZE INFORMATION AND INTERPRET SCIENTIFIC DATA AS APPLIED TO ENVIRONMENTAL PROBLEMS. THIS INCLUDES THE ABILITY TO...
  - Assess the results of scientific investigation into biological questions.
  - Construct reasonable conclusions from biological data.
  - Analyze conservation case studies and evaluate the effectiveness of conservation strategies.

BIOL 390 Natural History Field Study

This course will study the ecology and natural history covered in the field. Animals, plants and geology will be studied and their interrelationships investigated. The course will be offered in the appropriate area (mountains, desert or seashore and ocean). Assignments, field notes and appropriate exams/quizzes will be an integral part of the course. Lodging or campsites and some camping equipment will be provided. Students must provide their own food and some additional camping equipment. This course is ideal for future teachers, parents, resource management majors and those interested in the biological sciences.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- APPLY BASIC PRINCIPLES OF BIOLOGY TO OBSERVATIONS IN THE FIELD (SLO #1).
**BIOL 400 Principles of Biology**

- **Units:** 5
- **Hours:** 54 hours LEC; 108 hours LAB
- **Prerequisite:** Chem 400 OR Chem 305 with a grade of "C" or better AND Intermediate Algebra (Math 120 or Math 125 with a grade of "C" or better, or equivalent skills demonstrated through the assessment process)
- **Advisory:** ESLR 320 and ESLW 320, OR ESL 325 with a grade of "C" or better; OR eligibility for ENGRD 310 AND ENGWR 300.
- **Transferable:** CSU; UC (1) No credit for BIOL 300 or 307 if taken after BIOL 400, 420, 430, or 431; 2) No credit for BIOL 310 if taken after BIOL 400; 3) No transfer credit for BIOL 462, if taken after BIOL 400.
- **General Education:** AA/AS Area IV; CSU Area B2; CSU Area B3; IGETC Area 5B; IGETC Area 5C
- **C-ID:** C-ID BIOL 190; Part of C-ID BIOL 135S
- **Catalog Date:** June 1, 2020

This course introduces universal biological principles, including biological molecules, enzymes, cell structure and function, biochemistry, Mendelian and molecular genetics, ecology and evolution. BIOL 400 is recommended for science majors and students in pre-professional programs.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- **SLO 1:** DEMONSTRATE ABILITY TO ACQUIRE, SYNTHESIZE, EVALUATE AND PRESENT INFORMATION IN BIOLOGY.
  - demonstrate understanding of the scientific method by formulating testable hypotheses, designing experiments with appropriate controls and choices of data to collect, appropriately analyzing data including use of basic statistical analyses, and formulating conclusions supported by data.
  - demonstrate ability to use common laboratory techniques and equipment, such as measurement, light microscopes, spectrophotometers, electrophoresis, centrifuges, field sampling, and identification.
  - demonstrate understanding of appropriate use of correlational studies to gather data and to formulate conclusions when scientific experimentation is not possible.
  - present written and/or oral reports which address background information, procedures, results, and interpretation of data acquired during laboratory or field activities.
  - distinguish interpretations that are better supported from those that are less well supported.
  - acquire and synthesize information from print and electronic sources, and evaluate the information for quality, scientific validity, relevance, and bias.
  - recognize that research leads to generally accepted conclusions that gradually build a body of scientific knowledge and that the information presented in science textbooks and other established “authorities” is the result of research.
  - demonstrate the ability to respond to questions in a variety of formats (multiple choice, short-answer, essay prompts, etc.) with accurate, complete, and relevant information.
  - recognize the use and misuse of scientific concepts in society, including politics and the media.
- **SLO 2:** DEMONSTRATE KNOWLEDGE OF AND CRITICAL THINKING ABOUT BIOLOGY AT THE CELL AND MOLECULAR LEVEL.
  - apply chemistry concepts to recognize and describe the structure of biological molecules (such as DNA, RNA, proteins, carbohydrates, and lipids) and relate their structures to their functions.
  - demonstrate an understanding of basic cellular structures and functions in prokaryotes and eukaryotes.
  - analyze how the chemical composition of cell membranes leads to their specific cellular functions.
  - solve problems related to the movement of water and solutes through cell membranes.
• solve conceptual problems in cell and molecular biology such as the evaluation of the cell and molecular basis of disease, and the mechanisms of drug action.
• SLO 3: DEMONSTRATE KNOWLEDGE OF AND CRITICAL THINKING ABOUT BIOENERGETICS AND METABOLISM.
  • integrate chemical concepts to explain how cells obtain and transform energy.
  • explain how cells use enzymes, coenzymes and ATP to conduct and regulate metabolic pathways.
  • compare and contrast electron transport and the synthesis of ATP in mitochondria and chloroplasts.
• compare and contrast cellular respiration and photosynthesis, emphasizing the flow of carbon, electrons and energy and the roles of mitochondria and chloroplasts.
• solve conceptual problems such as evaluation of the effects of perturbations to metabolic systems as they might apply to agriculture, nutrition or disease.
• SLO 4: DEMONSTRATE KNOWLEDGE OF AND CRITICAL THINKING ABOUT GENES AND INHERITANCE AT THE MOLECULAR, CELLULAR, ORGANISMAL AND POPULATION LEVELS.
  • relate the structure of DNA to its ability to function as a molecule of inheritance and as a molecule that directs protein synthesis.
  • compare and contrast the organization and regulation of genes in viruses, prokaryotes and eukaryotes.
  • compare and contrast mechanisms that lead to genetic change.
• solve problems of inheritance involving 2 genes, a variety of dominance patterns, simple gene interactions, and linkage.
• explain the fundamental cellular processes involved in cell reproduction and the production of sex cells.
• solve conceptual problems such as evaluation of the effects of perturbations to genetic systems as they might apply to agriculture, nutrition or disease.
• SLO 5: CONSTRUCT RATIONAL ARGUMENTS THAT SHOW HOW THE THEORY OF BIOLOGICAL EVOLUTION EXPLAINS THE DIVERSITY, SIMILARITY AND ADAPTATION OF ORGANISMS.
  • examine critically the evidence that life has evolved.
  • explain how genetic variation is produced and maintained in populations.
  • compare and contrast mechanisms of evolutionary change including natural selection, genetic drift and non-random mating.
• show how evolutionary mechanisms lead to adaptation, diversity and similarity.
• solve problems requiring the application of principles of population genetics.
• solve conceptual problems by applying evolutionary theory to explain antibiotic resistance, patterns of human diversity, extinction, etc.
• SLO 6: EXPLAIN HOW ABIOTIC AND BIOTIC FACTORS INFLUENCE THE DISTRIBUTION AND ABUNDANCE OF ORGANISMS.
  • evaluate mathematical models that explain the factors that influence the distribution of organisms and their potential for population growth.
  • apply knowledge of species interactions to the structure and stability of communities.
  • analyze how principles of energy and nutrient flow through ecosystems influence the abundance and distribution of organisms.
  • apply ecological principles to assess the impact of human activities on ecosystems, communities and populations.

**BIOL 410 Principles of Botany**

**Units:** 5

**Hours:** 54 hours LEC; 108 hours LAB

**Prerequisite:** BIOL 400 with a grade of “C” or better

**Advisory:** ESLR 320 and ESLW 320, OR ESL 325 with a grade of “C” or better; OR eligibility for ENGRD 310 AND ENGWR 300.

**Transferable:** CSU; UC

**General Education:** AA/AS Area IV; CSU Area B2; CSU Area B3; IGETC Area 5B; IGETC Area 5C

**C-ID:** C-ID BIOL 155; Part of C-ID BIOL 130S; Part of C-ID BIOL 135S

**Catalog Date:** June 1, 2020

This course is an introduction to the diversity, classification, life cycles, and evolutionary trends of plants, fungi, algae, and cyanobacteria. Emphasis is on the anatomy, morphology, physiology, development, evolution, and ecology of plants. A field trip may be required.
Student Learning Outcomes

Upon completion of this course, the student will be able to:

- APPLY SCIENTIFIC METHOD TO TEST HYPOTHESES AND EXPLAIN BOTANICAL PHENOMENA. (SLO 1)
  - devise hypotheses, and design and conduct experiments to scientifically test these hypotheses.
  - analyze botanical data and formulate appropriate conclusions.
  - locate and utilize botanical information from a variety of scholarly sources.
  - communicate conclusions from scientific experimentation.

- ANALYZE THE MAJOR STRUCTURES AND PATTERNS OF MAJOR BOTANICAL TAXA (CYANOBACTERIA, ALGAE, FUNGI, AND PLANTS). (SLO 2)
  - identify major anatomical and morphological structures microscopically and/or macroscopically.
  - relate structures and physiological processes to their functions using scientific principles.
  - classify organisms into their major botanical taxa (especially kingdom and phylum) based upon their major features.
  - compare and contrast the anatomy, morphology, physiology, and life cycles of major botanical taxa.
  - analyze the basic cellular processes involved in plant physiology, including photosynthesis, cellular respiration, water and inorganic nutrient uptake, transport mechanisms, water balance, and regulation of growth and development.

- EVALUATE THE SIMILARITIES, DIVERSITY, AND ADAPTATIONS OF ORGANISMS BY APPLYING THE THEORY OF EVOLUTION BY NATURAL SELECTION. (SLO 3)
  - analyze evolutionary trends among algae, fungi, and plants, especially the adaptation of photosynthetic organisms to land.
  - analyze how similarities of organisms are related to similarities in their ecological niches and evolutionary adaptations.
  - describe different mechanisms for speciation, especially the role of polyploidy in plants.

- ANALYZE PATTERNS IN THE DISTRIBUTION AND ABUNDANCE OF POPULATIONS. (SLO 4)
  - describe the major terrestrial and aquatic biomes, and explain environmental factors that influence them.
  - compare and contrast the interactions among organisms, including symbiosis, competition, predation, herbivory, and ecological succession.
  - compare and contrast flow of energy and nutrient cycling in ecosystems.
  - relate the growth and distribution of plant populations to abiotic and biotic factors.

- EVALUATE THE RELEVANCE OF BOTANICAL TAXA TO NATURAL ECOSYSTEMS AND TO HUMANS. (SLO 5)
  - analyze the roles of cyanobacteria, algae, fungi, and plants to natural ecosystems, and assess the relevance of these organisms to humans.
  - analyze current developments in plant biotechnology, and evaluate the implications for its use.
  - evaluate the impact of humans on natural populations and ecosystems, with an emphasis on plant communities.

BIOL 420 Principles of Zoology

Units: 5
Hours: 54 hours LEC; 108 hours LAB
Prerequisite: BIOL 400 with a grade of "C" or better
Advisory: ESLR 320 and ESLW 320, OR ESL 325 with a grade of "C" or better; OR eligibility for ENGRD 310 AND ENGW 300.
Transferable: CSU; UC (1) No credit for BIOL 400, 420, 430, or 431
General Education: AA/AS Area IV; CSU Area B2; CSU Area B3; IGETC Area 5B; IGETC Area 5C
C-ID: C-ID BIOL 150; Part of C-ID BIOL 130S; Part of C-ID BIOL 133S
Catalog Date: June 1, 2020

This course is an introduction to zoology with particular emphasis on comparative anatomy and physiology of vertebrates and invertebrates. The basic principles of evolution, taxonomy, embryology, morphology, physiology, behavior and ecology will be covered. A field trip may be required.

Student Learning Outcomes
Upon completion of this course, the student will be able to:

- **SLO 1: DEMONSTRATE ABILITY TO ACQUIRE, SYNTHESIZE, EVALUATE, AND PRESENT INFORMATION IN ZOOLOGY.**
  - apply the perspective of the scientific method to gathering and evaluating biological information by formulating testable hypotheses, designing experiments with appropriate controls and choices of data to collect, appropriately analyzing data including use of basic statistical analyses, and formulating conclusions supported by data.
  - demonstrate ability to use common laboratory techniques such as measurement, light microscopes, dissection, field sampling, and identification.
  - present written and/or oral reports that address background information, procedures, results, and interpretation of data acquired during laboratory or field activities.
  - distinguish interpretations that are better supported from those that are less well supported.
  - acquire and synthesize information from print and electronic source, and evaluate the information for quality, scientific validity, relevance, and bias.
  - develop ability to tolerate the ambiguity and uncertainty associated with science.
  - recognize that research leads to generally accepted conclusions that gradually build a body of scientific knowledge and that the information presented in science textbooks and other established “authorities” is the result of research.
  - demonstrate the ability to respond to questions in a variety of formats (multiple choice, short-answer, essay prompts, etc.) with accurate, complete, and relevant information using appropriate subject-matter vocabulary.
  - recognize the use and misuse of scientific concepts in society, including politics and the media.
- **SLO 2: ANALYZE PATTERNS AND CAUSES OF THE DIVERSITY OF ANIMAL LIFE.**
  - explain the contributions of natural selection, genetic drift, mutation, and gene flow to the diversity, unity and history of animal life.
  - apply concepts of population genetics to detecting evolution in populations.
  - compare and contrast different mechanisms for speciation.
  - discuss macroevolutionary concepts such as how complex features evolve, adaptive radiation, and the occurrence and causes of extinction.
  - analyze evolutionary trends in animals, especially the evolution of early animal life, the origins of the major animal body plans and the transition of key groups to land.
  - outline the principles and methods biologists use to construct phylogenies.
  - integrate patterns of animal development and gene expression and show how these factors may have played major roles in animal evolution.
  - compare and contrast the anatomical, developmental and physiological characteristics of major animal phyla and use them to test proposed evolutionary relationships.
- **SLO 3: ANALYZE PATTERNS IN THE DISTRIBUTION AND ABUNDANCE OF POPULATIONS.**
  - describe the major terrestrial and aquatic biomes, and explain environmental factors that influence them.
  - discuss the short-term and long-term effects of species interactions such as mutualism, competition, and predation.
  - analyze how principles of energy and nutrient flow through ecosystems influence the abundance and distribution of animals.
  - discuss the factors that influence the structure and stability of communities.
  - apply principles of community ecology to assessing species abundance.
  - apply ecological principles to assess the impact of human activities on ecosystems, communities and populations.
- **SLO 4: IDENTIFY ANATOMICAL STRUCTURES AND EXPLAIN THEIR PHYSIOLOGICAL FUNCTIONS AND ADAPTIVE VALUES.**
  - identify major anatomical and morphological structures microscopically and dissection.
  - relate basic principles of biochemistry, cell biology and physics to understanding animal structure and function.
  - compare and contrast the major anatomical and physiological features of major animal phyla.
  - identify the characteristics of the specific ecological niches and the adaptations required by species to succeed there.
  - analyze how anatomical, physiological, and behavioral characteristics of animals are related to their ecological niches and evolutionary history.
This is an introductory course in which the basic principles of human anatomy and physiology are presented in an integrated fashion. This course covers anatomical terminology, basic organic chemistry, histology, and the integumentary, skeletal, muscular and nervous systems. Both BIOL 430 and BIOL 431 must be taken to study all of the major body systems.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- **SLO 1: EXPLAIN THE BASIC STRUCTURE OF CELLS AND TISSUES AND THE RELEVANCE OF THIS STRUCTURE TO HUMAN PHYSIOLOGY**
  - demonstrate knowledge of basic organic and inorganic chemistry as it relates to human cells
  - apply principles of electricity to membrane potentials, nervous system transmission, and muscle contraction physiology
  - illustrate how pH, ions, and concentration gradients influence physiological processes
  - compare and contrast the anatomy of cells in order to explain the physiology of various cells
  - categorize tissues by analyzing cell populations within the tissue
  - apply knowledge regarding tissues to organs and organ systems

- **SLO 2: DEMONSTRATE A FUNDAMENTAL UNDERSTANDING OF HOMEOSTASIS AND FEEDBACK LOOPS**
  - describe the mechanisms by which the human can self-regulate
  - compare and contrast positive and negative feedback loops
  - explain how homeostatic mechanisms involve multiple organ systems
  - assess the impact of pathologies on the maintenance of homeostasis

- **SLO 3: IDENTIFY ANATOMICAL STRUCTURES**
  - utilize proper anatomical terms to name structures in the integumentary, skeletal, muscular, and nervous systems
  - demonstrate the ability to use the light microscope to distinguish tissues
  - examine cadaver dissections in order to analyze relationships between organs
  - integrate lab experiences to apply knowledge of specific organ systems to human physiology

- **SLO 4: DETERMINE GENERAL PHYSIOLOGY OF A STRUCTURE BASED ON ANATOMICAL OBSERVATIONS**
  - analyze structural distinctions and apply concepts of cellular physiology to organs and organ systems
  - determine functional relationships among various organ systems based upon their anatomical proximity or similarity
This is an introductory course in which the basic principles of human anatomy and physiology are presented in an integrated fashion. This course covers the cardiovascular, respiratory, lymphatic/immune, digestive, urinary, endocrine and reproductive systems. Both BIOL 430 and BIOL 431 must be taken to study all of the major organ systems.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO 1: ANALYZE VARIOUS CONTROL SYSTEMS UTILIZING THE CONCEPT OF HOMEOSTASIS
  - categorize control systems as positive feedback loops or negative feedback loops
  - diagram the relationships between different organ systems as the apply to regulation
  - assess the impact of pathologies on the maintenance of homeostasis

- SLO 2: IDENTIFY ANATOMICAL STRUCTURES
  - compare and contrast tissues using the light microscope
  - utilize proper anatomical terms to name structures of the Cardiovascular, Lymphatic, Respiratory, Digestive, Endocrine, Urinary and Reproductive systems
  - examine human cadaver dissections in order to analyze relationships among organs
  - integrate lab experiences of the Cardiovascular, Lymphatic, Respiratory, Digestive, Endocrine, Urinary and Reproductive systems to overall human physiology to apply knowledge of specific organ systems to human physiology

- SLO 3: DETERMINE GENERAL PHYSIOLOGY OF A STRUCTURE BASED ON ANATOMICAL OBSERVATIONS
  - analyze structural distinctions and apply concepts of cellular physiology to organs and organ systems
  - determine functional relationships among various organ systems based upon their anatomical proximity or similarity

- SLO 4: UTILIZE CHEMISTRY CONCEPTS TO ELUCIDATE PHYSIOLOGICAL CONCEPTS
  - relate pressure gradients to physiological processes
  - combine methods of membrane transport to explain functional capability and/or limitations within an organ system
  - compare and contrast membrane potentials of different cell populations and explain how these differences impact the physiology of the organ system

BIOL 439 Human Cadaver Dissection

Units: 1  
Hours: 12 hours LEC; 18 hours LAB  
Prerequisite: None.  
Advisory: BIOL 420 or 430 with a grade of “C” or better  
Transferable: CSU; UC  
Catalog Date: June 1, 2020

The Human Cadaver Dissection course is a one-unit, intensive course for nursing, medical, physical therapy, sonography, chiropractic, or other health-related majors. Using a regional approach, students will study the structure of the human body through the dissection of cadavers. Students will gain experience in dissection techniques, more fully understand relationships between organs, and discuss physiological concepts as they pertain to anatomy. Maintaining a detailed lab notebook is an integral part of the course. This course may be taken one time for credit.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO 1: DEVELOP DISSECTION TECHNIQUES
  - Identify and utilize appropriate dissection tools
  - Perform advanced dissections to prepare the specimens for study in other Biology courses

- SLO 2: IDENTIFY ANATOMICAL FEATURES AND EXPLORE RELATIONSHIPS AMONG STRUCTURES
  - Investigate the anatomy of the human from superficial to deep
  - Discuss physiological concepts based on anatomical relationships
BIOL 440 General Microbiology

This course introduces the concepts of microbiology with an emphasis on forms, modes of growth, cell specialization, mutual, commensal and parasitic relationships of bacteria, fungi, molds, protozoans and viruses. Topics will be correlated with medical and health applications to animals and human beings.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO #1—Evaluate the cellular structure and function of microorganisms.
- Compare and contrast the overall cell structure of prokaryotes and eukaryotes.
- Differentiate between gram positive and gram negative bacterial cell structure.
- Analyze the structure and function of viral particles and prions.
- Demonstrate proper staining techniques and microscope use in the laboratory.
- SLO #2—Explain the basic mechanisms of microbial growth, metabolism and genetics.
- Assess how microbial growth is affected by physical and chemical agents.
- Evaluate the overall function of metabolic pathways.
- Categorize the various energy production mechanisms among organisms according to carbon source, mechanism of carbohydrate catabolism and ATP generation.
- Verify how DNA is replicated and how protein synthesis occurs.
- Compare mechanisms of genetic recombination in bacteria.
- Set up and analyze biochemical tests in the laboratory using aseptic technique.
- SLO #3—Evaluate host pathogen interactions.
- Assess the function and importance of normal flora.
- Analyze the mechanisms that microorganisms use to cause disease.
- Evaluate the characteristics of non-specific immunity.
- Compare and contrast humoral and cell mediated immunity.
- SLO #4—Apply microbiological concepts to historical and current health issues.
- Survey important milestones in the history of microbiology.
- Evaluate the significance of microbiology to the techniques of biotechnology.
- Apply microbiological concepts concerning infectious disease to clinical practice problems and case studies.
- Using principles of the scientific method, design and complete laboratory activities based on epidemiological concepts.

BIOL 462 Genetics in Contemporary Human Society

Units: 3
Hours: 54 hours LEC
Prerequisite: CSU; UC
Transferable: AA/AS Area IV; CSU Area B2; IGETC Area 5B
Catalog Date: June 1, 2020

This course introduces the basic principles of genetics, molecular biology and their applications to human health and disease. The course will briefly cover some of the historical milestones in the field of genetics and will introduce students to the techniques of genetic manipulation. The course will be structured around a series of lab activities which will enhance students' understanding of the concepts learned in lectures.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- Demonstrate fundamental knowledge of genetics, molecular biology and their applications to human health and disease.
- Apply basic principles of genetics, molecular biology and their applications to human health and disease.
- Use basic concepts of genetics, molecular biology and their applications to human health and disease in the laboratory setting.
- Demonstrate basic knowledge of the techniques of genetic manipulation.
- Apply basic concepts of genetics, molecular biology and their applications to human health and disease in the laboratory setting.
- Demonstrate basic knowledge of the techniques of genetic manipulation.
- Apply basic concepts of genetics, molecular biology and their applications to human health and disease in the laboratory setting.
- Demonstrate basic knowledge of the techniques of genetic manipulation.
- Apply basic concepts of genetics, molecular biology and their applications to human health and disease in the laboratory setting.
- Demonstrate basic knowledge of the techniques of genetic manipulation.
This course introduces students to the principles of modern genetics, especially as they apply to human health and society. Rapid advances in scientists’ knowledge of what genes are and how they work impact the daily life of people through genetically modified foods, DNA fingerprinting, therapies for human disease and a variety of reproductive technologies. This course includes the study of Mendelian inheritance, the roles of chromosomes and genes in human disease, how genes direct development, the relationship between genes, environment and behavior, and the contribution of genes to human diversity. Ethical, legal and social issues will be explored through class discussions and written reports. This course is primarily intended for non-biology majors; however, biology majors may enjoy the opportunity to explore human genetics in greater depth than is possible in BIOL 400.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO 1: SOLVE GENETICS PROBLEMS BY APPLYING PRINCIPLES OF INHERITANCE.
  - Solve genetics problems by applying Mendelian principles to single and two gene problems with and without dominance.
  - Solve genetics problems involving sex linkage.

- SLO 2: INTEGRATE MOLECULAR GENETICS AND CELL BIOLOGY TO EXPLAIN THE BASIS OF HUMAN GENETIC TRAITS.
  - Relate the functions of cellular organelles to specific human genetic disorders.
  - Describe the structure and functions of DNA, RNA and proteins.
  - Relate DNA, RNA and proteins to the development of human characteristics.
  - Examine the interaction between genes and the environment.
  - Use relevant genetic concepts to assess the contribution of genetic variation and environmental variation to variation in human phenotypes.
  - Review genetic data describing human variation and explaining human origins.

- SLO 3: GATHER RELEVANT INFORMATION AND USE IT TO EVALUATE THE SCIENTIFIC VALIDITY OF INFORMATION PRESENTED BY THE MEDIA AND OTHER SOURCES.
  - Distinguish between scientific hypotheses, inferences, and speculation.
  - Identify and analyze the scientific basis of modern genetic technologies.
  - Examine current ethical and social issues in human genetics.

BIOL 485 Honors Seminar in Genetics

Same As: HONOR 385
Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Transferable: CSU; UC
General Education: AA/AS Area IV; CSU Area B2; IGETC Area 5B
Catalog Date: June 1, 2020

This course offers honors students the opportunity to study, critique, and discuss advanced topics in genetics such as genetically modified foods, whole-genome rapid sequencing, gene therapies for human disease, and a variety of reproductive technologies. Furthermore, this course includes the study of Mendelian inheritance, the roles of chromosomes and genes in human disease, how genes direct development, the relationship between genes, environment and behavior, and the contribution of genes to human diversity.

Students will engage with each other to discuss ethical, legal and social issues during class discussions, and analyze scientific literature in written reports. Enrollment is limited to Honors students. Details about the Honors Program can be found in the Catalog and on the CRC website. This course is the same as HONOR 385. This course, under either name, may be taken a total of one time for credit.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO 1: SOLVE GENETICS PROBLEMS BY APPLYING PRINCIPLES OF INHERITANCE.
  - Solve genetics problems by applying Mendelian principles to single and two gene problems with and without dominance.
  - Solve genetics problems involving sex linkage.

- SLO 2: INTEGRATE MOLECULAR GENETICS AND CELL BIOLOGY TO EXPLAIN THE BASIS OF HUMAN GENETIC TRAITS.
  - Relate the functions of cellular organelles to specific human genetic disorders.
Describe the structure and functions of DNA, RNA and proteins.

Relate DNA, RNA and proteins to the development of human characteristics.

Examine the interaction between genes and the environment.

Use relevant genetic concepts to assess the contribution of genetic variation and environmental variation to variation in human phenotypes.

SLO 3: RECOGNIZE THE IMPORTANCE OF GENE THERAPY, GENETIC ENGINEERING, AND BIOTECHNOLOGY ON HUMAN HEALTH.

Describe the role of genes in human diseases (like cancer).

Communicate how advances in recombinant DNA technology and biotechnology (e.g. gene therapy and genetic engineering) can be used to treat genetic diseases in humans, and modify other organisms for human use.

Understand how modern DNA sequencing and genome databases are being used to change medical practices and better human health.

SLO 4: GATHER RELEVANT INFORMATION AND USE IT TO EVALUATE THE SCIENTIFIC VALIDITY OF INFORMATION PRESENTED BY THE MEDIA AND OTHER SOURCES.

Distinguish between scientific hypotheses, inferences, and speculation.

Identify and analyze the scientific basis of modern genetic technologies.

Review current scientific literature, and evaluate the effectiveness of the research.

Present written and/or oral reports which address background information, procedures, results, and interpretation of data from scientific literature.

Examine current ethical and social issues in human genetics.

BIOL 495 Independent Studies in Biology

An independent studies project involves an individual student or small group of students in study, research, or activities beyond the scope of regularly offered courses. See the current catalog section of "Special Studies" for full details of Independent Studies.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO #1: Actively engage in intellectual inquiry beyond that required in order to pass a course of study (College Wide Learning Outcome – Area 4).

- Discuss and outline a proposal of study (that can be accomplished within one semester term) with a supervising instructor qualified within the discipline.

- Design an independent study (to be completed individually or by collaboration of a small group) to foster special knowledge, skills, and experience that are not available in any one regularly scheduled course.

- Use information resources to gather discipline-specific information.

- SLO #2: Utilize modes of analysis and critical thinking to apply theoretical perspectives and/or concepts in the major discipline of study to significant problems and/or educational activities (College Wide Learning Outcome – Area 3).

- Analyze and apply the knowledge, skills and experience that are involved in the independent study to theoretical perspectives and/or concepts in the major discipline of study.

- Explain the importance of the major discipline of study in the broader picture of society.

- SLO #3: Communicate a complex understanding of content matter of the major discipline of study (College Wide Outcome – Area 3).

- Demonstrate competence in the skills essential to mastery of the major discipline of study that are necessary to accomplish the independent study.

- SLO #4: Identify personal goals and pursue these goals effectively (College Wide Outcome – Area 4).
Utilize skills from the “academic tool kit” including time management, study skills, etc., to accomplish the independent study within one semester term.

**BIOL 498 Work Experience in Biology**

**Units:** 1 - 4  
**Hours:** 60 - 300 hours LAB  
**Prerequisite:** None.  
**Enrollment Limitation:** Students must be in a paid or unpaid internship, volunteer position or job related to career goals in Biology.  
**Transferable:** CSU  
**General Education:** AA/AS Area III(b)  
**Catalog Date:** June 1, 2020

This course provides students with opportunities to develop marketable skills in preparation for employment in their major field of study or advancement within their career. It is designed for students interested in work experience and/or internships in transfer level degree occupational programs. Course content includes understanding the application of education to the workforce; completion of required forms which document the student's progress and hours spent at the work site; and developing workplace skills and competencies. Appropriate level learning objectives are established by the student and the employer. During the semester, the student is required to participate in a weekly orientation and 75 hours of related paid work experience, or 60 hours of unpaid work experience for one unit. An additional 75 or 60 hours of related work experience is required for each additional unit. Work Experience may be taken for a total of 16 units when there are new or expanded learning objectives. Only one Work Experience course may be taken per semester.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- **DEMONSTRATE AN UNDERSTANDING AND APPLICATION OF PROFESSIONAL WORKPLACE BEHAVIOR IN A FIELD OF STUDY RELATED ONE’S CAREER.(SLO 1)**
  - Understand the effects time, stress, and organizational management have on performance.
  - Demonstrate an understanding of consistently practicing ethics and confidentiality in a workplace.
  - Examine the career/life planning process and relate its relevancy to the student.
  - Demonstrate an understanding of basic communication tools and their appropriate use.
  - Demonstrate an understanding of workplace etiquette.
- **DESCRIBE THE CAREER/LIFE PLANNING PROCESS AND RELATE ITS RELEVANCY TO ONE’S CAREER.(SLO 2)**
  - Link personal goals to long term achievement.
  - Display an understanding of creating a professional first impression.
  - Understand how networking is a powerful job search tool.
  - Understand necessary elements of a résumé.
  - Understand the importance of interview preparation.
  - Identify how continual learning increases career success.
- **DEMONSTRATE APPLICATION OF INDUSTRY KNOWLEDGE AND THEORETICAL CONCEPTS AS WRITTEN IN LEARNING OBJECTIVES IN PARTNERSHIP WITH THE EMPLOYER WORK SITE SUPERVISOR.(SLO 3)**

**Biology - Field Studies (BIOLFS)**
Broadcast Journalism
| Cosumnes River College

This Cosumnes River College program introduces students to the field of broadcast journalism and prepares them for jobs, internships or transfer to a four-year institution.

Dean

📞 (916) 691-7170

✉️ BedfordB@crc.losrios.edu

Associate Degree

A.A. in Broadcast Journalism

This CRC program introduces students to the field of broadcast journalism and prepares them for jobs, internships or transfer to a four-year institution.

Highlights include:
* Practical experience in the digital TV studio and campus radio station
* Internship opportunities in local radio and TV stations
* Practical experience creating news packages
* Practical experience as an on-camera TV reporter/anchor or as a radio broadcaster

Note to Transfer Students:
If you are interested in transferring to a four-year college or university to pursue a bachelor's degree in this major, it is critical that you meet with a CRC counselor to select and plan the courses for your major. Schools vary widely in terms of the required preparation. The courses that CRC requires for an Associate's degree in this major may be different from the requirements needed for the Bachelor's degree.

Catalog Date: June 1, 2020

Degree Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>RTVF 300</td>
<td>Mass Media and Society</td>
<td>3</td>
</tr>
<tr>
<td>JOUR 300</td>
<td>Newswriting and Reporting</td>
<td>3</td>
</tr>
<tr>
<td>RTVF 331</td>
<td>Beginning Television Studio Production</td>
<td>3</td>
</tr>
<tr>
<td>RTVF 362</td>
<td>Digital Non-Linear Video Editing</td>
<td>3</td>
</tr>
<tr>
<td>RTVF 330</td>
<td>Beginning Single Camera Production</td>
<td>3</td>
</tr>
<tr>
<td>RTVF 312</td>
<td>Beginning Radio Production</td>
<td>3</td>
</tr>
<tr>
<td>RTVF 370</td>
<td>Broadcast Writing &amp; Announcing</td>
<td>3</td>
</tr>
<tr>
<td>RTVF 380</td>
<td>Broadcast Journalism</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>A minimum of 6 units from the following:</td>
<td>6</td>
</tr>
<tr>
<td>JOUR 351</td>
<td>Public Relations Writing and Media Techniques (3)</td>
<td></td>
</tr>
<tr>
<td>JOUR 410</td>
<td>College Media Production I (3)</td>
<td></td>
</tr>
<tr>
<td>COURSE CODE</td>
<td>COURSE TITLE</td>
<td>UNITS</td>
</tr>
<tr>
<td>-------------</td>
<td>------------------------------------------------------------------</td>
<td>-------</td>
</tr>
<tr>
<td>RTVF 315</td>
<td>Voice and Diction for Broadcasting (3)</td>
<td></td>
</tr>
<tr>
<td>RTVF 319</td>
<td>Beginning Audio Production (3)</td>
<td></td>
</tr>
<tr>
<td>RTVF 360</td>
<td>Introduction to Motion Graphics: Adobe After Effects (3)</td>
<td></td>
</tr>
<tr>
<td>RTVF 376</td>
<td>Advertising (3)</td>
<td></td>
</tr>
<tr>
<td>RTVF 498</td>
<td>Work Experience in Radio, Television and Film (1 - 4)</td>
<td></td>
</tr>
<tr>
<td>PHOTO 301</td>
<td>Beginning Photography (3)</td>
<td></td>
</tr>
<tr>
<td>COMM 480</td>
<td>Honors Seminar: Political Campaign Communication (3)</td>
<td></td>
</tr>
<tr>
<td>Total Units:</td>
<td></td>
<td>30</td>
</tr>
</tbody>
</table>

The Broadcast Journalism Associate in Arts (A.A.) degree may be obtained by completion of the required program, plus general education requirements, plus sufficient electives to meet a 60-unit total. See CRC graduation requirements.

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- Write in clear, concise English. (PSLO-1)
- Structure and craft messages in ways appropriate for specific audiences, including through a variety of technical skills for use in multi-media, internet, television, film or radio delivery. (PSLO-2)
- Research critically, filter the results, and present them in a cogent manner. (PSLO-3)
- Investigate and gather information for use in public presentation using library, internet, and personal interviews. (PSLO-4)
- Produce examples of professional-level work including writing, announcing and on-air performance. (PSLO-5)
- Demonstrate through projects that with the power of a communicator comes moral and ethical responsibility. (PSLO-6)
- Demonstrate a hands-on ability to perform the professional level critical thinking needed for work in television, radio and other media broadcasting. (PSLO-7)
- Recognize and overcome biases, prejudices and limited viewpoints (including his or her own) so that he or she can communicate effectively in a diverse world. (PSLO-8)

Career Information

Career Options News Broadcaster; Sportscaster; Announcer; News writer, News producer; Journalist; Multi-Media writer; Internet Information specialist. Some career options may require more than two years of college study. Classes beyond the associate degree may be required to fulfill some career options or for preparation for transfer to a university program.
Building Inspection Technology
| Cosumnes River College

This CRC program has been developed to prepare individuals for employment in building inspection. Graduates may be employed by contractors, government agencies, architects, finance companies and developers. A wide variety of employment opportunities exist in the fast-growing construction industry in the Sacramento Valley.

Dean
 (916) 691-4300
 HarrisC2@crc.losrios.edu

Associate Degrees

A.S. in Building Inspection Technology

This CRC program has been developed to prepare individuals for employment in building inspection. Graduates may be employed by contractors, government agencies, architects, finance companies and developers.

A wide variety of employment opportunities exist in the fast-growing construction industry in the Sacramento Valley.

HIGHLIGHTS

*Field trips to a variety of construction sites to study inspection technologies and code interpretations (Instructor Option)

*Association with instructors who are county and city building officials and inspectors

Catalog Date: June 1, 2020

Degree Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIT 100</td>
<td>Introduction to the International Building Code</td>
<td>3</td>
</tr>
<tr>
<td>BIT 101</td>
<td>Introduction to the International Residential Code</td>
<td>3</td>
</tr>
<tr>
<td>BIT 112</td>
<td>Building Inspection Principles for Disabled Access</td>
<td>3</td>
</tr>
<tr>
<td>BIT 120</td>
<td>Mechanical I/Plumbing Code Requirements</td>
<td>3</td>
</tr>
<tr>
<td>BIT 121</td>
<td>Mechanical II / H.V.A.C. Code Requirements</td>
<td>3</td>
</tr>
<tr>
<td>BIT 140</td>
<td>Residential Electrical Code Requirements</td>
<td>3</td>
</tr>
<tr>
<td>CMT 310</td>
<td>Materials of Construction</td>
<td>3</td>
</tr>
</tbody>
</table>

A minimum of 18 units from the following:

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIT 102</td>
<td>Plan Reading and Non-Structural Plan Review (3)</td>
<td></td>
</tr>
<tr>
<td>BIT 104</td>
<td>International Building Code - Fire &amp; Life Safety (3)</td>
<td></td>
</tr>
<tr>
<td>BIT 106</td>
<td>Introduction to Special Inspection- Concrete, Masonry, Steel, and Soils (3)</td>
<td></td>
</tr>
</tbody>
</table>
### Course Offerings

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIT 130</td>
<td>Introduction to Inspection of Wood Frame Construction (3)</td>
<td></td>
</tr>
<tr>
<td>BIT 141</td>
<td>Commercial Electrical Code Requirements (3)</td>
<td></td>
</tr>
<tr>
<td>BIT 150</td>
<td>California Energy Code – Building Energy Efficiency Standards (3)</td>
<td></td>
</tr>
<tr>
<td>BIT 152</td>
<td>HERS I, Field Verification and Diagnostic Testing for Code Compliance (3)</td>
<td></td>
</tr>
<tr>
<td>BIT 154</td>
<td>California Green Building Standards Code (3)</td>
<td></td>
</tr>
</tbody>
</table>

**Total Units:** 39

*The Building Inspection Technology Associate in Science (A.S.) degree may be obtained by completion of the required program, plus general education requirements, plus sufficient electives to meet a 60-unit total. See CRC graduation requirements.*

### Student Learning Outcomes

Upon completion of this program, the student will be able to:

- Interpret the model building codes: Interpret the model building codes and summarize the origins and evolution of building codes in this country. Identify the origin and organization of the model building codes. Interpret code requirements for plans, permits and inspections. Diagnose code compliance with a minimum of 80% accuracy, congruent with industry certification. (PSLO 1)

- Analyze a set of construction drawings to determine completeness/code compliance: Analyze a set of construction drawings to determine completeness and code compliance. Develop a thorough understanding of the organization and purpose of construction drawings. Recognize deficiencies in a set of construction drawings submitted for plan review. (PSLO 2)

- Develop skills and competencies: Develop skills and competencies for effective and competitive workforce performance. (PSLO 3)

- Apply specific and measurable career and/or workforce learning objectives: Apply specific and measurable career and/or workforce learning objective through classroom study and independent assignments. (PSLO 4)

- Ensure that the program is consistent with the college SLO's: Ensure that the program is consistent with the college SLO's and is providing the students and community with a valuable and meaningful service. (PSLO 5)

### Career Information

Building Inspector; Plan Checker; Construction Supervisor; Foreman; Construction Management; Government Building Official. Some career options may require more than two years of college study. Classes beyond the associate degree may be required to fulfill some career options or for preparation for transfer to a university program.

### A.S. in Fire Prevention

The fire service is one of the most dynamic employers in the country. This CRC program is designed to provide the student with updated skills and knowledge necessary to complete and successfully apply for fire service positions. The curriculum serves as an in-service program as well as a pre-employment program for students seeking employment or advancement in the profession of fire prevention.

**Catalog Date:** June 1, 2020

### Degree Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>FT 300</td>
<td>Fire Protection Organization</td>
<td>3</td>
</tr>
<tr>
<td>FT 301</td>
<td>Fire Prevention Technology</td>
<td>3</td>
</tr>
<tr>
<td>FT 302</td>
<td>Fire Protection Equipment and Systems</td>
<td>3</td>
</tr>
<tr>
<td>FT 303</td>
<td>Building Construction for Fire Protection</td>
<td>3</td>
</tr>
<tr>
<td>FT 304</td>
<td>Fire Behavior and Combustion</td>
<td>3</td>
</tr>
</tbody>
</table>
FT 498 | Work Experience in Fire Technology | 1 - 4

A minimum of 9 units from the following:

BIT 100 | Introduction to the International Building Code (3) | 3
BIT 102 | Plan Reading and Non-Structural Plan Review (3) | 3
BIT 104 | International Building Code - Fire & Life Safety (3) | 3
BIT 130 | Introduction to Inspection of Wood Frame Construction (3) | 3

Total Units: 25 - 28

1The student must have 1-4 units of work experience in Fire Prevention to receive a degree.

The Fire Prevention Associate in Science (A.S.) degree may be obtained by completion of the required program, plus general education requirements, plus sufficient electives to meet a 60-unit total. See CRC graduation requirements.

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- PSLO #1: Comprehend the qualifications for entry level skills, the discipline and evaluation process, fire service structure, history, and culture for the field of fire prevention.
- PSLO #2: Identify and comprehend laws, regulations, codes, standards and the regulatory and advisory organizations that influence fire prevention operations.
- PSLO #3: Analyze and determine the causes of fire, extinguishing agents, stages of fire, fire development, and methods of heat transfer.
- PSLO #4: Identify and describe the common types of building construction and conditions associated with structural collapse.
- PSLO #5: Differentiate between fire detection and fire suppression systems.

Career Information

Fire Inspector, Fire Investigator, Plans Examiner, Building Inspector, Fire Prevention Specialist/Officer, Public Education Specialist/Officer, Manager, Firefighter Some Career Opportunities may require more than two years of college study. Classes beyond the associate degree may be required to fulfill some career opportunities for preparation for transfer to a university program.

Certificates of Achievement

Building Inspection Technology Certificate

This CRC program has been developed to prepare individuals for employment in building inspection. Graduates may be employed by contractors, government agencies, architects, finance companies and developers.

A wide variety of employment opportunities exist in the fast-growing construction industry in the Sacramento Valley.

HIGHLIGHTS

*Field trips to a variety of construction sites to study inspection technologies and code interpretations (Instructor Option)
*Association with instructors who are county and city building officials and inspectors

Catalog Date: June 1, 2020

Certificate Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIT 100</td>
<td>Introduction to the International Building Code</td>
<td>3</td>
</tr>
<tr>
<td>BIT 101</td>
<td>Introduction to the International Residential Code (3)</td>
<td>3</td>
</tr>
<tr>
<td>COURSE CODE</td>
<td>COURSE TITLE</td>
<td>UNITS</td>
</tr>
<tr>
<td>-------------</td>
<td>----------------------------------------------------------</td>
<td>-------</td>
</tr>
<tr>
<td>BIT 112</td>
<td>Building Inspection Principles for Disabled Access</td>
<td>3</td>
</tr>
<tr>
<td>BIT 120</td>
<td>Mechanical I/Plumbing Code Requirements</td>
<td>3</td>
</tr>
<tr>
<td>BIT 121</td>
<td>Mechanical II / H.V.A.C. Code Requirements</td>
<td>3</td>
</tr>
<tr>
<td>BIT 140</td>
<td>Residential Electrical Code Requirements</td>
<td>3</td>
</tr>
<tr>
<td>CMT 310</td>
<td>Materials of Construction</td>
<td>3</td>
</tr>
</tbody>
</table>

A minimum of 12 units from the following:

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIT 102</td>
<td>Plan Reading and Non-Structural Plan Review (3)</td>
<td>3</td>
</tr>
<tr>
<td>BIT 104</td>
<td>International Building Code - Fire &amp; Life Safety (3)</td>
<td>3</td>
</tr>
<tr>
<td>BIT 106</td>
<td>Introduction to Special Inspection- Concrete, Masonry, Steel, and Soils (3)</td>
<td>3</td>
</tr>
<tr>
<td>BIT 130</td>
<td>Introduction to Inspection of Wood Frame Construction (3)</td>
<td>3</td>
</tr>
<tr>
<td>BIT 141</td>
<td>Commercial Electrical Code Requirements (3)</td>
<td>3</td>
</tr>
<tr>
<td>BIT 150</td>
<td>California Energy Code – Building Energy Efficiency Standards (3)</td>
<td>3</td>
</tr>
<tr>
<td>BIT 152</td>
<td>HERS I, Field Verification and Diagnostic Testing for Code Compliance (3)</td>
<td>3</td>
</tr>
<tr>
<td>BIT 154</td>
<td>California Green Building Standards Code (3)</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Units: 33

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- Interpret the model building codes: Interpret the model building codes and summarize the origins and evolution of building codes in this country. Identify the origin and organization of the model building codes. Interpret code requirements for plans, permits and inspections. Diagnose code compliance with a minimum of 80% accuracy, congruent with industry certification. (PSLO 1)

- Analyze a set of construction drawings to determine completeness/code compliance: Analyze a set of construction drawings to determine completeness and code compliance. Develop a thorough understanding of the organization and purpose of construction drawings. Recognize deficiencies in a set of construction drawings submitted for plan review. (PSLO 2)

- Develop skills and competencies: Develop skills and competencies for effective and competitive workforce performance. (PSLO 3)

- Apply specific and measurable career and/or workforce learning objectives: Apply specific and measurable career and/or workforce learning objective through classroom study and independent assignments. (PSLO 4)

- Ensure that the program is consistent with the college SLO’s: Ensure that the program is consistent with the college SLO’s and is providing the students and community with a valuable and meaningful service. (PSLO 5)

Career Information

Building Inspector; Plan Checker; Construction Supervisor; Foreman; Construction Management; Government Building Official. Some career options may require more than two years of college study. Classes beyond the associate degree may be required to fulfill some career options or for preparation for transfer to a university program.

Green Buildings Certificate

The purpose of this certificate is to develop job skills and an understanding of green strategies for high performance buildings and livable communities. It is focused at students and professionals in the fields of architecture; construction; building management; construction management; building inspection; design technology; landscape; and planning, who want to acquire a comprehensive knowledge of an integrated, economic life-cycle approach to the design of the built environment. It includes study of green rating systems, material choices and environmental strategies for a livable, sustainable future.
Certificate Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARCH 342</td>
<td>Introduction to Green Buildings</td>
<td>3</td>
</tr>
<tr>
<td>CMT 310</td>
<td>Materials of Construction</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>A minimum of 12 units from the following:</td>
<td>12</td>
</tr>
<tr>
<td>ARCH 332</td>
<td>Design Awareness (3)</td>
<td></td>
</tr>
<tr>
<td>ARCH 334</td>
<td>Advanced Design in Three Dimensions (3)</td>
<td></td>
</tr>
<tr>
<td>ADT 320</td>
<td>Architectural Design Technology - Building Information Modeling (BIM) I (3)</td>
<td></td>
</tr>
<tr>
<td>ADT 322</td>
<td>Architectural Design Technology - Building Information Modeling (BIM) II (3)</td>
<td></td>
</tr>
<tr>
<td>BIT 150</td>
<td>California Energy Code – Building Energy Efficiency Standards (3)</td>
<td></td>
</tr>
<tr>
<td>CONST 143</td>
<td>Photovoltaic Systems (3)</td>
<td></td>
</tr>
<tr>
<td>ECON 306</td>
<td>Environmental Economics (3)</td>
<td></td>
</tr>
<tr>
<td>GEOG 302</td>
<td>Environmental Studies &amp; Sustainability (3)</td>
<td></td>
</tr>
<tr>
<td>GEOG 305</td>
<td>Global Climate Change (3)</td>
<td></td>
</tr>
<tr>
<td>GEOG 306</td>
<td>Weather and Climate (3)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total Units:</td>
<td>18</td>
</tr>
</tbody>
</table>

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- **PSLO 1**: Establish meaningful ethical, social and environmental objectives for buildings and communities based on the values of energy and resource conscious design.
- Compare and contrast societal and economic implications of utilizing renewable and non-renewable energy sources.
- Compare and contrast the effect of contextual issues and evaluate their impact on energy consumption, environment and the beneficial experience of interior and exterior spaces.
- **PSLO 2**: Identify and articulate issues related to the choice of various building, landscape and environmental systems; ideate responsive solutions; and compare the alternatives in making effective, sustainable decisions.
- Analyze and calculate energy use to make informed, environmentally-sound and economic choices to satisfy human needs for comfort and aesthetics.
- Explain the concepts of resource conservation and waste reduction and make sustainable design choices related to materials and construction.
- Develop a comprehensive understanding of green rating systems, livable communities strategies and the ability to apply these concepts in decision-making.
- **PSLO 3**: Demonstrate independent learning, teamwork and continuing education habits that will help to encourage a life long pursuit of knowledge.
- To use a team work process to identify issues, analyze criteria, research and apply learned principles to synthesize solutions to specific design projects.
- To demonstrate habits of visual note making and independent research by developing a sketch and notebook to record learning.

Career Information
Building Inspection Technology (BIT)

BIT 100 Introduction to the International Building Code

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Catalog Date: June 1, 2020

This basic course is designed to provide background material on which the International Building Code was founded and the legal basis for the code. Emphasis will be placed on the development and proper use of the code.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO #1. Interpret building codes and summarize the origins and evolution of building codes in this country.
- Identify the origin and organization of the International Building Code (IBC).
- Interpret IBC requirements for plans, permits and inspections.
- Analyze basic principles of occupancy classifications, types of construction, and occupancy load calculations in order to correctly apply the construction provisions.
- SLO #2 Apply provisions of the International Building Code.
- Describe codes governing foundations, wood structures, masonry and concrete structural elements, safety glass requirements, weatherproofing, roofing, site preparation, gypsum and plaster, and light and ventilation requirements.
- Diagnose code examples with a minimum of 80% accuracy, congruent with industry certification.

BIT 101 Introduction to the International Residential Code

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Catalog Date: June 1, 2020

This basic course is designed to provide a thorough understanding of residential construction requirements for building plan review and inspection. The course will cover the portions of the International Residential Code that have been adopted by the State of California. Emphasis will be placed on the development and proper use of the code.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO #1. Interpret the International Residential Code (IRC) and summarize the origins and evolution of building codes in this country.
- Understand the application and adoption of the IRC in California.
- Identify the origin and organization of the IRC.
- Interpret IRC requirements for plans, permits and inspections.
- Analyze basic principles of residential construction as they relate to foundations, floors, wall construction, wall covering, and roof and ceiling construction in order to correctly apply the construction provisions.
- SLO #2 Apply provisions of the International Residential Code.
- Describe codes governing foundations, floors, wall construction, wall covering, roof and ceiling assemblies and light and ventilation requirements.
- SLO #3 Apply inspection procedures by developing the ability to visualize various types of residential construction methods.
BIT 102 Plan Reading and Non-Structural Plan Review

This course provides a thorough understanding of the plan reading and non-structural plan review process undertaken by building departments prior to plan approval.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- Analyze a set of construction drawings to determine completeness and code compliance (SLO #1).
- Develop a thorough understanding of the organization and purpose of construction drawings.
- Recognize deficiencies in a set of construction drawings submitted for plan review.
- Explain how the relationships between occupancy groups, construction types and fire protection measures, both active and passive, affect the size, height and means of egress of a structure (SLO #2).
- Understand the factors that must be considered when analyzing the code imposed limitations of buildings.
- Identify the purpose and intent of the means of egress requirements found in the building code.
- Perform simple plan reviews and understand the plans examiner's role in the plan review process (SLO #3).
- List the deficiencies found in a set of drawings.
- Articulate the modifications that are required to bring the plans into compliance with the code.
- Identify the effect that the plans examiner's performance can have on the construction project.
- Diagnose code compliance with a minimum of 80% accuracy, congruent with industry certification.

BIT 104 International Building Code - Fire & Life Safety

This course covers the use and application of the International Building Code for construction inspection.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- Explain the organization, intent and purpose of the fire and life safety provisions of the International Building Code (SLO #1).
- Understand why the fire and life safety provisions of the building code are included in the International Building Code and describe the benefits derived from inclusion of these provisions.
- Locate specific sections in the International Building Code in order to provide accurate information to applicants, contractors, property owners and co-workers.
- Describe how the relationships between occupancy groups, construction types and fire protection measures, both active and passive, affect the size, height and means of egress of a structure (SLO #2).
- Understand the factors that must be considered when analyzing the code imposed limitations of buildings.
- Identify the purpose and intent of the means of egress requirements found in the building code.
- Interpret and apply the fire and life safety provision of the International Building Code while performing plan reviews and field inspections (SLO #3).
- Diagnose code examples with a minimum of 80% accuracy, congruent with industry certification.

BIT 106 Introduction to Special Inspection- Concrete, Masonry, Steel, and Soils

<table>
<thead>
<tr>
<th>Units:</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hours:</td>
<td>54 hours LEC</td>
</tr>
<tr>
<td>Prerequisite:</td>
<td>None.</td>
</tr>
<tr>
<td>Catalog Date:</td>
<td>June 1, 2020</td>
</tr>
</tbody>
</table>

This course covers the Special Inspection requirements of chapter seventeen (17) in the International Building Code. The course will provide the technical knowledge and information necessary for Building Inspectors to oversee and approve Special Inspections performed by Special Inspectors on concrete, masonry, structural steel and soils.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO #1 Review plans for compliance with the International Building Code in the follow areas: steel framing; masonry construction; and concrete construction, per the International Building Code and ACI – 318.
- Identify code violations in steel structural systems, masonry construction, and concrete construction at various stages of construction including reinforcement, placement, curing and finishing operations.
- Define terms and definitions of steel construction, masonry construction, concrete construction and soils evaluation and testing.
- SLO #2 Review, understand and interpret strength and durability test results as they relate to structural, masonry, concrete and steel construction.
- Analyze and review field reports for compliance with code-required inspections of structural concrete, steel, masonry construction as well as and soil compaction.
- Describe and explain strength and durability tests for concrete, masonry and structural steel.
- SLO #3 Understand the roles of the Project Engineer, Contractor, Owner, Building Official and Special Inspector as they relate to the code required special inspections.

BIT 110 Engineering and Structural Principles for Building Construction

<table>
<thead>
<tr>
<th>Units:</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hours:</td>
<td>54 hours LEC</td>
</tr>
<tr>
<td>Prerequisite:</td>
<td>None.</td>
</tr>
<tr>
<td>Advisory:</td>
<td>BIT 100</td>
</tr>
<tr>
<td>Catalog Date:</td>
<td>June 1, 2020</td>
</tr>
</tbody>
</table>

This course covers the basic engineering and structural principles used in the construction industry. This course includes civil engineering, plan reading, site layout, mechanics of materials, soil fundamentals, and the construction and inspection of structural systems.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- (SLO #1) Explain the history of structural engineering and describe the role and responsibility of engineers and designers in the construction industry.
- Explain the importance of safety and professional ethics in the field of engineering and design.
- (SLO#2) Evaluate the structure of engineering materials used in construction to produce the desired properties and response in structural components and systems.
• Explain the development of design theories, approaches and methodology.
• Explain the concepts of loads, reaction, equilibrium, vertical shear and shear diagrams, static and stress formulas, section modules and flexure formula as they relate to structural design and review.
• (SLO #3) Define basic engineering principles and how they apply to plan review and construction inspection procedures.
• Analyze construction drawings to verify complete load path including gravity and lateral loads.
• Identify the strengths and limitations of construction materials and identify key components of structural systems.

BIT 112 Building Inspection Principles for Disabled Access

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Advisory: BIT 100
Catalog Date: June 1, 2020

This is a course designed to examine the state regulations that govern the design and construction of public buildings, publicly funded living accommodations, hotels and motels, and multi-family dwellings for individuals with mobility and sensory impairments. The course is designed specifically for building inspectors to develop knowledge and skills in disabled access inspections.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• (SLO#1) Explain the legal, social and economical importance of providing accessibility to public buildings, public accommodations, commercial buildings, publicly funded housing and non-publicly funded housing.
• (SLO#2) Explain the organization, origin, development and purpose of the Americans with Disabilities Act (ADA) and Chapters 11A and 11B of the California Building Code (Title 24).
• Explain why specific requirements are included in the accessibility provisions of the California Building Code and describe the benefits derived from inclusion of these provisions.
• Explain the function of the Certified Access Specialist Program (CASp) and describe the role a CASp inspector plays in accessibility compliance.
• (SLO#3) Locate specific sections in the California Building Code in order to provide accurate information to applicants, contractors, property owners and co-workers regarding accessibility requirements.
• Review plans and verify compliance with Title 24 accessibility requirements.
• Perform building inspections for compliance with accessibility regulations and describe common interpretations of the requirements as well as common problems that hinder compliance.
• Explain and have the ability to accurately apply the Unreasonable Hardship provision of Chapter 11B (Accessibility) in the California Building Code.

BIT 120 Mechanical I/Plumbing Code Requirements

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Advisory: CMT 300
Catalog Date: June 1, 2020

This course covers the use and interpretation of the Uniform Plumbing Code, legal and administrative enforcement procedures, field inspection techniques and procedures, methods and techniques used in plumbing installations, emerging technologies.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• Explain the organization, origin, development and purpose of the Uniform Plumbing Code (SLO #1).
• Understand why specific requirements are included in the Uniform Plumbing Code and describe the benefits derived from inclusion of these provisions.
Locate specific sections in the Uniform Plumbing Code in order to provide accurate information to applicants, contractors, property owners and co-workers.

Interpret the Uniform Plumbing Code in regard to regulations, minimum standards, new methods and materials used in the plumbing industry (SLO #2).

Apply inspection procedures by developing the ability to visualize various types of plumbing methods and identify code violations in installed plumbing systems at various stages of construction.

Interpret and apply the provisions of the Uniform Plumbing Code while performing plan reviews and field inspections (SLO #3).

Diagnose code examples with a minimum of 80% accuracy, congruent with industry certification.

---

**BIT 121 Mechanical II / H.V.A.C. Code Requirements**

<table>
<thead>
<tr>
<th>Units:</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hours:</td>
<td>54 hours LEC</td>
</tr>
<tr>
<td>Prerequisite:</td>
<td>None.</td>
</tr>
<tr>
<td>Advisory:</td>
<td>CMT 300</td>
</tr>
<tr>
<td>Catalog Date:</td>
<td>June 1, 2020</td>
</tr>
</tbody>
</table>

This course covers the use and interpretation of the Uniform Mechanical Code, and legal and administrative enforcement procedures used in mechanical installations, emerging trends and technologies.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- Explain the organization, origin, development and purpose of the Uniform Mechanical Code (SLO #1).
- Explain why specific requirements are included in the Uniform Mechanical Code and describe the benefits derived from inclusion of these provisions.
- Locate specific sections in the Uniform Mechanical Code in order to provide accurate information to applicants, contractors, property owners and co-workers.
- Interpret the Uniform Mechanical Code in regard to regulations, minimum standards, new methods and materials used in mechanical systems (SLO #2).
- Apply inspection procedures by developing the ability to visualize various types of HVAC and other mechanical systems and identify code violations in installed mechanical systems at various stages of construction.
- Interpret and apply the provisions of the Uniform Mechanical Code while performing plan reviews and field inspections (SLO #3).
- Diagnose code examples with a minimum of 80% accuracy, congruent with industry certification.

---

**BIT 130 Introduction to Inspection of Wood Frame Construction**

<table>
<thead>
<tr>
<th>Units:</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hours:</td>
<td>54 hours LEC</td>
</tr>
<tr>
<td>Prerequisite:</td>
<td>None.</td>
</tr>
<tr>
<td>Advisory:</td>
<td>BIT 100</td>
</tr>
<tr>
<td>Catalog Date:</td>
<td>June 1, 2020</td>
</tr>
</tbody>
</table>

This is a basic course designed to provide a thorough understanding of wood frame construction requirements for building plan review and inspection. The course will cover inspections for floor, roof and wall framing, and wall bracing for seismic and wind design. Simple beam calculations will be made.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- Review wood framing plans for compliance with the International Building Code (SLO #1).
- Apply inspection procedures by developing the ability to visualize various types of wood framing methods.
- Identify code violations in wood structural systems at various stages of construction.
• Define wood terms and definitions of lumber for framing and simple beams (SLO #2).

• Compare and contrast lumber grades and specifications in order to verify adequacy of framing members and perform simple beam calculations.

• Understand concepts of lateral bracing both prescriptive (conventional) and designed (SLO #3).

• Understand the concept of continuous load path, both vertical and lateral, and identify key components of a wood structural system.

BIT 140 Residential Electrical Code Requirements

<table>
<thead>
<tr>
<th>Units:</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hours:</td>
<td>54 hours LEC</td>
</tr>
<tr>
<td>Prerequisite:</td>
<td>None.</td>
</tr>
<tr>
<td>Advisory:</td>
<td>BIT 100</td>
</tr>
<tr>
<td>Catalog Date:</td>
<td>June 1, 2020</td>
</tr>
</tbody>
</table>

This course includes review of basic electricity and electrical principles for building inspection. This course is limited to the electrical code requirements for residential structures. The course will cover the use and interpretation of the electrical requirements found in the International Residential Code, legal and administrative enforcement procedures, field inspection techniques and procedures, methods and techniques used in electrical installations and emerging technologies.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• SLO #1 Explain the organization, origin, development and purpose of the electrical requirements found in the International Residential Code.

• Describe why specific requirements are included in the electrical chapters of the International Residential Code and describe the benefits derived from inclusion of these provisions.

• Cite specific sections in the electrical chapters of the International Residential Code in order to provide accurate information to applicants, contractors, property owners and co-workers.

• SLO #2 Interpret the electrical requirements found in the International Residential Code as it applies to residential structures.

• Analyze regulations, minimum standards, new methods and materials used in the electrical industry.

• Understand electrical installations in residential structures to ensure occupant safety by effective compliance with the electrical requirements found in the International Residential Code.

• Apply inspection procedures by developing the ability to visualize various types of electrical methods and identify code violations in installed electrical systems at various stages of construction

• SLO #3 Interpret and apply the provisions of the electrical chapters of the International Residential Code while performing plan reviews and field inspections

• Diagnose code examples with a minimum of 80% accuracy, congruent with industry certification.

BIT 141 Commercial Electrical Code Requirements

<table>
<thead>
<tr>
<th>Units:</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hours:</td>
<td>54 hours LEC</td>
</tr>
<tr>
<td>Prerequisite:</td>
<td>None.</td>
</tr>
<tr>
<td>Advisory:</td>
<td>BIT 140</td>
</tr>
<tr>
<td>Catalog Date:</td>
<td>June 1, 2020</td>
</tr>
</tbody>
</table>

This course is an in-depth study of the National Electrical Code (NEC) as it relates to commercial and industrial construction and includes text adopted into the California Building Standards Code (Title 24). Study will include the most critical aspects of the National Electrical Code for electrical wiring systems found in commercial and industrial installations.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• SLO #1 Describe the application, purpose and intent of specific requirements in the National electrical Code.
• Locate specific sections in the National Electrical Code in order to provide accurate information to applicants, contractors, property owners and co-workers.

• SLO #2 Interpret the National Electrical Code based on a thorough understanding of the code requirements in order to ensure code compliance on commercial and industrial electrical systems.

• Apply inspection procedures by developing the ability to visualize various types of electrical methods and identify code violations in installed electrical systems at various stages of construction.

• SLO #3 Interpret and apply the provisions of the National Electrical Code while performing plan reviews and field inspections of advanced electrical systems

• Diagnose code examples with a minimum of 80% accuracy, congruent with industry certification.

BIT 150 California Energy Code – Building Energy Efficiency Standards

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Catalog Date: June 1, 2020

This course introduces the interpretation and use of the California Energy Code, and legal and administrative enforcement procedures with emphasis on heating, ventilating, air conditioning and related installations.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• SLO #1- Understand plan and inspection procedures, as well as the organization of the California Energy Code

• Identify the origin and organization of the California Energy Code.

• Interpret California Energy Code requirements for plans, permits and inspections.

• Analyze basic principles of energy calculations in the context of plan review.

• Identify the relationship between the California Energy Code and green building rating systems.

• SLO #2- Interpret the California Energy Code as it relates to envelope, lighting and mechanical systems.

• Describe codes governing building envelope, lighting controls, use and alternatives, mechanical system efficiency.

• Describe California Energy Code compliance procedures.

• Diagnose code examples with a minimum of 80% accuracy, congruent with industry certification.

BIT 152 HERS I, Field Verification and Diagnostic Testing for Code Compliance

Units: 3
Hours: 45 hours LEC; 27 hours LAB
Prerequisite: None.
Advisory: BIT 150
Catalog Date: June 1, 2020

This course is an introduction to the California Home Energy Rating System (HERS) and prepares students to obtain certification as a HERS I rater. The HERS I certification allows certified individuals to verify certain energy efficiency measures of newly constructed buildings and alterations to existing buildings for compliance with the California Energy Code.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• SLO #1 Explain the purpose and history of the Home Energy Rating System in the State of California

• Describe the legal responsibilities of the HERS rater in the enforcement of the California Energy Code
- Explain the HERS field verification and diagnostic testing process and the roles of the Designer, Energy Consultant, Enforcement Agency, Builder, HERS provider and rater, Third Party Quality Control Program and the California Energy Commission.

- SLO #2 Analyze basic principles of energy efficiency, human comfort and heat transfer.

- Demonstrate a thorough knowledge of building components and systems that affect the efficiency of residential building including building envelope, HVAC systems, water heating, lighting and appliances.

- SLO #3 Interpret the California Energy Code as it relates to envelope, lighting and mechanical systems.

- Demonstrate a thorough understanding of code required HERS field verification and diagnostic testing including test and inspection protocols and documentation requirements.

- SLO #4 Perform all required HERS field verification and diagnostic testing to ensure compliance with the California Energy Code on Residential Alternations and Newly Constructed Homes.

- Explain the specific testing and documentation requirements for residential alterations and newly constructed homes regarding HERS verification and third party quality control programs when a builder opts to utilize sample groups.

BIT 154 California Green Building Standards Code

<table>
<thead>
<tr>
<th>Units:</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hours:</td>
<td>54 hours LEC</td>
</tr>
<tr>
<td>Prerequisite:</td>
<td>None.</td>
</tr>
<tr>
<td>Catalog Date:</td>
<td>June 1, 2020</td>
</tr>
</tbody>
</table>

The purpose of this course is to introduce students to the history, purpose, proper use and interpretation of the California Green Building Standards Code. The California Green Building Standards Code was adopted by the State of California in July of 2010 and continues to evolve with each new code cycle. These standards will be felt across all of the industry's occupations, from architects and designers to builders and inspectors. This course fills elective requirements in the BIT degree, as well as the Green Building Certificate.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO #1 Interpret the California Green Building Standards Code (CAL Green) and summarize the origins and evolution of California Green Building Standards in the State of California.

- Understand the organization of the California Green Building Standards Code.

- Interpret California Green Building Standards Code requirements as they relate to plan review, permit issuance and inspections.

- SLO #2 Analyze basic principles of site development, energy and water efficiency, material conservation, resource efficiency and environmental quality as they relate to the California Green Building Standards Code.

- Apply provisions of the California Green Building Standards Code.

- Describe codes governing site development, energy and water efficiency, material conservation, resource efficiency and environmental quality requirements.

- SLO #3 Identify code violations of the California Green Building Standards Code during plan review and at various stages of construction.

- Define construction terms as they relate to green building.

- Diagnose code examples with a minimum of 80% accuracy, congruent with industry certification.

- SLO #4 Understand and apply the voluntary measures found in the California Green Building Standards Code.

- Understand how the voluntary measures, also known as Tiers, can be adopted by a community as a means of achieving enhanced construction or reach levels of the code.

- Explain the process for complying with prerequisite and elective measures found in both Tier 1 and Tier 2 voluntary measures.

BIT 295 Independent Studies in Building Inspection Technology

<table>
<thead>
<tr>
<th>Units:</th>
<th>1 - 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hours:</td>
<td>54 - 162 hours LAB</td>
</tr>
<tr>
<td>Prerequisite:</td>
<td>None.</td>
</tr>
<tr>
<td>Catalog Date:</td>
<td>June 1, 2020</td>
</tr>
</tbody>
</table>
An independent studies project involves an individual student or small group of students in study, research, or activities beyond the scope of regularly offered courses. See the current catalog section of "Special Studies" for full details of Independent Studies.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- **SLO #1:** Actively engage in intellectual inquiry beyond that required in order to pass a course of study (College Wide Learning Outcome – Area 4).
- Discuss and outline a proposal of study (that can be accomplished within one semester term) with a supervising instructor qualified within the discipline.
- Design an independent study (to be completed individually or by collaboration of a small group) to foster special knowledge, skills, and experience that are not available in any one regularly scheduled course.
- Use information resources to gather discipline-specific information.
- **SLO #2:** Utilize modes of analysis and critical thinking to apply theoretical perspectives and/or concepts in the major discipline of study to significant problems and/or educational activities (College Wide Learning Outcome – Area 3).
- Analyze and apply the knowledge, skills and experience that are involved in the independent study to theoretical perspectives and/or concepts in the major discipline of study.
- Explain the importance of the major discipline of study in the broader picture of society.
- **SLO #3:** Communicate a complex understanding of content matter of the major discipline of study (College Wide Outcome – Area 3).
- Demonstrate competence in the skills essential to mastery of the major discipline of study that are necessary to accomplish the independent study.
- **SLO #4:** Identify personal goals and pursue these goals effectively (College Wide Outcome – Area 4).
- Utilize skills from the "academic tool kit" including time management, study skills, etc., to accomplish the independent study within one semester term.

**BIT 298 Work Experience in Building Inspection Technology**

**Units:** 1 - 4  
**Hours:** 60 - 300 hours LAB  
**Prerequisite:** None.  
**Enrollment Limitation:** Students must be in a paid or unpaid internship, volunteer position or job related to career goals in Building Inspection Technology.  
**General Education:** AA/AS Area III(b)  
**Catalog Date:** June 1, 2020

This course provides students with opportunities to develop marketable skills in preparation for employment in their major field of study or advancement within their career. It is designed for students interested in work experience and/or internships in associate degree level or certificate occupational programs. Course content includes understanding the application of education to the workforce; completion of required forms which document the student's progress and hours spent at the work site; and developing workplace skills and competencies. Appropriate level learning objectives are established by the student and the employer. During the semester, the student is required to participate in a weekly orientation and 75 hours of related paid work experience, or 60 hours of unpaid work experience for one unit. An additional 75 or 60 hours of related work experience is required for each additional unit. Work Experience may be taken for a total of 16 units when there are new or expanded learning objectives. Only one Work Experience course may be taken per semester.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- **DEMONSTRATE AN UNDERSTANDING AND APPLICATION OF PROFESSIONAL WORKPLACE BEHAVIOR IN A FIELD OF STUDY RELATED ONE'S CAREER(SLO 1)**
- Understand the effects time, stress, and organizational management have on performance.
- Demonstrate an understanding of consistently practicing ethics and confidentiality in a workplace.
- Examine the career/life planning process and relate its relevancy to the student.
- Demonstrate an understanding of basic communication tools and their appropriate use.
- Demonstrate an understanding of workplace etiquette.
- **DESCRIBE THE CAREER/LIFE PLANNING PROCESS AND RELATE ITS RELEVANCY TO ONE'S CAREER.** (SLO 2)
- Link personal goals to long term achievement.
- Display an understanding of creating a professional first impression.
- Understand how networking is a powerful job search tool.
- Understand necessary elements of a résumé.
- Understand the importance of interview preparation.
- Identify how continual learning increases career success.
- **DEMONSTRATE APPLICATION OF INDUSTRY KNOWLEDGE AND THEORETICAL CONCEPTS AS WRITTEN IN LEARNING OBJECTIVES IN PARTNERSHIP WITH THE EMPLOYER WORK SITE SUPERVISOR.** (SLO 3)
Cosumnes River College's business programs are designed to provide an entrance into an exciting career. Many opportunities are available which can lead to immediate employment and/or career advancement. CRC offers a variety of degrees and certificates to meet students' present and future needs. Whether it is one class or a step toward a degree, there are a variety of options.

Dean

 (916) 691-7427
 PowellJ@crc.losrios.edu

Associate Degrees for Transfer

A.S.-T. in Business Administration

The Associate in Science in Business Administration for Transfer degree provides students with a major that fulfills the general requirements of the California State University for transfer to baccalaureate degree programs in business administration. Students with this degree will receive priority admission with junior status to the California State University system. The Associate in Science in Business Administration for Transfer is comprised of lower division coursework typically required by CSU institutions. Students must complete the following Associate Degree for Transfer requirements (Pursuant to SB1440, §66746):

• 60 semester or 90 quarter CSU-transferable units
• the California State University-General Education-Breadth pattern (CSU GE-Breadth); OR the Intersegmental General Education Transfer Curriculum (IGETC) pattern
• a minimum of 18 semester or 27 quarter units in the major or area of emphasis as determined by the community college district
• obtain a minimum grade point average (GPA) of 2.0
• earn a grade of C or better in all courses required for the major or area of emphasis

Upon successful completion of the Associate in Science in Nutrition and Dietetics for Transfer degree requirements, students will be guaranteed admission to the CSU system with junior status and will not have to repeat lower division coursework.

Each California State University may have slightly different requirements for transfer so it is critical for students to work with their counselors to develop individual academic plans.

Catalog Date: June 1, 2020

Degree Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT 301</td>
<td>Financial Accounting</td>
<td>4</td>
</tr>
<tr>
<td>ACCT 311</td>
<td>Managerial Accounting</td>
<td>4</td>
</tr>
<tr>
<td>ECON 302</td>
<td>Principles of Macroeconomics</td>
<td>3</td>
</tr>
<tr>
<td>ECON 304</td>
<td>Principles of Microeconomics</td>
<td>3</td>
</tr>
<tr>
<td>BUS 340</td>
<td>Business Law (3)</td>
<td>3</td>
</tr>
<tr>
<td>BUS 300</td>
<td>Introduction to Business (3)</td>
<td>3</td>
</tr>
<tr>
<td>ECON 310</td>
<td>Statistics for Business and Economics (3)</td>
<td>3 - 4</td>
</tr>
<tr>
<td>or MATH 341</td>
<td>Calculus for Business and Economics (4)</td>
<td></td>
</tr>
<tr>
<td>or STAT 300</td>
<td>Introduction to Probability and Statistics (4)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>A minimum of 2 units from the following:</td>
<td>2</td>
</tr>
<tr>
<td>COURSE CODE</td>
<td>COURSE TITLE</td>
<td>UNITS</td>
</tr>
<tr>
<td>-------------</td>
<td>--------------------------------------------------</td>
<td>-------</td>
</tr>
<tr>
<td>CISC 310</td>
<td>Introduction to Computer Information Science (3)</td>
<td></td>
</tr>
<tr>
<td>CISA 305</td>
<td>Beginning Word Processing (2)</td>
<td></td>
</tr>
<tr>
<td>CISA 315</td>
<td>Introduction to Electronic Spreadsheets (2)</td>
<td></td>
</tr>
<tr>
<td>CISA 340</td>
<td>Presentation Graphics (2)</td>
<td></td>
</tr>
<tr>
<td>CISA 308</td>
<td>Exploring Word Processing Software (1)</td>
<td></td>
</tr>
<tr>
<td>CISC 308</td>
<td>Exploring Computer Environments and the Internet (1)</td>
<td></td>
</tr>
<tr>
<td>CISA 318</td>
<td>Exploring Spreadsheet Software (1)</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Total Units:</strong></td>
<td><strong>25 - 26</strong></td>
</tr>
</tbody>
</table>

The Associate in Science in Business Administration for Transfer (AS-T) degree may be obtained by completion of 60 transferable, semester units with a minimum 2.0 GPA, including (a) the major or area of emphasis described in the Required Program, and (b) either the Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education-Breadth Requirements.

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- P-SLO 1: Identify and explain the major functional areas of business organizations including management, marketing, finance, and accounting.
- P-SLO 2: Develop leadership skills that are effective in managing a multicultural workforce.
- P-SLO 3: Analyze practical business problems and utilize research and critical thinking to evaluate and recommend alternative solutions.
- P-SLO 4: Apply accounting principles and concepts in making decisions about business operations.
- P-SLO 5: Integrate management principles in relationship to finance, personnel, products, services and information.
- P-SLO 6: Communicate effectively verbally and in writing in various business settings.
- P-SLO 7: Apply commonly used computer application programs to create relevant business documents.

Career Information


Associate Degrees

A.A. in Business, General

This program provides an overview of business fundamentals for students interested in most business occupations. The program is also recommended for general government service occupations.

This degree is intended for students who wish to complete an A.A. degree in Business. Please consult with an academic counselor if you wish to obtain an A.A. degree and transfer to a CSU university as a business degree major.

**Catalog Date:** June 1, 2020

Degree Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS 300</td>
<td>Introduction to Business</td>
<td>3</td>
</tr>
<tr>
<td>BUS 340</td>
<td>Business Law</td>
<td>3</td>
</tr>
<tr>
<td>COURSE CODE</td>
<td>COURSE TITLE</td>
<td>UNITS</td>
</tr>
<tr>
<td>-------------</td>
<td>--------------------------------------------------</td>
<td>-------</td>
</tr>
<tr>
<td>ACCT 301</td>
<td>Financial Accounting</td>
<td>4</td>
</tr>
<tr>
<td>ECON 302</td>
<td>Principles of Macroeconomics</td>
<td>3</td>
</tr>
<tr>
<td>ECON 304</td>
<td>Principles of Microeconomics</td>
<td>3</td>
</tr>
<tr>
<td>MKT 300</td>
<td>Principles of Marketing</td>
<td>3</td>
</tr>
</tbody>
</table>

A minimum of 6 units from the following:

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS 310</td>
<td>Business Communications (3)</td>
<td></td>
</tr>
<tr>
<td>BUS 320</td>
<td>Concepts in Personal Finance (3)</td>
<td></td>
</tr>
<tr>
<td>BUS 330</td>
<td>Managing Diversity in the Workplace (3)</td>
<td></td>
</tr>
<tr>
<td>BUS 350</td>
<td>Small Business Management/Entrepreneurship (3)</td>
<td></td>
</tr>
<tr>
<td>ECON 310</td>
<td>Statistics for Business and Economics (3)</td>
<td></td>
</tr>
<tr>
<td>STAT 300</td>
<td>Introduction to Probability and Statistics (4)</td>
<td></td>
</tr>
</tbody>
</table>

A minimum of 3 units from the following:

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT 311</td>
<td>Managerial Accounting (4)</td>
<td></td>
</tr>
<tr>
<td>BUS 345</td>
<td>Law and Society (3)</td>
<td></td>
</tr>
<tr>
<td>MGMT 372</td>
<td>Human Relations and Organizational Behavior (3)</td>
<td></td>
</tr>
<tr>
<td>RE 300</td>
<td>California Real Estate Principles (3)</td>
<td></td>
</tr>
<tr>
<td>BUS 495</td>
<td>Independent Studies in Business (0.5 - 4)</td>
<td></td>
</tr>
<tr>
<td>BUS 498</td>
<td>Work Experience in Business (1 - 4)</td>
<td></td>
</tr>
</tbody>
</table>

A minimum of 3 units from the following:

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>CISC 310</td>
<td>Introduction to Computer Information Science (3)</td>
<td></td>
</tr>
<tr>
<td>CISA 305</td>
<td>Beginning Word Processing (2)</td>
<td></td>
</tr>
<tr>
<td>CISA 308</td>
<td>Exploring Word Processing Software (1)</td>
<td></td>
</tr>
<tr>
<td>CISA 315</td>
<td>Introduction to Electronic Spreadsheets (2)</td>
<td></td>
</tr>
<tr>
<td>CISA 320</td>
<td>Introduction to Database Management (1)</td>
<td></td>
</tr>
</tbody>
</table>

Total Units: 31

---

1Students may select ECON 310 or STAT 300, but not both.

The Business, General Associate in Arts (A.A.) degree may be obtained by completion of the required program, plus general education requirements, plus sufficient electives to meet a 60-unit total. See CRC graduation requirements.

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- Identify and explain the major functional areas of the business organizations including management, marketing, finance, and accounting.
- Develop leadership skills and abilities that are effective in managing a multicultural workforce.
- Analyze practical business problems and utilize critical thinking and research skills in the evaluation of alternative solutions.
- Apply accounting concepts and principles in making decisions about business operations.
- Integrate management principles in relationship to finance, personnel, products, services, and information.
- Communicate effectively verbally and in writing in various business settings.
A.A. in Business, Small Business Management/Entrepreneurship

The Small Business Management/Entrepreneurship degree provides training and education for those wishing to own or manage a small entrepreneurial venture. The various elements involved in starting and operating a small business are covered.

Catalog Date: June 1, 2020

Degree Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>BUSINESS CORE:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BUS 300</td>
<td>Introduction to Business</td>
<td>3</td>
</tr>
<tr>
<td>BUS 340</td>
<td>Business Law</td>
<td>3</td>
</tr>
<tr>
<td>ACCT 301</td>
<td>Financial Accounting</td>
<td>4</td>
</tr>
<tr>
<td>ECON 302</td>
<td>Principles of Macroeconomics</td>
<td>3</td>
</tr>
<tr>
<td>MKT 300</td>
<td>Principles of Marketing</td>
<td>3</td>
</tr>
<tr>
<td>BUS 215</td>
<td>Entrepreneurial Opportunity and Business Planning</td>
<td>3</td>
</tr>
<tr>
<td>BUS 350</td>
<td>Small Business Management/Entrepreneurship</td>
<td>3</td>
</tr>
</tbody>
</table>

A minimum of 6 units from the following:

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS 310</td>
<td>Business Communications</td>
<td>3</td>
</tr>
<tr>
<td>BUS 330</td>
<td>Managing Diversity in the Workplace</td>
<td>3</td>
</tr>
<tr>
<td>BUS 320</td>
<td>Concepts in Personal Finance</td>
<td>3</td>
</tr>
<tr>
<td>ECON 304</td>
<td>Principles of Microeconomics</td>
<td>3</td>
</tr>
<tr>
<td>MKT 310</td>
<td>Selling Professionally</td>
<td>3</td>
</tr>
<tr>
<td>MGMT 362</td>
<td>Techniques of Management</td>
<td>3</td>
</tr>
</tbody>
</table>

A minimum of 3 units from the following:

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>CISC 310</td>
<td>Introduction to Computer Information Science</td>
<td>3</td>
</tr>
<tr>
<td>CISA 305</td>
<td>Beginning Word Processing</td>
<td>2</td>
</tr>
<tr>
<td>CISA 308</td>
<td>Exploring Word Processing Software</td>
<td>1</td>
</tr>
<tr>
<td>CISA 315</td>
<td>Introduction to Electronic Spreadsheets</td>
<td>2</td>
</tr>
<tr>
<td>CISA 320</td>
<td>Introduction to Database Management</td>
<td>1</td>
</tr>
</tbody>
</table>

Total Units: 31

The Business, Small Business Management/Entrepreneurship Associate in Arts (A.A.) degree may be obtained by completion of the required program, plus general education requirements, plus sufficient electives to meet a 60-unit total. See CRC graduation requirements.

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- Evaluate the feasibility of success when starting a new business venture.
- Research and compose a business plan that can be used for planning as well as financing.
- Employ appropriate management, finance, accounting, and marketing techniques required in operating a business.
- Develop effective oral and written communication skills that can be applied in various business settings.
A.A. in Restaurant and Food Service Entrepreneurship

This program provides training and education for those wishing to own a restaurant or other food service venture. The various elements involved in starting and operating a small business are covered as well as training in food theory and production, safety and sanitation, culinary purchasing, and service.

Catalog Date: June 1, 2020

Degree Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAM 300</td>
<td>Introduction to Culinary Arts Management</td>
<td>2</td>
</tr>
<tr>
<td>CAM 301</td>
<td>Food Theory and Preparation</td>
<td>4</td>
</tr>
<tr>
<td>CAM 303</td>
<td>Food Product Identification</td>
<td>2</td>
</tr>
<tr>
<td>CAM 306</td>
<td>Culinary Sanitation &amp; Safety</td>
<td>2</td>
</tr>
<tr>
<td>CAM 310</td>
<td>Quantity Food Production</td>
<td>3</td>
</tr>
<tr>
<td>CAM 320</td>
<td>Culinary Management</td>
<td>2</td>
</tr>
<tr>
<td>CAM 322</td>
<td>Culinary Customer Service</td>
<td>2</td>
</tr>
<tr>
<td>CAM 332</td>
<td>Culinary Financial Management</td>
<td>2</td>
</tr>
<tr>
<td>CAM 334</td>
<td>Culinary Marketing</td>
<td>2</td>
</tr>
<tr>
<td>BUS 215</td>
<td>Entrepreneurial Opportunity and Business Planning</td>
<td>3</td>
</tr>
<tr>
<td>BUS 300</td>
<td>Introduction to Business</td>
<td>3</td>
</tr>
<tr>
<td>BUS 340</td>
<td>Business Law</td>
<td>3</td>
</tr>
<tr>
<td>BUS 350</td>
<td>Small Business Management/Entrepreneurship</td>
<td>3</td>
</tr>
<tr>
<td>MKT 300</td>
<td>Principles of Marketing</td>
<td>3</td>
</tr>
<tr>
<td>ACCT 301</td>
<td>Offered Fall, Spring, and Summer BUS 320 offered Fall and Spring:</td>
<td></td>
</tr>
</tbody>
</table>
### Student Learning Outcomes

Upon completion of this program, the student will be able to:

- (PSLO 1) Understand and practice proper sanitation and safety procedures critical to the food service industry.
- (PSLO 2) Demonstrate critical thinking skills needed to assess and correct problems within food preparation, production, presentation and service.
- (PSLO 3) Demonstrate effective techniques for the selection and procurement of food and non-food items used common to the food service industry.
- (PSLO 4) Demonstrate basic knowledge of cooking techniques and procedures.
- (PSLO 5) Exhibit a basic understanding of nutrition
- (PSLO 6) Demonstrate skill and comprehension in entrepreneurship as indicated by course outcomes.
- (PSLO 7) Transform an entrepreneurial idea into a viable business concept.
- (PSLO 8) Employ appropriate management, finance, accounting, and marketing techniques required in operating a business.
- (PSLO 9) Demonstrate the ability to think critically and analyze problems.
- (PSLO 10) Evaluate the feasibility of success when starting a new business venture.
- (PSLO 11) Research and compose a business plan that includes all facets of starting and managing a business.
- (PSLO 12) Express ideas and facts clearly and completely.
- (PSLO 13) Develop effective oral and written communication skills that can be applied in various business settings.

### Career Information

Small Business Owner- Restaurant and Food Service field. Restaurant manager.

### Certificates of Achievement

### Business, General Certificate

The Certificate of Achievement in Business provides an overview of the various disciplines in business. It is intended to meet the needs of students who wish to develop, retrain or upgrade skills for work in a business setting. Students wanting to earn the A.A. degree in Business, General, can do so by taking additional courses beyond the 18 units required in this certificate. Please seek advice from your counselor to verify the correct courses to take towards the A.A degree.

#### Catalog Data: June 1, 2020

### Certificate Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS 300</td>
<td>Introduction to Business</td>
<td>3</td>
</tr>
<tr>
<td>BUS 340</td>
<td>Business Law</td>
<td>3</td>
</tr>
<tr>
<td>COURSE CODE</td>
<td>COURSE TITLE</td>
<td>UNITS</td>
</tr>
<tr>
<td>-------------</td>
<td>-------------------------------------------------------------------------------</td>
<td>-------</td>
</tr>
<tr>
<td>MKT 300</td>
<td>Principles of Marketing</td>
<td>3</td>
</tr>
<tr>
<td>ECON 302</td>
<td>Principles of Macroeconomics</td>
<td>3</td>
</tr>
<tr>
<td>ACCT 301</td>
<td>Financial Accounting</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>A minimum of 3 units from the following:</td>
<td></td>
</tr>
<tr>
<td>BUS 350</td>
<td>Small Business Management/Entrepreneurship (3)</td>
<td>3</td>
</tr>
<tr>
<td>BUS 320</td>
<td>Concepts in Personal Finance (3)</td>
<td></td>
</tr>
<tr>
<td>BUS 310</td>
<td>Business Communications (3)</td>
<td></td>
</tr>
<tr>
<td>BUS 330</td>
<td>Managing Diversity in the Workplace (3)</td>
<td></td>
</tr>
<tr>
<td>ECON 304</td>
<td>Principles of Microeconomics</td>
<td></td>
</tr>
<tr>
<td>CISC 310</td>
<td>Introduction to Computer Information Science (3)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total Units:</td>
<td>19</td>
</tr>
</tbody>
</table>

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- P-SLO 1: Skills/Knowledge: Identify and explain the major functional areas of business organizations including management, marketing, economics, and accounting.
- P-SLO 2: Critical Thinking Skills: Analyze practical business problems utilize critical thinking and research skills in the evaluation of alternative solution.
- P-SLO 3: Critical Thinking Skills: Apply concepts and principles in business law, management, marketing, finance, and economics to making decisions about business operations.

Career Information

Business occupations General government service occupations.

Business, Office Assistant Certificate

This Certificate of Achievement is designed to provide students with general knowledge in business and an in-depth knowledge of a variety of business technology applications. Program topics include: keyboarding/word processing, integrated office applications, organization and supervision of office activities, office procedures, and business communications.

Catalog Date: June 1, 2020

Certificate Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUSTEC 101</td>
<td>Computer Keyboarding: 10-Key</td>
<td>1</td>
</tr>
<tr>
<td>BUSTEC 120</td>
<td>Skills for Today's Office</td>
<td>1</td>
</tr>
<tr>
<td>BUSTEC 303</td>
<td>Computer-Keyboard Formatting</td>
<td>2</td>
</tr>
<tr>
<td>BUSTEC 304</td>
<td>Computer-Keyboard Speed-and-Accuracy Building</td>
<td>2(^1)</td>
</tr>
<tr>
<td>CISA 305</td>
<td>Beginning Word Processing</td>
<td>2</td>
</tr>
<tr>
<td>CISA 315</td>
<td>Introduction to Electronic Spreadsheets</td>
<td>2</td>
</tr>
<tr>
<td>CISC 302</td>
<td>Computer Familiarization</td>
<td>2</td>
</tr>
<tr>
<td>BUS 100</td>
<td>English for the Professional</td>
<td>3</td>
</tr>
</tbody>
</table>
A minimum of 3 units from the following:

- BUS 300: Introduction to Business (3)
- BUS 310: Business Communications (3)
- CISC 310: Introduction to Computer Information Science (3)
- CISA 340: Presentation Graphics (2)
- CISA 318: Exploring Spreadsheet Software (1)
- CISC 308: Exploring Computer Environments and the Internet (1)
- BUSTEC 302: Computer-Keyboarding (2)

Total Units: 18

\(^1\)BUSTEC 304 may be replaced by keyboarding speed verification at 40 wpm or better

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- **P-SLO 1: Skills/Knowledge**: Demonstrate skill and comprehension in respective subject areas as indicated by course outcomes
  - Use word processing, spreadsheet, database, presentation, and electronic communication software to effectively support the office environment.
  - Demonstrate keyboarding skills which represent industry-standard speed and accuracy

- **P-SLO 2: Critical Thinking Skills**: Demonstrate the ability to think critically and analyze problems.
  - Analyze and demonstrate effective business procedures and office management strategies
  - Incorporate technological, communication, and problem-solving skills in the business setting

Career Information

Clerk, Administrative Assistant, Office Assistant, Data-entry Specialist.

Entrepreneurship Certificate

This certificate is designed for current and potential entrepreneurs. It provides an introductory and organized course of study that enables students to develop their entrepreneurial skills, recognize opportunities, and learn the basics of starting and managing a small business.

**Catalog Date**: June 1, 2020

Certificate Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS 215</td>
<td>Entrepreneurial Opportunity and Business Planning</td>
<td>3</td>
</tr>
<tr>
<td>BUS 300</td>
<td>Introduction to Business</td>
<td>3</td>
</tr>
<tr>
<td>BUS 350</td>
<td>Small Business Management/Entrepreneurship</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Units: 9

Student Learning Outcomes

Upon completion of this program, the student will be able to:
Small Business Management/Entrepreneurship Certificate

The Certificate of Achievement in Small Business Management/Entrepreneurship is designed for current and potential entrepreneurs. It provides an introductory and organized course of study that enables students to develop their entrepreneurial skills, recognize opportunities, and learn the various aspects of starting and managing a small business. Students wanting to earn the A.A. degree in Small Business Management/Entrepreneurship can do so by taking additional courses beyond the 18 units required for this certificate. Please seek advice from your counselor to verify the correct courses to take towards the A.A degree.

**Catalog Date:** June 1, 2020

### Certificate Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS 215</td>
<td>Entrepreneurial Opportunity and Business Planning</td>
<td>3</td>
</tr>
<tr>
<td>BUS 300</td>
<td>Introduction to Business</td>
<td>3</td>
</tr>
<tr>
<td>BUS 350</td>
<td>Small Business Management/Entrepreneurship</td>
<td>3</td>
</tr>
<tr>
<td>MKT 300</td>
<td>Principles of Marketing</td>
<td>3</td>
</tr>
<tr>
<td>BUS 340</td>
<td>Business Law</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>A minimum of 3 units from the following:</td>
<td></td>
</tr>
<tr>
<td>ACCT 301</td>
<td>Financial Accounting (4)</td>
<td>3</td>
</tr>
<tr>
<td>BUS 310</td>
<td>Business Communications (3)</td>
<td></td>
</tr>
<tr>
<td>BUS 320</td>
<td>Concepts in Personal Finance (3)</td>
<td></td>
</tr>
<tr>
<td>CISC 310</td>
<td>Introduction to Computer Information Science (3)</td>
<td></td>
</tr>
<tr>
<td>ECON 304</td>
<td>Principles of Microeconomics (3)</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Total Units:</strong></td>
<td><strong>18</strong></td>
</tr>
</tbody>
</table>

### Student Learning Outcomes

Upon completion of this program, the student will be able to:

- P-SLO 1: Skills/Knowledge: Demonstrate skill and comprehension in entrepreneurship as indicated by course outcomes
- Transform an entrepreneurial idea into a viable business concept
- Employ appropriate management, finance, accounting, and marketing techniques required in operating a business.
- P-SLO 2: Critical Thinking Skills: Demonstrate the ability to think critically and analyze problems
- Evaluate the feasibility of success when starting a new business venture.
- Research and compose a business plan that includes all facets of starting and managing a business
- P-SLO 3: Communication: Express ideas and facts clearly and completely
- Develop effective oral and written communication skills that can be applied in various business settings

### Career Information
BUS 100 English for the Professional

This course is designed to prepare the student for business communication. It presents principles of correct and effective English usage as applied in business. Included are skills and techniques of written communication, sentence structure, word usage, punctuation, spelling, business vocabulary, and business document-formatting. Emphasis is placed on critical thinking and effective writing techniques through analyzing written communication and composing and organizing paragraphs into effective business documents. Computer skills are needed to format business documents and search the Internet for information. Proofreading skills are stressed throughout the course. The course is recommended for all business majors during their first semester.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO 1: DEMONSTRATE SKILL AND COMPREHENSION IN RESPECTIVE SUBJECT AREAS AS INDICATED BY COURSE OUTCOMES.
  - Select and use appropriate writing aids and references.
  - Prepare assignments that exhibit a clear understanding of the structure of English grammar, word usage, spelling, punctuation, and business vocabulary.
  - Analyze and evaluate business documents.
  - Produce documents that show an understanding of the essentials of the sentence as an aid to clear thinking and effective writing.
  - Compose coherent, well-developed, unified paragraphs.
- SLO 2: DEMONSTRATE THE ABILITY TO THINK CRITICALLY AND ANALYZE PROBLEMS.
  - Assess Internet options in the search for relevant information.
  - Examine the content of and proofread written assignments.
- SLO 3: EXPRESS IDEAS AND FACTS CLEARLY AND COMPLETELY.
  - Create, revise, and edit written sentences, paragraphs, and basic business documents (using a computer).

BUS 105 Business Mathematics

This course is a review of basic mathematical skills and introduces equations and formulas in solving for unknowns. Applications of mathematics in business include such areas as banking, commercial discounts, retail and wholesale markup-markdown, payroll computations, simple and compound interest, bank discount, present value, taxes, insurance, depreciation, and financial statements. This course is recommended for every major in business.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO 1: DEMONSTRATE SKILLS AND COMPREHENSION IN BUSINESS MATHEMATICS (AS INDICATED BY COURSE OUTCOMES).
  - Use and derive formulas and equations in the solution of unknowns.
  - Demonstrate skill in the business use of mathematics through a variety of applications.
Develop accuracy, neatness, thoroughness, promptness, and speed as desirable work habits.

SLO 2: DEMONSTRATE THE ABILITY TO THINK CRITICALLY AND ANALYZE PROBLEMS.

Demonstrate the ability to analyze thought problems pertaining to business mathematics and to solve them.

BUS 215 Entrepreneurial Opportunity and Business Planning

This course provides students with insight and knowledge into developing their entrepreneurial opportunity and creating a business plan for it. Students will research entrepreneurial ideas and determine how to turn an idea into a successful startup enterprise given the current and anticipated demographic, technological and social climates. Students will also be offered an organized, step-by-step approach to preparing a business plan. Once students are able to assess the feasibility of their own business ideas based on their personal strengths, skills, and financial goals, they will develop and produce a comprehensive business plan. Students will analyze the organization and management of a new business and map out how to execute a new business venture. The plan will enable the students to solve problems "on paper" before they become operational or money problems.

Students with little entrepreneurial experience or have business idea they would like to pursue will benefit from this course.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO 1: Demonstrate the ability to develop an entrepreneurial idea into a viable business concept. This includes the ability to
  - Determine the feasibility of a business idea.
  - Assess the marketability and acceptability of a business idea by the prospective consumers.
- SLO 2: Demonstrate the skills to research the requirements of starting a small business. This includes the ability to
  - Identify the legal, financial, and human resource needs for a new business.
  - Understand how a business concept might be affected by the current and anticipated demographic, technological, and social climates.
- SLO 3: Demonstrate the skills to produce and develop a business plan for a new business venture. This includes the ability to
  - Determine the essential elements of a business plan.
  - Identify target markets and project start-up, monthly, and yearly costs.
- SLO 4: Demonstrate the ability to think critically, develop alternatives, and analyze solutions for a new business. This includes the ability to
  - Anticipate how uncontrollable variables in the environment might affect the new business.
  - Develop contingency plans to navigate through ambiguous situations.

BUS 295 Independent Studies in Business

An independent studies project involves an individual student or small group of students in study, research, or activities beyond the scope of regularly offered courses. See the current catalog section of "Special Studies" for full details of Independent Studies.

Student Learning Outcomes

Upon completion of this course, the student will be able to:
SLO #1: Actively engage in intellectual inquiry beyond that required in order to pass a course of study (College Wide Learning Outcome – Area 4).

Discuss and outline a proposal of study (that can be accomplished within one semester term) with a supervising instructor qualified within the discipline.

Design an independent study (to be completed individually or by collaboration of a small group) to foster special knowledge, skills, and experience that are not available in any one regularly scheduled course.

Use information resources to gather discipline-specific information.

SLO #2: Utilize modes of analysis and critical thinking to apply theoretical perspectives and/or concepts in the major discipline of study to significant problems and/or educational activities (College Wide Learning Outcome – Area 3).

Analyze and apply the knowledge, skills and experience that are involved in the independent study to theoretical perspectives and/or concepts in the major discipline of study.

Explain the importance of the major discipline of study in the broader picture of society.

SLO #3: Communicate a complex understanding of content matter of the major discipline of study (College Wide Outcome – Area 3).

Demonstrate competence in the skills essential to mastery of the major discipline of study that are necessary to accomplish the independent study.

SLO #4: Identify personal goals and pursue these goals effectively (College Wide Outcome – Area 4).

Utilize skills from the “academic tool kit” including time management, study skills, etc., to accomplish the independent study within one semester term.

BUS 300 Introduction to Business

| Units: | 3 |
| Hours: | 54 hours LEC |
| Prerequisite: | None. |
| Transferable: | CSU; UC |
| C-ID: | C-ID BUS 110 |
| Catalog Date: | June 1, 2020 |

This course provides a survey of all business areas, including accounting, law, human resources, management, marketing, economics and finance. The course is designed to be taken by all beginning students interested in business. It is a core requirement for business majors. This course provides an overview often very helpful in assisting students’ selection of a specific career in the field of business.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO 1: DEMONSTRATE SKILL AND COMPREHENSION IN MAJOR ENVIRONMENTAL FACTORS PERTAINING TO BUSINESS.
  This includes the ability to describe the economic, social, legal, and governmental environments and how they might affect business operations.

- SLO 2: DEMONSTRATE UNDERSTANDING OF MAJOR FUNCTIONAL AREAS OF BUSINESS.
  This includes the ability to identify and describe the functional units such as management, marketing, finance, accounting, and human resources in a typical business organization.

- SLO 3: DEMONSTRATE THE ABILITY TO THINK CRITICALLY AND ANALYZE PROBLEMS.
  This includes the ability to critically analyze business problems and utilize critical thinking to develop alternative solutions.

- SLO 4: APPLY COURSE CONCEPTS TO THE REAL WORLD OF BUSINESS.
  This includes the ability to connect business theories to practice and recognize the need to deal with ambiguous situations.

BUS 310 Business Communications
This course is designed to emphasize the use of communication theory in planning and composing various types of effective business letters and reports. The course stresses style, appearance, grammar, punctuation, tone, vocabulary and reader appeal. Interpersonal communication and listening, cross-cultural communication, electronic communication technology, and ethical and legal guidelines are included. A formal report with graphics is required.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO 1: DEMONSTRATE THE ABILITY TO THINK CRITICALLY AND ANALYZE PROBLEMS.
  - Compose and write effective letters and memorandums.
  - Critique written documents for clarity and effectiveness in the message.
  - Demonstrate appropriate business writing style, document appearance, grammar usage, and writing mechanics.
  - Research and incorporate sources effectively and meaningfully in a formal business report (including graphics).
- SLO 2: EXPRESS IDEAS AND FACTS CLEARLY AND COMPLETELY.
  - Write, revise, and edit professional business documents.
  - Create reports for business and other organizations.

BUS 320 Concepts in Personal Finance

This course is designed to assist individuals in analyzing their financial affairs. Elements and conceptual basis of financial planning, analysis, and decision making in areas of budgeting, taxes, borrowing, money management, insurance, investments, and retirement will be examined with an emphasis on principles to develop students' economic decision making. Students will be using mathematical concepts as well as reading and interpreting written and oral instructions. The course provides a solid base for a career in financial planning services. This course is the same as ECON 320, and only one may be taken for credit.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO #1: DEMONSTRATE COMPREHENSION IN ECONOMIC PRINCIPLES AND PLANNING, AS INDICATED BY COURSE OUTCOMES OF THE SUBJECT AREA.
  - Apply economic principles and concepts of individual economic planning.
- SLO #2: DEMONSTRATE THE ABILITY TO THINK CRITICALLY AND ANALYZE PROBLEMS.
  - Analyze the changing economic environment.
  - Describe the conceptual basis of various economic tools available to the individual as well as the terminology used in their development and implementation.
  - SLO 2: DEMONSTRATE THE ABILITY TO THINK CRITICALLY AND ANALYZE PROBLEMS.
  - Analyze the conceptual basis of various economic tools available to the individual as well as the terminology used in their development and implementation.
  - Evaluate economic needs and goals and design financial models to achieve them.
BUS 330 Managing Diversity in the Workplace

This course examines the leadership skills and abilities needed to manage a multicultural workforce. A primary focus is placed upon the workplace impact of various historical, social, and cultural experiences/perspectives related to gender, age, ethnicity, and disability. Workforce issues related to the diversity of the American consumer and global consumer impact on the United States are analyzed.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO 1: EXAMINE AND DEMONSTRATE APPROPRIATE RESPONSES TO KEY DIVERSITY ISSUES IN THE WORKPLACE.
  - Define culture within the context of the United States workplace.
  - Identify leadership skills and abilities that are effective in managing a multicultural workforce.
- SLO 2: DEMONSTRATE THE ABILITY TO THINK CRITICALLY AND ANALYZE PROBLEMS.
  - Analyze demographic trends in order to determine possible future directions in the United States workforce.
  - Analyze how language, gender, race, ethnicity, and organizational culture interact to produce an organizational climate.
  - Analyze the impact of cultural, historical, and stereotypical perspectives on the workplace.

BUS 340 Business Law

This course focuses on the law and its relationship to the environment of business. The course covers the legal system; court process and procedures; alternative dispute resolution; government regulation of business; constitutional law; contracts, both under the common and the Uniform Commercial Code (U.C.C.); torts; business organizations; property rights; and agency and employment law. While covering a broad range of substantive laws related to business, the course also stresses critical thinking and analytical evaluation of legal issues surrounding business including ethics and social responsibility.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO 1: Demonstrate the ability to understand important legal principles, concepts, and terminology, and to explain how they affect the environment of business and societal interactions.
  - Understand the state and federal court systems, jurisdiction, methods for alternative dispute resolution, and the operation of the court system process, including the role of the judge, jury, lawyers, and parties to the action. Show familiarity of the appellate process, types of motions, rulings, judgments and enforcement of judgments.
  - Describe the Constitutional basis for state and federal government regulation of business.
  - Distinguish between torts and crimes and describe the purpose of criminal and tort law, including an understanding of intentional torts, negligence, business torts, strict liability, product liability, and the arguments for and against tort reform.
  - Understand the elements of a valid contract, when a promise becomes enforceable, contractual performance requirements, and the remedies available in the event of breach. Distinguish between contracts governed by the Uniform Commercial Code and those governed by the common law of contracts.
  - Describe the concept of agency, including how agency relationships are formed, duties of the agent and principal, and the liability of the parties in contract and tort.
Identify and describe the different business organizational structures available to an entrepreneur including sole proprietorships, partnerships, limited partnerships, limited liability partnerships, limited liability companies, and corporations. Understand the key differences, including liability, to owner/shareholders, tax considerations, ease of creation and capitalization requirements.

SLO 2: Demonstrate the ability to think critically and analyze problems so as to be able to apply legal concepts to real and hypothetical business related legal issues.

Analyze cases to identify issues and apply the appropriate legal rules to the fact patterns to reach defensible legal conclusions. Demonstrate the ability to utilize the internet and other media to research legal issues.

SLO 3: Assess the relationship between ethics and law and understand the nature of law and its importance to our society.

Explain the social, political and ethical implications of law and its application to actual and hypothetical business scenarios with an understanding of corporate social responsibility, stakeholder relationships, and ethical business practices and decision making.

**BUS 345 Law and Society**

**Units:** 3  
**Hours:** 54 hours LEC  
**Prerequisite:** None.  
**Transferable:** CSU; UC  
**General Education:** AA/AS Area V(b); CSU Area DB; IGETC Area 4G  
**Catalog Date:** June 1, 2020

This course is an introduction to the American legal system emphasizing the nature, purpose, sources and functioning of American law but including some comparative analysis of other historical and contemporary legal systems. It stresses the evolution of legal concepts as a reflection of the social environment and the role of the judiciary. A theoretical rather than practical viewpoint is used through analysis of selected cases and legislation in the areas of individualism, socioeconomic groups, the family, the economy, crime, criminal procedure and punishment, church and state separation, the environment, and torts. This course should not be taken in place of BUS 340 when required.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- SLO 1: DEMONSTRATE SKILL AND COMPREHENSION IN RESPECTIVE SUBJECT AREAS AS INDICATED BY COURSE OUTCOMES PERTAINING TO BUSINESS LAW.
- Develop an understanding of the law as an evolutionary, stabilizing, and reforming factor in human affairs with, however, certain limitations as an instrument of social control.
- Develop an understanding of the magnitude and vitality of the law and the ways in which history, economics, sociology, psychology, and technology have influenced and have been influenced by the law.
- Develop an understanding of the basic organization and operation of the American judicial system.
- Develop an understanding of the Anglo-American Common Law System; its historical origin; some of its fundamental concepts; and the complexities inherent in such a multifaceted institution.
- Develop an understanding of the nature and purpose of law in society.
- SLO 2: DEMONSTRATE THE ABILITY TO THINK CRITICALLY AND ANALYZE PROBLEMS.
- Develop an understanding of the role of logic, critical analysis, imagination, and creativity in the study and application of the law and the legal process.

**BUS 350 Small Business Management/Entrepreneurship**

**Units:** 3  
**Hours:** 54 hours LEC  
**Prerequisite:** None.  
**Transferable:** CSU  
**Catalog Date:** June 1, 2020

This class provides an overview of the various elements involved in starting and operating a small business. It introduces such topics as developing a business plan, finding financial resources, developing personal and business goals, meeting legal requirements, understanding marketing concepts, and other topics of interest to the entrepreneur.

**Student Learning Outcomes**
Upon completion of this course, the student will be able to:

- SLO 1: DEMONSTRATE THE ABILITY TO THINK CRITICALLY AND ANALYZE PROBLEMS.
  - Analyze the impact of various legal requirements and government regulations as related to the operation of the small business.
  - Apply principles of management and marketing relevant to the small business.
- SLO 2: DEMONSTRATE SKILL AND COMPREHENSION IN RESPECTIVE SUBJECT AREAS AS INDICATED BY COURSE OUTCOMES PERTAINING TO SMALL BUSINESS MANAGEMENT.
  - Explain the importance of a business plan, a financial plan, and a marketing plan.
  - SLO 3: EXPRESS IDEAS AND FACTS CLEARLY AND COMPLETELY.
  - Evaluate various financial reports.

BUS 354 Students in Free Enterprise

<table>
<thead>
<tr>
<th>Units:</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hours:</td>
<td>54 hours LEC</td>
</tr>
<tr>
<td>Prerequisite:</td>
<td>None.</td>
</tr>
<tr>
<td>Transferable:</td>
<td>CSU</td>
</tr>
<tr>
<td>Catalog Date:</td>
<td>June 1, 2020</td>
</tr>
</tbody>
</table>

This course provides students with an overview of what it takes to be successful in business through implementation of group projects and business leadership practices. Students will complete community-based business projects, focusing on business and project planning, team building, communications, preparing and processing information, and leadership. Students will plan, implement, and evaluate each project and then compose an annual report and deliver a professional presentation that will be evaluated by a selection of industry and business leaders at a regional competition, Students in Free Enterprise (SIFE). Students receive instruction in the areas of entrepreneurship, small business management, business planning, project management, oral and written presentation skills. This course emphasizes activities and techniques that develop competencies needed to become a successful business leader. This course is designed to prepare students for the SIFE competition; therefore it may be taken a maximum of four times for credit.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO 1: PRACTICE HIGH ETHICAL STANDARDS IN ALL CONTACTS WITH EMPLOYERS, CLIENTS, CO-WORKERS AND GENERAL PUBLIC.
  - Develop the leadership, team building, and entrepreneurship skills necessary to complete community-based projects.
- SLO 2: DEMONSTRATE SKILL AND COMPREHENSION IN RESPECTIVE SUBJECT AREAS AS INDICATED BY COURSE OUTCOMES.
  - Identify the skills and tools that are needed for project management including project design, implementation, documentation, and control.
  - Compose and deliver presentations using computer software presentation programs and tools.
  - SLO 3: DEMONSTRATE THE ABILITY TO THINK CRITICALLY AND ANALYZE PROBLEMS.
  - Organize resources and participate in regional and national competitions.
  - SLO 4: EXPRESS IDEAS AND FACTS CLEARLY AND COMPLETELY.
  - Create a written business annual report.

BUS 495 Independent Studies in Business

<table>
<thead>
<tr>
<th>Units:</th>
<th>0.5 - 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hours:</td>
<td>27 - 216 hours LAB</td>
</tr>
<tr>
<td>Prerequisite:</td>
<td>None.</td>
</tr>
<tr>
<td>Transferable:</td>
<td>CSU</td>
</tr>
<tr>
<td>Catalog Date:</td>
<td>June 1, 2020</td>
</tr>
</tbody>
</table>

An independent studies project involves an individual student or small group of students in study, research, or activities beyond the scope of regularly offered courses. See the current catalog section of "Special Studies" for full details of Independent Studies.
Student Learning Outcomes

Upon completion of this course, the student will be able to:

- **SLO #1:** Actively engage in intellectual inquiry beyond that required in order to pass a course of study (College Wide Learning Outcome – Area 4).
- Discuss and outline a proposal of study (that can be accomplished within one semester term) with a supervising instructor qualified within the discipline.
- Design an independent study (to be completed individually or by collaboration of a small group) to foster special knowledge, skills, and experience that are not available in any one regularly scheduled course.
- Use information resources to gather discipline-specific information.
- **SLO #2:** Utilize modes of analysis and critical thinking to apply theoretical perspectives and/or concepts in the major discipline of study to significant problems and/or educational activities (College Wide Learning Outcome – Area 3).
- Analyze and apply the knowledge, skills and experience that are involved in the independent study to theoretical perspectives and/or concepts in the major discipline of study.
- Explain the importance of the major discipline of study in the broader picture of society.
- **SLO #3:** Communicate a complex understanding of content matter of the major discipline of study (College Wide Outcome – Area 3).
- Demonstrate competence in the skills essential to mastery of the major discipline of study that are necessary to accomplish the independent study.
- **SLO #4:** Identify personal goals and pursue these goals effectively (College Wide Outcome – Area 4).
- Utilize skills from the “academic tool kit” including time management, study skills, etc., to accomplish the independent study within one semester term.

BUS 498 Work Experience in Business

**Units:** 1 - 4
**Hours:** 60 - 300 hours LAB
**Prerequisite:** None.
**Enrollment Limitation:** Students must be in a paid or unpaid internship, volunteer position or job related to career goals in Business.
**Transferable:** CSU
**General Education:** AA/AS Area III(b)
**Catalog Date:** June 1, 2020

This course provides students with opportunities to develop marketable skills in preparation for employment in their major field of study or advancement within their career. It is designed for students interested in work experience and/or internships in transfer level degree occupational programs. Course content includes understanding the application of education to the workforce; completion of required forms which document the student's progress and hours spent at the work site; and developing workplace skills and competencies. Appropriate level learning objectives are established by the student and the employer. During the semester, the student is required to participate in a weekly orientation and 75 hours of related paid work experience, or 60 hours of unpaid work experience for one unit. An additional 75 or 60 hours of related work experience is required for each additional unit. Work Experience may be taken for a total of 16 units when there are new or expanded learning objectives. Only one Work Experience course may be taken per semester.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- **DEMONSTRATE AN UNDERSTANDING AND APPLICATION OF PROFESSIONAL WORKPLACE BEHAVIOR IN A FIELD OF STUDY RELATED TO ONE’S CAREER,(SLO 1)**
- Understand the effects time, stress, and organizational management have on performance.
- Demonstrate an understanding of consistently practicing ethics and confidentiality in a workplace.
- Examine the career/life planning process and relate its relevancy to the student.
- Demonstrate an understanding of basic communication tools and their appropriate use.
- Demonstrate an understanding of workplace etiquette.
- **DESCRIBE THE CAREER/LIFE PLANNING PROCESS AND RELATE ITS RELEVANCY TO ONE’S CAREER,(SLO 2)**
- Link personal goals to long term achievement.
- Display an understanding of creating a professional first impression.
- Understand how networking is a powerful job search tool.
- Understand necessary elements of a résumé.
- Understand the importance of interview preparation.
- Identify how continual learning increases career success.
- DEMONSTRATE APPLICATION OF INDUSTRY KNOWLEDGE AND THEORETICAL CONCEPTS AS WRITTEN IN LEARNING OBJECTIVES IN PARTNERSHIP WITH THE EMPLOYER WORK SITE SUPERVISOR (SLO 3)

Business Technology (BUSTEC)

BUSTEC 101 Computer Keyboarding: 10-Key

| Units: | 1 |
| Hours: | 18 hours LEC |
| Prerequisites: | None. |
| Catalog Date: | June 1, 2020 |

This course introduces the numeric keypad and develops the ability to key information into a computer with speed and accuracy.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO 1: DEMONSTRATE THE ABILITY TO OPERATE A NUMERIC KEYPAD BY TOUCH.
- Develop speed and accuracy on timed tests at a rate of at least 6,000 keystrokes per hour with 98% accuracy on all timings.
- Use a numeric keypad to accurately add, subtract, multiply and divide problems with whole numbers and decimals.
- Apply techniques of 10-key operation to job-related tasks.

BUSTEC 110 Business Procedures for Professional Success

| Units: | 3 |
| Hours: | 54 hours LEC |
| Prerequisites: | None. |
| Advisory: | BUSTEC 302 or equivalent, BUSTEC 303 and BUS 100 |
| Catalog Date: | June 1, 2020 |

This course develops skills associated with the business professional, including specialized procedures in electronic workplaces. Students learn critical thinking, problem solving, teamwork, supervision skills, administrative procedures, and information-processing technologies. Specific areas include the 21st century workplace; business technology; business communication; records management; meetings, travel, and financial documents; and the business professional's career. The course emphasizes developing a work-site team through effective communications; dependability, interpreting various management responsibilities, and motivational techniques. Recommended for all management information science and business students.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO 1: PRACTICE HIGH ETHICAL STANDARDS IN ALL CONTACTS WITH EMPLOYERS, CLIENTS, CO-WORKERS AND GENERAL PUBLIC.
  - Demonstrate knowledge of the changing workplace, the work-site team and environment, and ethical behavior.
  - Demonstrate independent initiative and carry out oral and written instructions; correctly prioritize work responsibilities; and use wise judgment and discretion without continuous review.

- SLO 2: DEMONSTRATE SKILL AND COMPREHENSION IN RESPECTIVE SUBJECT AREAS AS INDICATED BY COURSE OUTCOMES.
  - Demonstrate administrative support skills pertaining to mail, meeting and conference planning, travel arrangements, and financial assistance.
Demonstrate knowledge of computer applications and electronic technology.

- SLO 3: EXPRESS IDEAS AND FACTS CLEARLY AND COMPLETELY.
- Compose and key business documents.
- SLO 4: PRACTICE PROFESSIONAL STANDARDS IN THE WORKPLACE.
- Exhibit a professional, business-like manner.

**BUSTEC 120 Skills for Today's Office**

<table>
<thead>
<tr>
<th>Units:</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hours:</td>
<td>18 hours LEC; 18 hours LAB</td>
</tr>
<tr>
<td>Prerequisite:</td>
<td>None.</td>
</tr>
<tr>
<td>Advisory:</td>
<td>BUSTEC 302 or keyboarding speed verification at 25 wpm or better, and CISA 305 and 315.</td>
</tr>
<tr>
<td>Catalog Date:</td>
<td>June 1, 2020</td>
</tr>
</tbody>
</table>

This is a course designed to build upon previous wordprocessing and spreadsheet training in the computer science/business area, and complete the training necessary to perform effectively and become a skilled employee in the modern, computerized office. The course includes preparing and processing information: wordprocessing, spreadsheet, and database documents; communicating via fax, e-mail, voicemail, Internet, and telephone; and using copiers and other office equipment. Students will simulate office situations. This course emphasizes activities and techniques that enhance competencies needed in today's office.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- SLO 1: DEMONSTRATE OFFICE AND COMPUTER SKILLS AND COMPREHENSION IN THE SUBJECT AREAS AS INDICATED BY COURSE OUTCOMES.
  - Use various methods to send office correspondence.
  - Apply telephone techniques and use voice mail.
  - Use e-mail to send and receive messages and to attach documents.
  - Use fax machines, copiers, and other office equipment.
  - Describe a typical practical experience in a typical office situation.
  - Create, format, and edit various office documents using word processing, spreadsheet and database programs.

**BUSTEC 302 Computer-Keyboarding**

<table>
<thead>
<tr>
<th>Units:</th>
<th>2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hours:</td>
<td>36 hours LEC</td>
</tr>
<tr>
<td>Prerequisite:</td>
<td>None.</td>
</tr>
<tr>
<td>Transferable:</td>
<td>CSU</td>
</tr>
<tr>
<td>General Education:</td>
<td>AA/AS Area III(b)</td>
</tr>
<tr>
<td>Catalog Date:</td>
<td>June 1, 2020</td>
</tr>
</tbody>
</table>

This intensive introductory computer-keyboard course emphasizes operating alphabetic, numeric, and symbol keys by touch. It includes computer-keyboarding techniques, speed-and-accuracy development, proofreading proficiency, communication skills, essential computer-keyboarding information, and use of basic features of a current office level word processing program. Workplace etiquette and common organizational duties are introduced and reinforced throughout the course. This course is not open to students who have received credit for BUSTEC 306.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- SLO 1: DEMONSTRATE SKILL AND COMPREHENSION IN RESPECTIVE SUBJECT AREAS AS INDICATED BY COURSE OUTCOMES.
  - Demonstrate alphabetic-, numeric-, and symbol-key skill using features of a current office-level word processing program.
  - Key 30 or more words a minute with three or fewer errors on a three-minute timed writing.
  - Demonstrate an understanding of computer-keyboard equipment and technical information.
- Interpret and apply oral and written instructions.
- Describe the ergonomics required to use the keyboard properly and apply proper techniques to develop computer-keyboard skill.
- SLO 2: DEMONSTRATE THE ABILITY TO THINK CRITICALLY AND ANALYZE PROBLEMS.
- Describe the main functions you would need to use as a professional in a workplace setting.

BUSTEC 303 Computer-Keyboard Formatting

| Units: | 2 |
| Hours: | 36 hours LEC |
| Prerequisite: | BUSTEC 302 with a grade of "C" or better |
| Transferable: | CSU |
| Catalog Date: | June 1, 2020 |

This intensive computer-keyboard formatting course emphasizes application of the following formatting concepts: horizontal and vertical centering, business letter styles, memorandums, tables, and reports. The course includes developing proofreading proficiency, reinforcing communication skills, developing speed and accuracy, and using the features of a current office-level word processing program. Workplace etiquette and common organizational duties are introduced and reinforced throughout the course. This course is not open to students who have received credit for BUSTEC 306.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO 1: EXPRESS IDEAS AND FACTS CLEARLY AND COMPLETELY.
- Explain basic document-format concepts.
- SLO 2: DEMONSTRATE SKILL AND COMPREHENSION IN RESPECTIVE SUBJECT AREAS AS INDICATED BY COURSE OUTCOMES.
- Set up multiple-column tables (with main, secondary, and column headings; total columns; and source notes).
- Produce a report with side headings, references, and a title page.
- Demonstrate the ability to collaboratively work as a productive member of a team (simulation project).
- Demonstrate the ability to function as a professional in a workplace setting.
- Demonstrate an understanding of computer-keyboard equipment, technical concepts, and proper use of a current office-level word processing program.
- Demonstrate the ability to format and produce a one-page business letter, a personal-business letter, a memorandum, and envelopes.

BUSTEC 304 Computer-Keyboard Speed-and-Accuracy Building

| Units: | 2 |
| Hours: | 36 hours LEC |
| Prerequisite: | BUSTEC 302 with a grade of "C" or better |
| Transferable: | CSU |
| Catalog Date: | June 1, 2020 |

This course builds upon previous computer-keyboard skills and stresses speed-and accuracy techniques. It includes skills assessment and individually prescribed improvement plans. The student will be reading and interpreting written and oral instructions. Students who feel that they have skills equivalent to the prerequisite are encouraged to apply for credit by examination for BUSTEC 302.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO 1: DEMONSTRATE THE ABILITY TO IMPROVE COMPUTER-KEYBOARDING SKILLS
- Assess speed and accuracy on 2- and 5-minute timed writing.
• Improve speed and accuracy through individually prescribed drills.
• Demonstrate an accuracy rate of 0-2 errors on a 2-minute timed writing.
• Demonstrate an accuracy rate of 0-5 errors on a 5-minute timed writing.
• Demonstrate increased keyboarding speed of 4-10+ words a minute on a 2-minute timed writing.
• Demonstrate increased keyboarding speed of 4-10+ words a minute on a 5-minute timed writing.
• SLO 2: DEMONSTRATE THE ABILITY TO THINK CRITICALLY AND ANALYZE PROBLEMS
• Demonstrate the ability to interpret and apply oral and written directions.
Chemistry | Cosumnes River College

A series of chemistry courses designed to meet transfer requirements for chemical, physical and biological science majors. A series of courses intended for students majoring in fields other than chemistry, biology, or physical science. A course designed specifically for students who require preparation or review of the more basic chemical concepts. All chemistry courses at CRC include a practical component where students conduct hands-on chemical experimentation in a modern, well-equipped laboratory.

Dean
Kathryn Sorensen

(916) 691-7204
SorensK@crc.losrios.edu

Associate Degrees

A.S. in Chemistry

The Chemistry Program at CRC consists of: a series of courses designed to meet transfer requirements for chemical, physical and biological science majors; a series of courses intended for students majoring in fields other than chemistry, biology, or physical science; and a course designed specifically for students who require preparation or review of the more basic chemical concepts.

All chemistry courses at CRC include a practical component where students conduct hands-on chemical experimentation in a modern, well-equipped laboratory.

HIGHLIGHTS
* An outstanding chemistry faculty striving to maintain an excellent and well-respected chemistry program
* Ample contact with the instructor and the relaxed atmosphere that only a limited class size can offer
* A Mathematics, Engineering and Science Achievement (MESA) program

This degree is designed to meet common lower division requirements for a major in chemistry.

Catalog Data: June 1, 2020

Degree Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 400</td>
<td>General Chemistry I</td>
<td>5</td>
</tr>
<tr>
<td>CHEM 401</td>
<td>General Chemistry II</td>
<td>5</td>
</tr>
<tr>
<td>CHEM 420</td>
<td>Organic Chemistry I</td>
<td>5</td>
</tr>
<tr>
<td>CHEM 421</td>
<td>Organic Chemistry II</td>
<td>5</td>
</tr>
<tr>
<td>MATH 400</td>
<td>Calculus I</td>
<td>5</td>
</tr>
<tr>
<td>MATH 401</td>
<td>Calculus II</td>
<td>5</td>
</tr>
<tr>
<td>MATH 402</td>
<td>Calculus III</td>
<td>5</td>
</tr>
<tr>
<td>PHYS 411</td>
<td>Mechanics of Solids and Fluids</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 421</td>
<td>Electricity and Magnetism</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 431</td>
<td>Heat, Waves, Light and Modern Physics</td>
<td>4</td>
</tr>
<tr>
<td>Total Units:</td>
<td></td>
<td>47</td>
</tr>
</tbody>
</table>
The Chemistry Associate in Science (A.S.) degree may be obtained by completion of the required program, plus general education requirements, plus sufficient electives to meet a 60-unit total. See CRC graduation requirements.

Career Information
Biochemist; Chemist; Pharmacist; Chemical Engineer; Chemical Technology; Physician; Dentist; Veterinarian; Allied Health Professional; Biologist; Physicist; Geologist; Geochemist; Oceanographer. Some career options require more than two years of college study. Classes beyond the associate degree may be required to fully prepare students for transfer to a university program.

A.S. in General Science
Areas of Study include:

- Physical Anthropology
- Astronomy
- Biology
- Chemistry
- Engineering
- Physical Geography
- Geology
- Physics

Eighteen (18) units of transfer level course work in science is required. Two laboratory courses must be included: one in the physical sciences and one in the biological sciences. Courses may be selected from astronomy, biology, chemistry, geology, physical geography, physical anthropology, and physics. The student, in consultation with a counselor, should choose science courses to meet his or her program, transfer, or general education requirements.

Students interested in transferring to a four-year university with a science major are encouraged to complete a science AS or AS-T degree such as Anthropology, Biology, Chemistry, Engineering, Geography, Geology, or Physics. This General Science degree may not include the majors-level transfer courses needed for many science majors. Students are strongly recommended to see a counselor for guidance.

Catalog Date: June 1, 2020

Degree Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>A. Life Science with Lab:</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>A minimum of 4 units from the following:</td>
<td>4</td>
</tr>
<tr>
<td>ANTH 300</td>
<td>Biological Anthropology (3)</td>
<td></td>
</tr>
<tr>
<td>and ANTH 301</td>
<td>Biological Anthropology Laboratory (1)</td>
<td></td>
</tr>
<tr>
<td>BIOL 307</td>
<td>Biology of Organisms (4)</td>
<td></td>
</tr>
<tr>
<td>BIOL 310</td>
<td>General Biology (4)</td>
<td></td>
</tr>
<tr>
<td>BIOL 400</td>
<td>Principles of Biology (5)</td>
<td></td>
</tr>
<tr>
<td>BIOL 410</td>
<td>Principles of Botany (5)</td>
<td></td>
</tr>
<tr>
<td>BIOL 420</td>
<td>Principles of Zoology (5)</td>
<td></td>
</tr>
<tr>
<td>BIOL 430</td>
<td>Anatomy and Physiology (5)</td>
<td></td>
</tr>
<tr>
<td>BIOL 431</td>
<td>Anatomy and Physiology (5)</td>
<td></td>
</tr>
<tr>
<td>BIOL 440</td>
<td>General Microbiology (4)</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>B. Physical Science with Lab:</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>A minimum of 3 units from the following:</td>
<td>3</td>
</tr>
<tr>
<td>ASTR 400</td>
<td>Astronomy Laboratory (1)</td>
<td></td>
</tr>
<tr>
<td>and ASTR 300</td>
<td>Introduction to Astronomy (3)</td>
<td></td>
</tr>
<tr>
<td>CHEM 300</td>
<td>Beginning Chemistry (4)</td>
<td></td>
</tr>
<tr>
<td>COURSE CODE</td>
<td>COURSE TITLE</td>
<td>UNITS</td>
</tr>
<tr>
<td>-------------</td>
<td>-----------------------------------------------------------------------------</td>
<td>-------</td>
</tr>
<tr>
<td>CHEM 305</td>
<td>Introduction to Chemistry (5)</td>
<td></td>
</tr>
<tr>
<td>CHEM 306</td>
<td>Introduction to Organic and Biological Chemistry (5)</td>
<td></td>
</tr>
<tr>
<td>CHEM 309</td>
<td>Integrated General, Organic, and Biological Chemistry (5)</td>
<td></td>
</tr>
<tr>
<td>CHEM 322</td>
<td>Environmental Chemistry Laboratory (1)</td>
<td></td>
</tr>
<tr>
<td>and CHEM 321</td>
<td>Environmental Chemistry (3)</td>
<td></td>
</tr>
<tr>
<td>CHEM 400</td>
<td>General Chemistry I (5)</td>
<td></td>
</tr>
<tr>
<td>CHEM 401</td>
<td>General Chemistry II (5)</td>
<td></td>
</tr>
<tr>
<td>CHEM 420</td>
<td>Organic Chemistry I (5)</td>
<td></td>
</tr>
<tr>
<td>CHEM 421</td>
<td>Organic Chemistry II (5)</td>
<td></td>
</tr>
<tr>
<td>GEOG 301</td>
<td>Physical Geography Laboratory (1)</td>
<td></td>
</tr>
<tr>
<td>and GEOG 300</td>
<td>Physical Geography: Exploring Earth's Environmental Systems (3)</td>
<td></td>
</tr>
<tr>
<td>GEOL 301</td>
<td>Physical Geology Laboratory (1)</td>
<td></td>
</tr>
<tr>
<td>and GEOL 300</td>
<td>Physical Geology (3)</td>
<td></td>
</tr>
<tr>
<td>GEOL 306</td>
<td>Earth Science Laboratory (1)</td>
<td></td>
</tr>
<tr>
<td>and GEOL 305</td>
<td>Earth Science (3)</td>
<td></td>
</tr>
<tr>
<td>GEOL 311</td>
<td>Historical Geology Laboratory (1)</td>
<td></td>
</tr>
<tr>
<td>and GEOL 310</td>
<td>Historical Geology (3)</td>
<td></td>
</tr>
<tr>
<td>ENGR 304</td>
<td>How Things Work (3)</td>
<td></td>
</tr>
<tr>
<td>PHYS 350</td>
<td>General Physics (4)</td>
<td></td>
</tr>
<tr>
<td>PHYS 360</td>
<td>General Physics (4)</td>
<td></td>
</tr>
<tr>
<td>PHYS 370</td>
<td>Introductory Physics - Mechanics and Thermodynamics (5)</td>
<td></td>
</tr>
<tr>
<td>PHYS 380</td>
<td>Introductory Physics - Electricity and Magnetism, Light and Modern Physics (5)</td>
<td></td>
</tr>
<tr>
<td>PHYS 411</td>
<td>Mechanics of Solids and Fluids (4)</td>
<td></td>
</tr>
<tr>
<td>PHYS 421</td>
<td>Electricity and Magnetism (4)</td>
<td></td>
</tr>
<tr>
<td>PHYS 431</td>
<td>Heat, Waves, Light and Modern Physics (4)</td>
<td></td>
</tr>
<tr>
<td>C. Additional Science Courses:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A minimum of 11 units from the following:</td>
<td></td>
<td>11</td>
</tr>
<tr>
<td>ANTH 300</td>
<td>Biological Anthropology (3)</td>
<td></td>
</tr>
<tr>
<td>ANTH 301</td>
<td>Biological Anthropology Laboratory (1)</td>
<td></td>
</tr>
<tr>
<td>ASTR 300</td>
<td>Introduction to Astronomy (3)</td>
<td></td>
</tr>
<tr>
<td>ASTR 400</td>
<td>Astronomy Laboratory (1)</td>
<td></td>
</tr>
<tr>
<td>BIOL 300</td>
<td>The Foundations of Biology (3)</td>
<td></td>
</tr>
<tr>
<td>BIOL 307</td>
<td>Biology of Organisms (4)</td>
<td></td>
</tr>
<tr>
<td>BIOL 310</td>
<td>General Biology (4)</td>
<td></td>
</tr>
<tr>
<td>BIOL 342</td>
<td>The New Plagues: New and Ancient Infectious Diseases Threatening World Health (3)</td>
<td></td>
</tr>
<tr>
<td>BIOL 350</td>
<td>Environmental Biology (3)</td>
<td></td>
</tr>
<tr>
<td>COURSE CODE</td>
<td>COURSE TITLE</td>
<td>UNITS</td>
</tr>
<tr>
<td>-------------</td>
<td>---------------------------------------------------------------</td>
<td>------------</td>
</tr>
<tr>
<td>BIOL 352</td>
<td>Conservation Biology</td>
<td>(3)</td>
</tr>
<tr>
<td>BIOL 390</td>
<td>Natural History Field Study</td>
<td>(0.5 - 4)</td>
</tr>
<tr>
<td>BIOL 400</td>
<td>Principles of Biology</td>
<td>(5)</td>
</tr>
<tr>
<td>BIOL 410</td>
<td>Principles of Botany</td>
<td>(5)</td>
</tr>
<tr>
<td>BIOL 420</td>
<td>Principles of Zoology</td>
<td>(5)</td>
</tr>
<tr>
<td>BIOL 430</td>
<td>Anatomy and Physiology</td>
<td>(5)</td>
</tr>
<tr>
<td>BIOL 431</td>
<td>Anatomy and Physiology</td>
<td>(5)</td>
</tr>
<tr>
<td>BIOL 440</td>
<td>General Microbiology</td>
<td>(4)</td>
</tr>
<tr>
<td>BIOL 462</td>
<td>Genetics in Contemporary Human Society</td>
<td>(3)</td>
</tr>
<tr>
<td>CHEM 300</td>
<td>Beginning Chemistry</td>
<td>(4)</td>
</tr>
<tr>
<td>CHEM 305</td>
<td>Introduction to Chemistry</td>
<td>(5)</td>
</tr>
<tr>
<td>CHEM 306</td>
<td>Introduction to Organic and Biological Chemistry</td>
<td>(5)</td>
</tr>
<tr>
<td>CHEM 309</td>
<td>Integrated General, Organic, and Biological Chemistry</td>
<td>(5)</td>
</tr>
<tr>
<td>CHEM 321</td>
<td>Environmental Chemistry</td>
<td>(3)</td>
</tr>
<tr>
<td>CHEM 322</td>
<td>Environmental Chemistry Laboratory</td>
<td>(1)</td>
</tr>
<tr>
<td>CHEM 400</td>
<td>General Chemistry I</td>
<td>(5)</td>
</tr>
<tr>
<td>CHEM 401</td>
<td>General Chemistry II</td>
<td>(5)</td>
</tr>
<tr>
<td>CHEM 420</td>
<td>Organic Chemistry I</td>
<td>(5)</td>
</tr>
<tr>
<td>CHEM 421</td>
<td>Organic Chemistry II</td>
<td>(5)</td>
</tr>
<tr>
<td>ENGR 304</td>
<td>How Things Work</td>
<td>(3)</td>
</tr>
<tr>
<td>GEOG 300</td>
<td>Physical Geography: Exploring Earth's Environmental Systems</td>
<td>(3)</td>
</tr>
<tr>
<td>GEOG 301</td>
<td>Physical Geography Laboratory</td>
<td>(1)</td>
</tr>
<tr>
<td>GEOG 305</td>
<td>Global Climate Change</td>
<td>(3)</td>
</tr>
<tr>
<td>GEOG 306</td>
<td>Weather and Climate</td>
<td>(3)</td>
</tr>
<tr>
<td>GEOL 300</td>
<td>Physical Geology</td>
<td>(3)</td>
</tr>
<tr>
<td>GEOL 301</td>
<td>Physical Geology Laboratory</td>
<td>(1)</td>
</tr>
<tr>
<td>GEOL 305</td>
<td>Earth Science</td>
<td>(3)</td>
</tr>
<tr>
<td>GEOL 306</td>
<td>Earth Science Laboratory</td>
<td>(1)</td>
</tr>
<tr>
<td>GEOL 310</td>
<td>Historical Geology</td>
<td>(3)</td>
</tr>
<tr>
<td>GEOL 311</td>
<td>Historical Geology Laboratory</td>
<td>(1)</td>
</tr>
<tr>
<td>GEOL 330</td>
<td>Introduction to Oceanography</td>
<td>(3)</td>
</tr>
<tr>
<td>GEOL 390</td>
<td>Field Studies in Geology</td>
<td>(1 - 4)</td>
</tr>
<tr>
<td>PHYS 310</td>
<td>Conceptual Physics</td>
<td>(3)</td>
</tr>
<tr>
<td>PHYS 350</td>
<td>General Physics</td>
<td>(4)</td>
</tr>
<tr>
<td>PHYS 360</td>
<td>General Physics</td>
<td>(4)</td>
</tr>
<tr>
<td>PHYS 370</td>
<td>Introductory Physics - Mechanics and Thermodynamics</td>
<td>(5)</td>
</tr>
</tbody>
</table>
### COURSE CODE | COURSE TITLE | UNITS
--- | --- | ---
PHYS 380 | Introductory Physics - Electricity and Magnetism, Light and Modern Physics (5) |  
PHYS 411 | Mechanics of Solids and Fluids (4) |  
PHYS 421 | Electricity and Magnetism (4) |  
PHYS 431 | Heat, Waves, Light and Modern Physics (4) |  

Total Units: 18

Courses used in A or B above will not count towards C, except units exceeding the 4 or 3 unit minimum in A and B. For example, a student completing the 5 unit CHEM 309 under B could apply 2 of those units towards C. A total of 18 science units is required.

The General Science Associate in Science (A.S.) degree may be obtained by completion of the required program, plus general education requirements, plus sufficient electives to meet a 60-unit total. See CRC graduation requirements.

### Student Learning Outcomes

Upon completion of this program, the student will be able to:

- explain the core perspectives of the scientific method and apply it to at least one scientific discipline. (SLO 1)
- solve introductory problems of a conceptual and/or numerical nature of at least one scientific discipline. (SLO 2)
- accurately apply the basic vocabulary and concepts of at least one scientific discipline verbally and in writing. (SLO 3)
- recognize the use and misuse of scientific concepts in society including politics and the media. (SLO 4)

---

### Chemistry (CHEM)

#### CHEM 300 Beginning Chemistry

| Units: | 4 |
| Hours: | 54 hours LEC; 54 hours LAB |
| Prerequisite: | MATH 100 or 102 with a grade of "C" or better |
| Advisory: | Completion of or concurrent enrollment in MATH 120. |
| Transferable: | CSU; UC (1) No credit for CHEM 300 if taken after 305 ) |
| General Education: | CSU Area B1; CSU Area B3; IGETC Area 5A; IGETC Area 5C |
| C-ID: | C-ID CHEM 101 |
| Catalog Date: | June 1, 2020 |

This course covers an introduction to fundamental chemical concepts, problem-solving and laboratory skills. CHEM 300 is designed for students needing a comprehensive review of or intensive preparation in chemistry. This course is primarily intended to prepare students for CHEM 400.

### Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO #1: CONCEPTUALIZE, MODEL, AND EXPLAIN FUNDAMENTAL CHEMICAL PRINCIPLES AND PROCESSES
- recognize types of matter, and explain macroscopic observations in terms of the basic properties and theories of matter
- distinguish the three states of matter
- apply the basic terminology and nomenclature of inorganic chemistry
- relate the properties of the elements to their relative positions on the periodic table
- develop a general knowledge of the atom with an understanding of electrons, protons, neutrons, and atomic orbitals, and how they relate to chemical bonding and structure
- develop a basic knowledge of the concepts of chemical bonding and chemical reactivity
- predict the geometric shape and structure of basic inorganic compounds
demonstrate an understanding of basic chemical equilibria, and use LeChatelier's Principle

predict solubility of ionic compounds, distinguish between soluble and insoluble compounds, and illustrate the effects of both solvent and solute properties on solubility

describe the colligative properties of solutions, qualitatively predicting their changes in freezing point, boiling point, vapor pressure, and osmotic pressure

recognize acids and bases and list their properties

SLO #2: SOLVE CHEMISTRY PROBLEMS AT AN APPROPRIATE LEVEL BY ANALYZING THE GIVEN DATA FOR ITS SIGNIFICANCE, BY FORMULATING A SOLUTION STRATEGY, AND BY EXPRESSING THE RESULTS IN PROPER FORMAT

use calculators, tables of reference values, and mathematical manipulation to solve chemical problems, and express answers in both regular decimal formats and scientific notation

solve problems by dimensional analysis

write balanced chemical equations and perform stoichiometric calculations

apply chemical principles such as percent yield to predict expected outcomes of chemical reactions, including acid/base reactions, redox reactions, and precipitation reactions. Discuss actual versus expected yields, distinguishing potential sources of differences in percent yields

calculate the percent composition and determine the empirical and molecular formulas of compounds

solve chemical calculation problems that involve solids, solutions, or gases, clearly and logically; for example, calculate pressure or volume of a gas, solubility, solution concentrations, and results of titration

organize large quantities of information in logical patterns

SLO #3: COMMUNICATE EFFECTIVELY, BOTH ORALLY AND IN WRITING

write a logical, complete setup for each chemical calculation, that details the method used

demonstrate proper collection and recording of scientific measurements, with the correct units and number of significant figures (i.e. measuring mass, volume, temperature, length, and pressure)

demonstrate the recording and evaluation of observations (physical and chemical changes and properties)

SLO #4: WORK SAFELY IN A LABORATORY ENVIRONMENT, APPLY AND EVALUATE SCIENTIFIC METHODS FOR ASSEMBLING EXPERIMENTS, COLLECTING DATA, AND INTERPRETING EXPERIMENTAL OUTCOMES

observe basic chemistry laboratory safety practices

apply both chemical deduction and scientific method to the solving of problems in a laboratory environment

demonstrate basic laboratory techniques, including following written directions from a laboratory manual, measuring, pipetting, graphing, titration, synthesis, writing observations of physical changes, writing observations of chemical changes, filtration, neutralization, qualitative analysis, calorimetry

apply an understanding of the importance of significant figures and appropriate measurement units to all chemical calculations based on laboratory-obtained data

calculate non-measured information based on that data, such as the concentration of an unknown solution, or the specific heat capacity of an unknown metal

draw sound conclusions from collected data and observations

analyze sources of experimental error

analyze individual and group data as well as scientific literature to determine the validity, precision and accuracy of results obtained from experimental data. Calculate percent error and perform statistical analyses including standard deviation

conclude laboratory experiments after receiving both written and verbal instructions, in a safe manner within time lines established by the instructor

SLO #5: APPLY PRINCIPLES OF SCIENTIFIC ETHICS AND ACADEMIC INTEGRITY

welcome constructive criticism of submitted work and offer the same to other individuals in a manner that fosters mutual respect amid objective scientific debate

acknowledge past and present contributors to the field of chemistry and credit another's idea and data with appropriate reference
CHEM 305 Introduction to Chemistry

This is a general chemistry course intended for students majoring in the allied health fields, such as nursing, physical therapy, dental hygiene, veterinary technology, and environmental technology. This course emphasizes the fundamental principles of chemistry: types of matter, physical and chemical processes, atomic and molecular structure, stoichiometry, properties and theories of gases, properties of solutions, acids and bases, equilibria, oxidation-reduction and an introduction to organic functional groups as they pertain to medicine or biological systems.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- **SLO #1: CONCEPTUALIZE, MODEL, AND EXPLAIN FUNDAMENTAL CHEMICAL PRINCIPLES AND PROCESSES**
  - recognize types of matter, and explain macroscopic observations in terms of the basic properties and theories of matter
  - distinguish the three states of matter
  - apply the basic terminology and nomenclature of inorganic chemistry
  - recognize some basic functional groups in organic chemistry and write simple formulae
  - relate the properties of the elements to their relative positions on the periodic table
  - develop a general knowledge of the atom with an understanding of electrons, protons, neutrons, and atomic orbitals, and how they relate to chemical bonding and structure
  - develop a basic knowledge of the concepts of chemical bonding and chemical reactivity
  - predict the geometric shape and structure of basic inorganic and organic compounds
  - demonstrate an understanding of basic kinetics, and some elements of thermochemistry and equilibria
  - predict solubility of ionic compounds; distinguish between soluble and insoluble compounds, and illustrate the effects of both solvent and solute properties on solubility
  - describe the colligative properties of solutions, qualitatively predicting their changes in freezing point, boiling point, vapor pressure, and osmotic pressure
  - recognize acids and bases and list their properties
  - develop a basic understanding of nuclear chemistry and its applications in medicine
  - assess the importance and application of chemistry in Life Sciences and Allied Health

- **SLO #2: SOLVE CHEMISTRY PROBLEMS AT AN APPROPRIATE LEVEL BY ANALYZING THE GIVEN DATA FOR ITS SIGNIFICANCE, BY FORMULATING A SOLUTION STRATEGY, AND BY EXPRESSING THE RESULTS IN PROPER FORMAT**
  - solve problems by dimensional analysis
  - write balanced chemical equations and perform stoichiometric calculations
  - apply chemical principles such as percent yield to predict expected outcomes of chemical reactions, including acid/base reactions, redox reactions, and precipitation reactions. Discuss actual versus expected yields, distinguishing potential sources of differences in percent yields
  - solve chemical calculation problems that involve solids, solutions, or gases, clearly and logically; for example, calculate pressure or volume of a gas, solubility, solution concentrations, and results of titration
  - perform basic calculations involving heat energy transfers in physical changes or chemical reactions; for example, determine the calories transferred or specific heat capacity
  - organize large quantities of information in logical patterns

- **SLO #3: COMMUNICATE EFFECTIVELY, BOTH ORALLY AND IN WRITING**
  - write a logical, complete setup for each chemical calculation, that details the method used

**Units:** 5
**Hours:** 72 hours LEC; 54 hours LAB
**Prerequisites:** MATH 100 or 102 with a grade of "C" or better
**Transferable:** CSU; UC (1) CHEM 305, 306, 400, and 401 combined: maximum transfer credit is one series; 2) No transfer credit for CHEM 305 if taken after CHEM 400
**General Education:** AA/AS Area IV; CSU Area B1; CSU Area B3; IGETC Area 5A; IGETC Area 5C
**Catalog Date:** June 1, 2020
CHEM 306 Introduction to Organic and Biological Chemistry

Units: 5
Hours: 72 hours LEC; 54 hours LAB
Prerequisite: CHEM 305 with a grade of "C" or better
Transferable: CSU; UC (1) CHEM 305, 306, 400, and 401 combined: maximum transfer credit is one series
General Education: AA/AS Area IV; CSU Area B1; CSU Area B3; IGETC Area 5A; IGETC Area 5C
C-ID: C-ID CHEM 102
Catalog Date: June 1, 2020

The organic chemistry portion of this course emphasizes the major classes of organic compounds: their structure, physical and chemical properties related to biological systems, and nomenclature. Some clinical and pharmacological aspects are also discussed. The biochemistry portion of this course emphasizes the structure and function of carbohydrates, proteins, and lipids in biological systems. Special topics include enzymes and enzyme regulation, drugs their bioavailability and metabolism.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO #1: CONCEPTUALIZE, MODEL, AND EXPLAIN FUNDAMENTAL CHEMICAL PRINCIPLES AND PROCESSES OF ORGANIC MOLECULES.
- identify, name, draw and build structures of organic compounds including hydrocarbons, alcohols, organic acids, esters, amines, and amides
- defend predicted physical properties of hydrocarbons, alcohols, organic acids, esters, amines, and amides based on their chemical structure
- classify reactions involving hydrocarbons, alcohols, organic acids, esters, amines, and amides
- predict products from reactions involving hydrocarbons, alcohols, organic acids, esters, amines, and amides
- SLO #2: CONCEPTUALIZE, MODEL, AND EXPLAIN FUNDAMENTAL BIOCHEMICAL PRINCIPLES AND PROCESSES
  - distinguish important carbohydrates, amino acids, lipids and nucleic acids by name and structure.
  - compare the structure, function, and uses of important carbohydrates, lipids, proteins, and nucleic acids.
  - describe the process of digestion and metabolism of proteins, carbohydrates, and lipids.
  - describe the process by which energy is generated from carbohydrates, proteins, and lipids.
  - explain the role of enzymes in biochemical processes, and describe how they perform those roles
- SLO #3 – APPLY BASIC CONCEPTS OF MODERN ORGANIC CHEMISTRY TO EXPLAIN BIOCHEMICAL PROCESSES AND MECHANISMS.
  - apply concepts learned in the organic chemistry portion of the course to proteins, carbohydrates, lipids, and nucleic acids.
  - predict physical properties of biochemical molecules based on their functional groups and intermolecular attractions
  - explain the role of group functionality in enzyme function and regulation.
  - describe how functional groups and solubility affect drug bioavailability and metabolism
  - compare the physical and chemical properties of carbohydrates, lipids, proteins, enzymes, and nucleic acids
  - describe how functional groups and solubility affect drug bioavailability and metabolism
- SLO #4: WORK SAFELY IN A LABORATORY ENVIRONMENT, APPLY AND EVALUATE SCIENTIFIC METHODS FOR ASSEMBLING EXPERIMENTS, COLLECTING DATA, AND INTERPRETING EXPERIMENTAL OUTCOMES.
  - conduct and follow the laboratory safety protocols and practice chemical safety based on MSDS.
  - demonstrate proper laboratory techniques
  - synthesize classes of organic compounds
  - determine physical and chemical properties of classes of organic compounds
  - determine physical and chemical properties of proteins and amino acids
- SLO #5: APPLY PRINCIPLES OF SCIENTIFIC ETHICS AND ACADEMIC INTEGRITY
  - process constructive criticism of submitted work and offer the same to other individuals in a manner that fosters mutual respect amid objective scientific debate.
  - recognize and acknowledge past and present contributors to the field of chemistry.
  - reference others on their original ideas with proper credit in student's submitted work.

CHEM 309 Integrated General, Organic, and Biological Chemistry

**Units:** 5
**Hours:** 72 hours LEC; 54 hours LAB
**Prerequisite:** MATH 100 or 102 with a grade of “C” or better, or placement through the assessment process.
**Advisory:** ENGWR 101, or placement through the assessment process; Successful completion of high school Chemistry
**Transferable:** CSU; UC
**General Education:** AA/AS Area IV; CSU Area B1; CSU Area B3; IGETC Area 5A; IGETC Area 5C
**Catalog Date:** June 1, 2020

This course is an intensive survey of general, organic, and biological chemistry specifically designed for nursing majors and other health-related fields. Topics include general chemistry, organic chemistry, and biological chemistry. This course satisfies the requirements of those health-care programs that require one semester of chemistry. Students who had chemistry in high school and retained some of it are advised to take CHEM 309. Students who have not taken a chemistry course recently or have never taken a chemistry course are advised to take the CHEM 305 and CHEM 306 sequence.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- SLO #1: CONCEPTUALIZE, MODEL, AND EXPLAIN FUNDAMENTAL CHEMICAL PRINCIPLES AND PROCESSES
• analyze the fundamental features of chemistry including measurement of physical properties such as mass, volume, density, pressure, temperature, and solutions

• differentiate between functional groups when they appear in biological molecules and relate their functional groups to the physical and chemical properties of the biological molecules

• differentiate between physical and chemical properties of matter

• name and write chemical formulae of cations, anions, inorganic compounds, and organic compounds

• analyze the phenomena of diffusion, osmosis, dialysis, and transport mechanisms of particles through cell membranes based on their physical properties

• differentiate typical acid and base formulae and compare the behaviors associated with acids and bases

• SLO #2: SOLVE CHEMISTRY PROBLEMS AT AN APPROPRIATE LEVEL BY ANALYZING THE GIVEN DATA FOR ITS SIGNIFICANCE, BY FORMULATING A SOLUTION STRATEGY, AND BY EXPRESSING THE RESULTS IN PROPER FORMAT

• apply the concept of unit analysis towards concentration, dilution, and medical dosage calculation

• describe intermolecular forces and apply them to the understanding of basic principles of biochemistry and physical characteristics of organic compounds

• apply LeChatelier's equilibrium principles to the understanding of blood buffers

• distinguish among various functions of four major classes of biomolecules in living cells

• compare the processes of DNA replication, transcription, and translation

• compare major biochemical components in catabolic pathways for carbohydrates, triglycerides, and proteins and compare the output from those processes.

• SLO #3: COMMUNICATE EFFECTIVELY, BOTH ORALLY AND IN WRITING

• write a logical, complete setup for each chemical calculation, that details the method used demonstrate proper collection and recording of scientific measurements with the correct units (i.e. measuring mass, volume, temperature, length, and pressure)

• complete laboratory manual pages documenting work completed, evaluating data obtained, calculating further information based on that data, and deriving conclusions from that data

• demonstrate the recording and evaluation of observations (physical and chemical changes and properties)

• SLO #4: WORK SAFELY IN A LABORATORY ENVIRONMENT, APPLY AND EVALUATE SCIENTIFIC METHODS FOR ASSEMBLING EXPERIMENTS, COLLECTING DATA, AND INTERPRETING EXPERIMENTAL OUTCOMES.

• observe basic chemistry laboratory safety practices based on MSDS

• demonstrate proper laboratory techniques: apply both chemical deduction and scientific method to the solving of problems in a laboratory environment including following written directions, measuring, synthesis, writing observations and appropriate measurement units to all chemical calculations based on laboratory-obtained data

• calculate non-measured information based on that data, such as the concentration of an unknown solution draw sound conclusions from collected data and observations analyze sources of experimental error

• analyze individual and group data as well as scientific literature to determine the validity, precision and accuracy of results obtained from experimental data

• SLO #5: APPLY PRINCIPLES OF SCIENTIFIC ETHICS AND ACADEMIC INTEGRITY.

• welcome constructive criticism of submitted work and offer the same to other individuals in a manner that fosters mutual respect amid objective scientific debate

• acknowledge past and present contributors to the field of chemistry and credit another's idea and data with appropriate reference

CHEM 321 Environmental Chemistry

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Transferable: CSU; UC
General Education: AA/AS Area IV; CSU Area B1; IGETC Area 5A
Catalog Date: June 1, 2020
This course explores the interrelationship of human beings and the surrounding environment with regard to the chemical substances that are encountered in everyday life. The role of chemistry in both creating environmental problems as well as providing solutions to environmental problems will be examined. Students will learn how chemicals released to the environment can have adverse effects on ecosystems and human health. Chemical and physical methods of controlling and remediating air, water, and soil pollutants will be covered. The role of environmental regulations in preventing and mitigating environmental degradation will also be covered. By the completion of this course, students will have acquired skills and techniques that can be utilized to examine environmental problems and their proposed solutions.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO #1: CONCEPTUALIZE, MODEL, AND EXPLAIN FUNDAMENTAL CHEMICAL PRINCIPLES AND PROCESSES
  - describe the structure of the atom and how electrons, protons, and neutrons relate to chemical binding and structure.
  - demonstrate the ability to recognize acids and bases and their properties.
  - evaluate environmental processes from the perspective of basic chemical principles of matter and energy.
  - analyze how chemical and physical properties affect pollutant behavior in the environment.

- SLO #2: SOLVE CHEMISTRY PROBLEMS AT AN APPROPRIATE LEVEL BY ANALYZING THE GIVEN DATA FOR ITS SIGNIFICANCE, BY FORMULATING A SOLUTION STRATEGY, AND BY EXPRESSING THE RESULTS IN PROPER FORMAT.
  - write balanced chemical equations and perform stoichiometric calculations
  - identify the sources of air, water, and soil pollution.
  - apply basic chemical principles in the interpretation and analysis of a Material Safety Data Sheet, Department of Transportation Guidebooks, and basic toxicological reference materials.
  - design pollution control and remediation systems based on chemical and physical principles.
  - describe the function of environmental laws and regulations in protecting and cleaning up the environment.

- SLO #3: COMMUNICATE EFFECTIVELY, BOTH ORALLY AND IN WRITING
  - write a concise report on an effective solution to an air, water or soil pollution issue
  - prepare and present an oral presentation on a remediation process

- SLO #4: APPLY PRINCIPLES OF SCIENTIFIC ETHICS AND ACADEMIC INTEGRITY
  - process constructive criticism of submitted work and offer the same to other individuals in a manner that fosters mutual respect amid objective scientific debate.
  - acknowledge past and present contributors to the field of chemistry and credit other's idea and data with appropriate reference.

CHEM 322 Environmental Chemistry Laboratory

Units: 1
Hours: 54 hours LAB
Prerequisite: None.
Corequisite: CHEM 321
Transferable: CSU; UC
General Education: CSU Area B1; CSU Area B3; IGETC Area 5A
Catalog Date: June 1, 2020

This course provides "hands-on" opportunities for students to collect and analyze data about chemicals found in the environment. Students will learn how to collect and analyze soil, water and air samples for environmental quality parameters and the presence of pollutants. Analysis of samples will involve the use of readily available field test equipment. Field trips for sample collection will take place during laboratory periods or at arranged times. There may also be field trips to environmental analytical laboratories.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO #1: SOLVE CHEMISTRY PROBLEMS AT AN APPROPRIATE LEVEL BY ANALYZING THE GIVEN DATA FOR ITS SIGNIFICANCE, BY FORMULATING A SOLUTION STRATEGY, AND BY EXPRESSING THE RESULTS IN PROPER FORMAT.
  - design a process for sampling, analysis and data handling in a field research setting
prepare a sampling plan which will describe the number of samples needed, the types of analyses to be performed and the sampling equipment required.

SLO #2: WORK SAFELY IN A LABORATORY OR FIELD ENVIRONMENT, APPLY AND EVALUATE SCIENTIFIC METHODS FOR ASSEMBLING EXPERIMENTS, COLLECTING DATA, AND INTERPRETING EXPERIMENTAL OUTCOMES.

demonstrate basic chemistry laboratory techniques and safety practices

collect and properly analyze soil, air, and water samples using field and laboratory test equipment.

analyze individual and group data as well as scientific literature to determine successfully the validity, precision and accuracy of results obtained from experimental data.

conduct and successfully conclude laboratory and field experiments after receiving both written and verbal instructions, in a safe manner within time lines established by the instructor.

SLO #3: APPLY PRINCIPLES OF SCIENTIFIC ETHICS AND ACADEMIC INTEGRITY

process constructive criticism of submitted work and offer the same to other individuals in a manner that fosters mutual respect amid objective scientific debate.

acknowledge past and present contributors to the field of chemistry and credit other's idea and data with appropriate reference.

CHEM 400 General Chemistry I

Units: 5
Hours: 54 hours LEC, 108 hours LAB
Prerequisite: CHEM 300 with a grade of "C" or better; OR one year high school chemistry lecture and laboratory AND MATH 120 or the equivalent. Grade of "C" or better required to meet prerequisite.
Transferable: CSU; UC (1) CHEM 305, 306, 400 and 401 combined: maximum transfer credit is one series
General Education: AA/AS Area IV; CSU Area B1; CSU Area B3; IGETC Area 5A; IGETC Area 5C
C-ID: C-ID CHEM 110; Part of C-ID CHEM 120S
Catalog Date: June 1, 2020

This is a general college chemistry course intended for students majoring in the scientific disciplines including chemistry, biology, physics, geology and engineering. This course emphasizes the fundamental principles of chemistry. Topics include chemical measurement, physical and chemical processes, nomenclature, atomic structure, quantum theory, stoichiometry, molecular structure, bonding theory, physical properties of gases, thermochemistry, modern materials, and properties of solutions.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

SLO #1: CONCEPTUALIZE, MODEL, AND EXPLAIN FUNDAMENTAL CHEMICAL PRINCIPLES AND PROCESSES

apply the basic terminology and nomenclature of inorganic chemistry.

explain macroscopic observations in terms of the basic properties and theories of matter.

define key principles of atomic theory, and distinguish the basic factors that produce atomic orbital structure.

predict solubility of ionic compounds, distinguish between soluble and insoluble compounds, and illustrate the effects of both solvent and solute properties on solubility.

predict the geometric shape and structure of basic inorganic and organic compounds.

explain and apply changes in the physical properties of solutions as a function of their colligative properties. This would include, for example, calculations of freezing point and boiling point changes, as well as changes in vapor pressure and osmotic pressure

SLO #2: SOLVE CHEMISTRY PROBLEMS AT AN APPROPRIATE LEVEL BY ANALYZING THE GIVEN DATA FOR ITS SIGNIFICANCE, BY FORMULATING A SOLUTION STRATEGY, AND BY EXPRESSING THE RESULTS IN PROPER FORMAT.

analyze and then solve chemical calculation problems that involve solids, solutions, or gases, in a clear and logical fashion; for example, stoichiometry, acid-base, and colligative property problems.

analyze and then solve chemical calculation problems that involve heat energy transfers in calorimeters or chemical reactions; for example, determining the heat of fusion, heat of solution, heat of reaction, and heat capacity.

calculate, write and balance chemical and thermochemical equations, with respect to molar quantities and energy. Evaluate these balanced equations with respect to quantities of individual elements present.
• apply balanced equations and chemical principles such as limiting reagent and percent yield to predict expected outcomes of chemical reactions, including acid/base reactions, redox reactions, and gas phase reactions. Discuss actual versus expected yields, distinguishing potential sources of differences in percent yields.

• SLO #3: COMMUNICATE EFFECTIVELY, BOTH ORALLY AND IN WRITING

• demonstrate the proper collection and recording of scientific measurements in tables with the correct units and number of significant figures (i.e. measuring mass, volume, temperature, length, and pressure), and the recording and evaluation of observations (physical and chemical changes and properties).

• prepare a written lab notebook documenting work completed, evaluating data obtained, and analyzing conclusions derived from that data, by means of calculated results, data tables and both hand generated and computer generated graphs.

• SLO #4: WORK SAFELY IN A LABORATORY ENVIRONMENT, APPLY AND EVALUATE SCIENTIFIC METHODS FOR ASSEMBLING EXPERIMENTS, COLLECTING DATA, AND INTERPRETING EXPERIMENTAL OUTCOMES.

• demonstrate basic chemistry laboratory techniques and safety practices

• synthesize data into computer generated graphical outputs, and make predictions by interpolation, using linear and non-linear regression analyses.

• evaluate errors related to experimental procedures, and assess their effects on experimental results.

• demonstrate understanding of the importance of significant figures, use of correct units of measurement, and proper application of basic calculations of stoichiometry and thermochemistry as they apply to laboratory experiments.

• successfully analyze individual and group data as well as scientific literature to determine the validity, precision and accuracy of results obtained from experimental data.

• successfully conclude laboratory experiments after receiving both written and verbal instructions, in a safe manner within time lines established by the instructor.

• design experimental procedures, execute the designed experiments, assess the data obtained, formulate hypotheses to categorize and correlate data obtained, and identify critical factors affecting results obtained from the experimental work.

• SLO #5: APPLY PRINCIPLES OF SCIENTIFIC ETHICS AND ACADEMIC INTEGRITY

• process constructive criticism of submitted work and offer the same to other individuals in a manner that fosters mutual respect amid objective scientific debate.

• recognize and acknowledge past and present contributors the field of chemistry and credit other's ideas and data with appropriate reference.

CHEM 401 General Chemistry II

| Units:     | 5 |
| Hours:     | 54 hours LEC; 108 hours LAB |
| Prerequisite: | CHEM 400 with a grade of "C" or better |
| Transferable: | CSU; UC (1) CHEM 305, 306, 400, and 401 combined: maximum transfer credit is one series | CSU Area B1; CSU Area B3; IGETC Area 5A; IGETC Area 5C |
| General Education: | Part of C-ID CHEM 120S |
| C-ID:     | Part of C-ID CHEM 120S |
| Catalog Date: | June 1, 2020 |

This course is a continuation of the two-semester series in general college chemistry. Topics presented in the course include kinetics, equilibrium, acid/base chemistry, thermodynamics, electrochemistry, radiochemistry, coordination chemistry, and an introduction to organic chemistry. Laboratory exercises include qualitative and quantitative analysis techniques.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• SLO #1: CONCEPTUALIZE, MODEL, AND EXPLAIN FUNDAMENTAL CHEMICAL PRINCIPLES AND PROCESSES.

• explain the basic concepts and theories of kinetics, equilibrium, thermodynamics, electrochemistry

• SLO #2: SOLVE CHEMISTRY PROBLEMS AT AN APPROPRIATE LEVEL BY ANALYZING THE GIVEN DATA FOR ITS SIGNIFICANCE, BY FORMULATING A SOLUTION STRATEGY, AND BY EXPRESSING THE RESULTS IN PROPER FORMAT.

• solve quantitative problems in areas such as: kinetics, equilibrium, thermodynamics, acid/base chemistry, electrochemistry, coordination chemistry, and nuclear chemistry through the mathematical application of basic principles.

• evaluate and solve qualitative problems using the basic principles of kinetics, equilibrium, thermodynamics, electrochemistry, coordination chemistry, and nuclear chemistry.

• SLO #3: COMMUNICATE EFFECTIVELY, BOTH ORALLY AND IN WRITING
demonstrate the proper collection and recording of scientific measurements in tables with the correct units and number of significant figures (i.e. measuring mass, volume, temperature, length, and pressure), and the recording and evaluation of observations (physical and chemical changes and properties).

prepare a written lab notebook documenting work completed, evaluating data obtained, and analyzing conclusions derived from that data, by means of calculated results, data tables and both hand generated and computer generated graphs.

SLO #4: WORK SAFELY IN A LABORATORY ENVIRONMENT, APPLY AND EVALUATE SCIENTIFIC METHODS FOR ASSEMBLING EXPERIMENTS, COLLECTING DATA, AND INTERPRETING EXPERIMENTAL OUTCOMES.

demonstrate basic chemistry laboratory techniques and safety practices

synthesize data into computer generated graphical outputs, and make predictions by interpolation, using linear and non-linear regression analyses.

evaluate errors related to experimental procedures, and assess their effects on experimental results.

demonstrate understanding of the importance of significant figures, use of correct units of measurement, and proper application of basic calculations of kinetics, equilibrium, thermochemistry, and electrochemistry as they apply to laboratory experiments.

justify the identity of unknown cations and anions using experimental evidence from qualitative analysis, the scientific method, and chemical reasoning.

analyze individual and group data as well as scientific literature successfully to determine the validity, precision and accuracy of results obtained from experimental data.

conduct and successfully conclude laboratory experiments after receiving both written and verbal instructions, in a safe manner within time lines established by the instructor.

design experimental procedures, execute the designed experiments, assess the data obtained, formulate hypotheses to categorize and correlate data obtained, and identify critical factors affecting results obtained from the experimental work.

SLO #5: APPLY PRINCIPLES OF SCIENTIFIC ETHICS AND ACADEMIC INTEGRITY

process constructive criticism of submitted work and offer the same to other individuals in a manner that fosters mutual respect amid objective scientific debate.

recognize and acknowledge past and present contributors the field of chemistry and credit other's ideas and data with appropriate reference.

CHEM 420 Organic Chemistry I

Units: 5
Hours: 54 hours LEC; 108 hours LAB
Prerequisite: CHEM 401 with a grade of "C" or better
Transferable: CSU; UC
General Education: CSU Area B1; CSU Area B3; IGETC Area 5A; IGETC Area 5C
C-ID: C-ID CHEM 150; Part of C-ID CHEM 160
Catalog Date: June 1, 2020

This course surveys the principles of organic chemistry intended for chemistry and biological science majors or those students interested in the medical and related professions. Units covered include chemistry of alkanes/cycloalkanes, alkenes, alkyl halides, alcohols with emphasis on physical and chemical properties, nomenclature, stereochemistry, reaction mechanisms (SN1, SN2, E1, and E2) and spectroscopy (FT-IR and MS). Laboratory work includes characterization of organic molecules using analytical instrumentation such as FTIR, GC, and GC/MS. Modern separation and purification techniques are also introduced such as HPLC, Packed-column GC, and Capillary GC, as well as traditional techniques such as distillation, liquid-liquid extraction, recrystallization, column chromatography, and thin-layer chromatography.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO #1: CONCEPTUALIZE, MODEL, AND EXPLAIN FUNDAMENTAL CHEMICAL PRINCIPLES AND PROCESSES OF ORGANIC MOLECULES.

- name saturated and unsaturated hydrocarbons, alkyl halides and alcohols.

- analyze the relationship between the molecular structure of an organic molecule and its physical properties and chemical reactivity.

- classify 3-D structures of organic molecules in their chiralities, optical activity and correct isomeric classifications.
- explain the fundamental concepts of polar covalent bond, resonance structure, steric effect, electronegativity, and inductive effect.

- SLO #2 – APPLY BASIC CONCEPTS OF THE MODERN ORGANIC CHEMISTRY AND SPECTROSCOPY TO EXPLAIN ORGANIC REACTIONS AND MECHANISMS.

- analyze reaction mechanisms to predict products of organic chemistry reactions.

- propose reactions mechanisms for common organic chemistry reactions including SN1, SN2, E1, E2, and electrophilic addition reactions.

- propose a chemical structure based on given chemical and spectroscopic information: molecular formula, IR spectrum, and mass spectrum.

- provide reasons for favored products based on kinetic and thermodynamic preference.

- SLO #3: SOLVE CHEMISTRY PROBLEMS AT AN APPROPRIATE LEVEL BY ANALYZING THE GIVEN DATA FOR ITS SIGNIFICANCE, BY FORMULATING A SOLUTION STRATEGY, AND BY EXPRESSING THE RESULTS IN PROPER FORMAT.

- design single and multi-step organic synthesis.

- analyze organic reactions via retro-synthesis.

- identify oxidative and reductive reactions.

- propose plausible reaction mechanisms with major and minor products for given reactants and reaction conditions.


- identify necessary reagents for regioselective synthesis.

- SLO #4: WORK SAFELY IN A LABORATORY ENVIRONMENT, APPLY AND EVALUATE SCIENTIFIC METHODS FOR ASSEMBLING EXPERIMENTS, COLLECTING DATA, AND INTERPRETING EXPERIMENTAL OUTCOMES.

- conduct and follow the laboratory safety protocols and practice chemical safety based on MSDS.

- perform laboratory techniques such as liquid extraction and partition, synthesis, purification using both macro- and micro-scale procedures.

- prepare a structured laboratory notebook.

- perform basic spectral data collection (FT-IR and MS).

- perform basic sample analysis using Column Chromatography, TLC, GC, GC/MS and HPLC.

- analyze and interpret experimental data and apply statistics to express results.

- prepare and present formal oral report on an experiment.

- prepare written laboratory report and cite relevant literature reference.

- SLO #5: APPLY PRINCIPLES OF SCIENTIFIC ETHICS AND ACADEMIC INTEGRITY.

- process constructive criticism of submitted work and offer the same to other individuals in a manner that fosters mutual respect amid objective scientific debate.

- recognize and acknowledge past and present contributors to the field of chemistry.

- reference others on their original ideas with proper credit in student's submitted work.

---

**CHEM 421 Organic Chemistry II**

**Units:** 5

**Hours:** 54 hours LEC; 108 hours LAB

**Prerequisite:** CHEM 420 with a grade of "C" or better

**Transferable:** CSU; UC

**General Education:** CSU Area B1; CSU Area B3; IGETC Area 5A; IGETC Area 5C

**C-ID:** Part of C-ID CHEM 160S

**Catalog Date:** June 1, 2020

This course is a continuation of CHEM 420. Units covered include an in-depth study of the physical and chemical properties of aromatic compounds, aldehydes, ketones, amines, carboxylic acids and its derivatives. A special emphasis is placed on structural analysis/elucidation of these compounds by the various spectroscopic techniques. In addition, an introduction to pericyclic reactions and biomolecules is presented.
Upon completion of this course, the student will be able to:

- **SLO #1: CONCEPTUALIZE, MODEL, AND EXPLAIN FUNDAMENTAL CHEMICAL PRINCIPLES AND PROCESSES OF ORGANIC MOLECULES.**
  - recognize and identify nomenclatures of aromatics, aldehydes, ketones, amines, carboxylic acids and their derivatives.
  - analyze the relationship between the molecular structure of an organic molecule and its physical properties and chemical reactivity.
  - explain the fundamental concepts of conjugated alkenes, aromaticity, carbonyl groups involving nucleophilic addition and nucleophilic acyl substitution.

- **SLO #2: APPLY BASIC CONCEPTS OF THE MODERN ORGANIC CHEMISTRY AND SPECTROSCOPY TO EXPLAIN ORGANIC REACTIONS AND MECHANISMS.**
  - analyze reaction mechanisms to predict major products of organic chemistry reactions.
  - propose reactions mechanisms for common organic chemistry reactions including electrophilic aromatic substitution, nucleophilic addition to carbonyl groups, and nucleophilic acyl substitution.
  - propose a chemical structure based on given chemical and spectroscopic information: molecular formula, IR spectrum, mass spectrum, UV-Vis spectrum and 1H and 13C – NMR spectrum.
  - Describe reasons for favored products based on kinetic and thermodynamic preference.

- **SLO #3: SOLVE CHEMISTRY PROBLEMS AT AN APPROPRIATE LEVEL BY ANALYZING THE GIVEN DATA FOR ITS SIGNIFICANCE, BY FORMULATING A SOLUTION STRATEGY, AND BY EXPRESSING THE RESULTS IN PROPER FORMAT.**
  - design multi-step organic synthesis.
  - Analyze organic reactions via retro-synthesis.
  - Propose plausible reaction mechanisms with major and minor products for given reactants and reaction conditions.

- **SLO #4: WORK SAFELY IN A LABORATORY ENVIRONMENT, APPLY AND EVALUATE SCIENTIFIC METHODS FOR ASSEMBLING EXPERIMENTS, COLLECTING DATA, AND INTERPRETING EXPERIMENTAL OUTCOMES.**
  - demonstrate basic chemistry laboratory techniques and safety practices.
  - perform laboratory techniques such as liquid extraction and partition, synthesis, purification using both macro- and micro-scale procedures.
  - prepare a structured laboratory notebook.
  - perform basic spectral data collection (FT-IR and NMR).
  - perform basic sample analysis using Column Chromatography, TLC, GC, GC/MS and HPLC.
  - analyze and interpret experimental data and apply statistics to express results.
  - apply statistics to express experimental results.
  - prepare and present formal oral report on an experiment.
  - prepare written laboratory report and cite relevant literature reference.

- **SLO #5: APPLY PRINCIPLES OF SCIENTIFIC ETHICS AND ACADEMIC INTEGRITY.**
  - evaluate constructive criticism of submitted work and offer the same to other individuals in a manner that fosters mutual respect amid objective scientific debate.
  - acknowledge past and present contributors to the field of chemistry.
  - cite others on their original ideas with proper credit in student’s submitted work.

**CHEM 495 Independent Studies in Chemistry**

- **Units:** 1 - 3
- **Hours:** 54 - 162 hours LAB
- **Prerequisite:** None.
- **Transferable:** CSU
- **Catalog Date:** June 1, 2020
An independent studies project involves an individual student or small group of students in study, research, or activities beyond the scope of regularly offered courses. See the current catalog section of "Special Studies" for full details of Independent Studies.

Student Learning Outcomes
Upon completion of this course, the student will be able to:

- **SLO #1**: Actively engage in intellectual inquiry beyond that required in order to pass a course of study (College Wide Learning Outcome – Area 4).
- Discuss and outline a proposal of study (that can be accomplished within one semester term) with a supervising instructor qualified within the discipline.
- Design an independent study (to be completed individually or by collaboration of a small group) to foster special knowledge, skills, and experience that are not available in any one regularly scheduled course.
- Use information resources to gather discipline-specific information.
- **SLO #2**: Utilize modes of analysis and critical thinking to apply theoretical perspectives and/or concepts in the major discipline of study to significant problems and/or educational activities (College Wide Learning Outcome – Area 3).
- Analyze and apply the knowledge, skills and experience that are involved in the independent study to theoretical perspectives and/or concepts in the major discipline of study.
- Explain the importance of the major discipline of study in the broader picture of society.
- **SLO #3**: Communicate a complex understanding of content matter of the major discipline of study (College Wide Outcome – Area 3).
- Demonstrate competence in the skills essential to mastery of the major discipline of study that are necessary to accomplish the independent study.
- **SLO #4**: Identify personal goals and pursue these goals effectively (College Wide Outcome – Area 4).
- Utilize skills from the “academic tool kit” including time management, study skills, etc., to accomplish the independent study within one semester term.

CHEM 498 Work Experience in Chemistry

**Units:** 1 - 4
**Hours:** 60 - 300 hours LAB
**Prerequisite:** None.
**Enrollment Limitation:** Students must be in a paid or unpaid internship, volunteer position or job related to career goals in Chemistry.
**Transferable:** CSU
**General Education:** AA/AS Area III(b)
**Catalog Date:** June 1, 2020

This course provides students with opportunities to develop marketable skills in preparation for employment in their major field of study or advancement within their career. It is designed for students interested in work experience and/or internships in transfer level degree occupational programs. Course content includes understanding the application of education to the workforce; completion of required forms which document the student's progress and hours spent at the work site; and developing workplace skills and competencies. Appropriate level learning objectives are established by the student and the employer. During the semester, the student is required to participate in a weekly orientation and 75 hours of related paid work experience, or 60 hours of unpaid work experience for one unit. An additional 75 or 60 hours of related work experience is required for each additional unit. Work Experience may be taken for a total of 16 units when there are new or expanded learning objectives. Only one Work Experience course may be taken per semester.

Student Learning Outcomes
Upon completion of this course, the student will be able to:

- **DEMONSTRATE AN UNDERSTANDING AND APPLICATION OF PROFESSIONAL WORKPLACE BEHAVIOR IN A FIELD OF STUDY RELATED TO ONE’S CAREER** (SLO 1)
- Understand the effects time, stress, and organizational management have on performance.
- Demonstrate an understanding of consistently practicing ethics and confidentiality in a workplace.
- Examine the career/life planning process and relate its relevancy to the student.
- Demonstrate an understanding of basic communication tools and their appropriate use.
- Demonstrate an understanding of workplace etiquette.
• DESCRIBE THE CAREER/LIFE PLANNING PROCESS AND RELATE ITS RELEVANCY TO ONE’S CAREER (SLO 2)

• Link personal goals to long term achievement.
• Display an understanding of creating a professional first impression.
• Understand how networking is a powerful job search tool.
• Understand necessary elements of a résumé.
• Understand the importance of interview preparation.
• Identify how continual learning increases career success.

• DEMONSTRATE APPLICATION OF INDUSTRY KNOWLEDGE AND THEORETICAL CONCEPTS AS WRITTEN IN LEARNING OBJECTIVES IN PARTNERSHIP WITH THE EMPLOYER WORK SITE SUPERVISOR (SLO 3)
Communication Studies  
Cosumnes River College

The role of communication in the workplace today has grown in importance, and workplace communication competencies are increasingly in demand. The number one skill identified by employers is the ability to communicate clearly in both oral and written form. The number two skill identified by employers as necessary is the ability to work effectively as a member of a team. A competitive workplace requires employees to exercise competence in interview skills, professional presentations, written communication, group problem solving, intercultural interactions, conflict management, and analytical reasoning. This transferable degree gives students a foundation that can be used in any career path, increasing one's preparation for employment and transferability to a university.

Dean

 (916) 691-7142
 WilliaL3@crc.losrios.edu (mailto:WilliaL3@crc.losrios.edu)

Associate Degrees for Transfer

A.A.-T. in Communication Studies

The AA for Transfer in Communication Studies prepares students for graduation from Cosumnes River College as well as transfer to a four-year university, including lower division preparation for the major. Courses required for the degree provide students with a practical as well as theoretical foundation in the discipline and offer a critical perspective on human communication in a variety of contexts. Students completing this program will explore the history and interdisciplinary nature of human communication, develop communication competency for a variety of contexts, compose and critically evaluate oral, written and visual messages for diverse audiences, construct and defend arguments in support of a thesis, as well as demonstrate individual responsibility and integrity in all communication interactions.

Catalog Date: June 1, 2020

Degree Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Required Core:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>COMM 301</td>
<td>Introduction to Public Speaking</td>
<td>3</td>
</tr>
<tr>
<td>Interactive Communication Skills:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A minimum of 6 units from the following:</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>COMM 311</td>
<td>Argumentation and Debate (3)</td>
<td></td>
</tr>
<tr>
<td>COMM 321</td>
<td>Interpersonal Communication (3)</td>
<td></td>
</tr>
<tr>
<td>COMM 331</td>
<td>Group Discussion (3)</td>
<td></td>
</tr>
<tr>
<td>Communication Contexts:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A minimum of 6 units from the following:</td>
<td>6(^1)</td>
<td></td>
</tr>
<tr>
<td>COMM 315</td>
<td>Persuasion (3)</td>
<td></td>
</tr>
<tr>
<td>COMM 321</td>
<td>Interpersonal Communication (3)</td>
<td></td>
</tr>
<tr>
<td>COMM 325</td>
<td>Intercultural Communication (3)</td>
<td></td>
</tr>
<tr>
<td>COURSE CODE</td>
<td>COURSE TITLE</td>
<td>UNITS</td>
</tr>
<tr>
<td>-------------</td>
<td>--------------</td>
<td>-------</td>
</tr>
<tr>
<td>COMM 331</td>
<td>Group Discussion (3)</td>
<td></td>
</tr>
<tr>
<td>COMM 361</td>
<td>The Communication Experience (3)</td>
<td></td>
</tr>
<tr>
<td>COMM 363</td>
<td>Introduction to Communication Theory (3)</td>
<td></td>
</tr>
<tr>
<td>JOUR 310</td>
<td>Mass Media and Society (3)</td>
<td></td>
</tr>
<tr>
<td>or RTVF 300</td>
<td>Mass Media and Society (3)</td>
<td></td>
</tr>
</tbody>
</table>

**Written Communication, Digital Media and/or Social Science Perspectives:**

A minimum of 3 units from the following:

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANTH 310</td>
<td>Cultural Anthropology (3)</td>
<td></td>
</tr>
<tr>
<td>COMM 315</td>
<td>Persuasion (3)</td>
<td></td>
</tr>
<tr>
<td>COMM 325</td>
<td>Intercultural Communication (3)</td>
<td></td>
</tr>
<tr>
<td>COMM 331</td>
<td>Group Discussion (3)</td>
<td></td>
</tr>
<tr>
<td>COMM 341</td>
<td>Organizational Communication (3)</td>
<td></td>
</tr>
<tr>
<td>COMM 361</td>
<td>The Communication Experience (3)</td>
<td></td>
</tr>
<tr>
<td>COMM 363</td>
<td>Introduction to Communication Theory (3)</td>
<td></td>
</tr>
<tr>
<td>ENGWR 301</td>
<td>College Composition and Literature (3)</td>
<td></td>
</tr>
<tr>
<td>ENGWR 302</td>
<td>Advanced Composition and Critical Thinking (3)</td>
<td></td>
</tr>
<tr>
<td>JOUR 300</td>
<td>Newswriting and Reporting (3)</td>
<td></td>
</tr>
<tr>
<td>PSYC 300</td>
<td>General Principles (3)</td>
<td></td>
</tr>
<tr>
<td>RTVF 312</td>
<td>Beginning Radio Production (3)</td>
<td></td>
</tr>
<tr>
<td>RTVF 331</td>
<td>Beginning Television Studio Production (3)</td>
<td></td>
</tr>
<tr>
<td>SOC 300</td>
<td>Introductory Sociology (3)</td>
<td></td>
</tr>
</tbody>
</table>

Total Units: 18

1 Any transfer level communication (COMM) course listed that is completed in this category cannot be used to satisfy another part of the degree requirements.

2 Any transfer level communication (COMM) course listed that is completed in this category cannot be used to satisfy another part of the degree requirements.

The Associate in Arts in Communication Studies for Transfer (AA-T) degree may be obtained by completion of 60 transferable, semester units with a minimum 2.0 GPA, including (a) the major or area of emphasis described in the Required Program, and (b) either the Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education-Breadth Requirements.

**Student Learning Outcomes**

Upon completion of this program, the student will be able to:

- Design and relate messages clearly for effective and appropriate oral communication (PSLO-1).
- Apply effective listening skills to comprehend spoken messages, analyze information critically and consider multiple perspectives (PSLO-2).
- Compose ideas clearly in effective, appropriate and well-organized written messages (PSLO-3).
- Assess individual responsibility within one's ability to influence ethical, effective and appropriate communicate among diverse settings and people (PSLO-4).
- Define and identify various theoretical perspectives across the discipline of communication studies (PSLO-5).
Career Information

Transfer: Courses offered by the Communication Department meet a wide range of lower division transfer requirements for CSU and UC universities. The department offers many courses designed to prepare students for transfer to a variety of disciplines including Business, Communication Studies, Criminal Justice, Education, Liberal Arts, Pre-Law, Mass Media, Management, Psychology, Sociology, and Social Work. Upon completion of a baccalaureate degree after transfer, students will gain opportunities for employment and promotion in fields including Public Information; Human Resources Development; Corporate Training; Motivational Speaking; Political Speech Writing; Radio & Television; Advertising; Public Relations; College & University Instruction; Organizational Administration; Negotiation & Mediation Services; Writing for Publication; Personnel Management; Customer Service; Social Science Research; Corporate Imaging; Campaign Management; Marketing; Community Relations; and Grant Writing. NOTE TO TRANSFER STUDENTS: The Associate Degree for Transfer program is designed for students who plan to transfer to a campus of the California State University (CSU). Other than the required core, the courses you choose to complete this degree will depend to some extent on the selected CSU for transfer. In addition, some CSU-GE Breadth or IGETC requirements can also be completed using courses required for this associate degree for transfer major (known as “double-counting”). Meeting with a counselor to determine the most appropriate course choices will facilitate efficient completion of your transfer requirements. For students wishing to transfer to other universities (UC System, private, or out-of-state), the Associate Degree for Transfer may not provide adequate preparation for upper-division transfer admissions; it is critical that you meet with a CRC counselor to select and plan the courses for the major, as programs vary widely in terms of the required preparation.

Associate Degrees

A.A. in Communication, Organizational Communication

The role of communication in the workplace today has grown in importance, and workplace communication competencies are increasingly in demand. The number one skill identified by employers is the ability to communicate clearly in both oral and written form. The number two skill identified by employers as necessary is the ability to work effectively as a member of a team. A competitive workplace requires employees to exercise competence in interview skills, professional presentations, written communication, group problem solving, intercultural interactions, conflict management, and analytical reasoning. This transferable degree gives students a foundation that can be used in any career path, increasing one's preparation for employment and transferability to a university.

HIGHLIGHTS

* Transfer requirements simultaneously met while pursuing degree
* Many of the courses required for this degree can also be used to fulfill transfer general education requirements for the CSU system.
* Our courses are interdisciplinary in nature. Communication Studies offers students an opportunity to explore coursework in oral communication, critical thinking, social sciences, multicultural studies, and living skills.
* Students will find this background helpful and applicable to their everyday pursuits. Students intending to transfer to a university will have a solid base of courses that will interface with further, focused study in a major. For those wishing to pursue a university degree in the field of communication, degrees can be earned with emphasis in the following areas:
  • Mass Media Studies
  • Broadcast Electronic Communication Arts
  • Organizational Communication
  • Intercultural Communication
  • Visual Communication
  • Rhetoric
  • Group Communication
  • Interpersonal Communication

FURTHER INFORMATION: For additional program information, contact any of our full time faculty:

Colette (Cole) Harris (916) 691-7202
Dan DuBray (916) 691-7493
Georgine Hodgkinson (916) 691-7772
Chris Wagner (916) 691-7336

NOTE TO TRANSFER STUDENTS: If you are interested in transferring to a four-year college or university to pursue a bachelor’s degree in this major, it is critical that you meet with a CRC counselor to select and plan the courses for your major. Schools vary widely in terms of the required preparation. The courses that CRC requires for an Associate’s degree in this major may be different from the requirements needed for the Bachelor’s degree.

Catalog Date: June 1, 2020

Degree Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMM 301</td>
<td>Introduction to Public Speaking</td>
<td>3</td>
</tr>
<tr>
<td>COURSE CODE</td>
<td>COURSE TITLE</td>
<td>UNITS</td>
</tr>
<tr>
<td>-------------</td>
<td>--------------------------------------------------</td>
<td>-------</td>
</tr>
<tr>
<td>COMM 311</td>
<td>Argumentation and Debate</td>
<td>3</td>
</tr>
<tr>
<td>COMM 321</td>
<td>Interpersonal Communication</td>
<td>3</td>
</tr>
<tr>
<td>COMM 325</td>
<td>Intercultural Communication</td>
<td>3</td>
</tr>
<tr>
<td>COMM 331</td>
<td>Group Discussion</td>
<td>3</td>
</tr>
<tr>
<td>JOUR 310</td>
<td>Mass Media and Society (3)</td>
<td>3</td>
</tr>
</tbody>
</table>

**Communication in Organizations (6 units):**

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMM 341</td>
<td>Organizational Communication</td>
<td>3</td>
</tr>
<tr>
<td>COMM 315</td>
<td>Persuasion (3)</td>
<td>3</td>
</tr>
<tr>
<td>or BUS 330</td>
<td>Managing Diversity in the Workplace (3)</td>
<td>3</td>
</tr>
<tr>
<td>or SGVT 315</td>
<td>Dynamics of Leadership (3)</td>
<td>3</td>
</tr>
</tbody>
</table>

**Written Communication (6 units):**

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGWR 300</td>
<td>College Composition</td>
<td>3</td>
</tr>
<tr>
<td>ENGWR 302</td>
<td>Advanced Composition and Critical Thinking (3)</td>
<td>3</td>
</tr>
<tr>
<td>or BUS 310</td>
<td>Business Communications (3)</td>
<td>3</td>
</tr>
<tr>
<td>or JOUR 300</td>
<td>Newswriting and Reporting (3)</td>
<td>3</td>
</tr>
<tr>
<td>or JOUR 301</td>
<td>Advanced Newswriting and Reporting (3)</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Units: 30

1 Or 3 units earned through any department approved internship - internships may be arranged through the CRC Co-op Work Experience program, and credit may be received by enrolling in WEXP 498, Work Experience in (Subject).

The Communication, Organizational Communication Associate in Arts (A.A.) degree may be obtained by completion of the required program, plus general education requirements, plus sufficient electives to meet a 60-unit total. See CRC graduation requirements.

**Student Learning Outcomes**

Upon completion of this program, the student will be able to:

- Design and relate messages clearly for effective and appropriate oral communication (SLO-1).
- Apply effective listening skills to comprehend spoken messages, analyze information critically and consider multiple perspectives (SLO-2).
- Compose ideas clearly in effective, appropriate and well-organized written messages (SLO-3).
- Analyze and formulate critical thinking within the evidence and reasoning of spoken and written messages (SLO-4).
- Assess individual responsibility within one's ability to influence ethical, effective and appropriate communication among diverse settings and people (SLO-5).
- Define and identify various theoretical perspectives across the discipline of communication studies (SLO-6).

**Career Information**

Public Information; Human Resources Development; Corporate Training; Motivational Speaking; Political Speech Writing; Radio & Television; Advertising; Public Relations; College & University Instruction; Organizational Administration; Negotiation & Mediation Services; Writing for Publication; Personnel Management; Customer Service; Social Science Research; Corporate Imaging; Campaign Management; Marketing; Community Relations; Grant Writing

**Certificate of Achievement**

Applied Communication Skills Certificate
This certificate program provides the communication skills necessary for entry-level positions in business, and helps improve managerial attributes with an emphasis on abilities to communicate effectively, efficiently and appropriately in organizational settings. Students with this certificate are prepared to design messages based on analysis of the intended audience and cultural context, apply effective listening skills, analyze persuasive messages, and demonstrate effective oral presentation skills. The certificate prepares students with the skills necessary to demonstrate proficiency in different communication settings by identifying and appraising factors that affect organizational communication structures in small group, interpersonal and intercultural settings.

Catalog Date: June 1, 2020

Certificate Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>A minimum of 15 units from the following:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>COMM 301</td>
<td>Introduction to Public Speaking 3</td>
<td>15</td>
</tr>
<tr>
<td>COMM 311</td>
<td>Argumentation and Debate</td>
<td>3</td>
</tr>
<tr>
<td>COMM 315</td>
<td>Persuasion</td>
<td>3</td>
</tr>
<tr>
<td>COMM 321</td>
<td>Interpersonal Communication</td>
<td>3</td>
</tr>
<tr>
<td>COMM 325</td>
<td>Intercultural Communication</td>
<td>3</td>
</tr>
<tr>
<td>COMM 331</td>
<td>Group Discussion</td>
<td>3</td>
</tr>
<tr>
<td>COMM 341</td>
<td>Organizational Communication</td>
<td>3</td>
</tr>
<tr>
<td>COMM 361</td>
<td>The Communication Experience</td>
<td>3</td>
</tr>
<tr>
<td>Total Units:</td>
<td></td>
<td>15</td>
</tr>
</tbody>
</table>

1It is recommended that one of the courses completed should meet the general education requirement of oral communication, which is either Communication 301, or 331, or 361.

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- Design and relate messages clearly for effective and appropriate oral communication (SLO-1).
- Apply effective listening skills to comprehend spoken messages, analyze information critically and consider multiple perspectives (SLO-2).
- Compose ideas clearly in effective, appropriate and well-organized written messages (SLO-3).
- Assess individual responsibility within one's ability to influence ethical, effective and appropriate communicate among diverse settings and people (SLO-4).

Career Information

Public Information; Human Resources Development; Corporate Training; Motivational Speaking; Political Speech Writing; Radio & Television; Advertising; Public Relations; College & University Instruction; Organizational Administration; Negotiation & Mediation Services; Writing for Publication; Personnel Management; Customer Service; Social Science Research; Corporate Imaging; Campaign Management; Marketing; Community Relations; Grant Writing Some careers may require more than two years of study.

Communication (COMM)

COMM 301 Introduction to Public Speaking
This course prepares students to speak in a variety of rhetorical situations: as college students, as employees, as opinion leaders in the
community. The course is designed to assist students in developing effective delivery, ethical research methodology, analytical thinking
and listening skills, organization and outlining skills, and appropriate presentation skills. Emphasis is on researching, preparing,
organizing, and presenting a variety of speeches for different audiences. Video-recording equipment may be used as an aid to the
student’s self-analysis and improvement. Access to a computer with online capabilities may be required and computer access is
available on campus.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- **DESIGN AND RELATE MESSAGES CLEARLY FOR EFFECTIVE AND APPROPRIATE ORAL COMMUNICATION (SLO#1).**
- Analyze an audience using age, gender, cultural variations, and other appropriate measures.
- Design, deliver and differentiate a variety of speech types, including, at a minimum, the speech to inform, to entertain or relate
  (within a special occasion), and to persuade.
- Identify, evaluate and apply appropriate nonverbal techniques.
- Design presentational aids, audio and/or visual, appropriate to the audience, message and context.
- Recognize and respond to techniques for managing communication apprehension.
- **APPLY EFFECTIVE LISTENING SKILLS TO COMPREHEND SPOKEN MESSAGES, ANALYZE INFORMATION CRITICALLY AND
  CONSIDER MULTIPLE PERSPECTIVES (SLO#2).**
- Demonstrate critical listening skills.
- Recognize and model constructive feedback.
- **COMPOSE IDEAS CLEARLY IN EFFECTIVE, APPROPRIATE AND WELL-ORGANIZED WRITTEN MESSAGES (SLO#3).**
- Compose fully developed, structured, and unified oral presentations, including formal written outlines.
- Locate, interpret and evaluate various research materials to accurately document sources (in oral and written form) according
to a standard referencing style (MLA, APA, CBE, etc.).
- **ANALYZE AND FORMULATE CRITICAL THINKING WITHIN EVIDENCE AND REASONING OF SPOKEN AND WRITTEN MESSAGES
  (SLO#4).**
- Assess, evaluate, and apply a variety of rhetorical strategies that are effective and appropriate per the purpose, occasion and
  audience.
- Apply language techniques and strategies appropriate to the audience and occasion.
- Arrange, paraphrase and effectively integrate evidence and/or supportive material into a presentation.
- **ASSESS INDIVIDUAL RESPONSIBILITY WITHIN ONE’S ABILITY TO INFLUENCE ETHICAL, EFFECTIVE AND APPROPRIATE
  COMMUNICATION AMONG DIVERSE SETTINGS AND PEOPLE (SLO #5).**
- Recognize and apply ethical standards to the research, design and delivery of a message for an audience and occasion.

COMM 311 Argumentation and Debate

| Units: | 3 |
| Hours: | 54 hours LEC |
| Prerequisite: | ENGWR 300 with a grade of "C" or better |
| Transferable: | CSU; UC |
| General Education: | AA/AS Area II(b); CSU Area A3; IGETC Area 1B |
| C-ID: | C-ID COMM 110 |
| Catalog Date: | June 1, 2020 |
This course introduces students to argumentation, critical evaluation of evidence, and reasoning in the context of debate. A series of writing assignments will focus on the skills of critical thinking, rhetoric, and the sophistication of argumentative skills. Intended as a practical course, the fundamentals of proposition analysis, case building and dissent are discussed and applied within written communication and oral presentation. Video-recording equipment may be used as an aid to the student’s self-analysis and improvement. Access to a computer with online capabilities may be required and computer access is available on campus.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- **COMPOSE IDEAS CLEARLY IN EFFECTIVE, APPROPRIATE AND WELL-ORGANIZED WRITTEN MESSAGES** (SLO #1).
- Use advanced lower-division composition: essay structure, continuity, elements of style, grammar as a stylistic technique, clarity, coherence, concision, persuasive essay and sophisticated writing skills that consider the reader as audience.
- Distinguish and evaluate the viability of different types of arguments.
- Compose arguments cogently in a number of modes, including but not limited to making proposals (propositions), providing evaluation, and explanation of positions and the existence of causal, analogical, and/or correlation relationships.
- **ANALYZE AND FORMULATE CRITICAL THINKING WITHIN EVIDENCE AND REASONING OF SPOKEN AND WRITTEN MESSAGES** (SLO #2).
- Understand the nature of critical thinking and quality composition.
- Apply the theoretical foundations for argument analysis and construction of induction, deduction, analysis, synthesis, sound reasoning, and fallacy identification within the readings and writing of debate cases and argumentative communication messages.
- Differentiate the nature and function of argumentation in various communication contexts.
- Assess rhetorical style differences and choose appropriate strategies for the composition of delivery of oral versus written argument.
- Critique written and oral arguments using Aristotle’s classical structures of reasoning and contemporary elements of argument (such as Stephen Toulmin’s model).
- Analyze competing points of views of subjects and determine the stances of the authors on the subjects as well as to express individual stances logically and effectively on the subjects.
- **DESIGN AND RELATE MESSAGES CLEARLY FOR EFFECTIVE AND APPROPRIATE ORAL COMMUNICATION** (SLO #3).
- Argue for a position within the context and understanding of a specific debate format.
- Design and present an affirmative and negative debate case clearly and effectively.
- Use the library and online technologies to research debate topics and gather evidence to support negative and affirmative positions.
- **APPLY EFFECTIVE LISTENING SKILLS TO COMPREHEND SPOKEN MESSAGES, ANALYZE INFORMATION CRITICALLY AND CONSIDER MULTIPLE PERSPECTIVES** (SLO #4).
- Consider the audience to establish common ground in the construction of affirmative and negative arguments.
- Construct effective refutation to opposing viewpoints in a variety of debate formats.
- Assess rhetorical style differences and choose appropriate strategies for the composition and delivery of oral and written messages.
- **ASSESS INDIVIDUAL RESPONSIBILITY WITHIN ONE’S ABILITY TO INFLUENCE ETHICAL, EFFECTIVE AND APPROPRIATE COMMUNICATION AMONG DIVERSE SETTINGS AND PEOPLE** (SLO #5).
- Appreciate the importance of ethics in controversy.
- Demonstrate ethical behavior in the research, construction and delivery of arguments.
- Employ, evaluate and interpret various research materials to accurately document sources (in oral and written form) according to a standard referencing style (MLA, APA, CBE, etc.).
- **DEFINE AND IDENTIFY VARIOUS THEORETICAL PERSPECTIVES ACROSS THE DISCIPLINE OF COMMUNICATION STUDIES** (SLO #6).
- Define and identify various theoretical models of argumentation.
- Identify messages within argumentation and rhetoric and their theoretical approaches as they exist in a variety of communication contexts (classical Aristotelian, canons of rhetoric per Roman Oration, one-sided versus two sided messages, etc.).
COMM 315 Persuasion

This introductory course will examine historical and contemporary approaches to persuasive messages throughout time. It will also focus on the presentation of persuasive appeals, and learning to construct, deliver, and critique persuasive messages. Students will construct and deliver ethical persuasive messages directed toward a specific audience in front of a live audience or other pedagogically appropriate medium. Students explore ethical considerations of persuasive communication, learn about types of reasoning, and identify fallacious arguments as well as unethical means of influence such as manipulation, coercion, and propaganda as they occur in persuasion. This course presents fundamental theoretical models of critical thinking and communication studies that apply to rhetoric, examining message production, analyzing messages, and exploring the fields of electronic, print and social media, advertising (product campaign), political campaign strategy, and ideological campaign techniques for mass communication. A series of writing assignments of advanced composition will focus on the skills of critical thinking, persuasion, and the sophistication of argumentative essay skills. Access to a computer with online capabilities may be required and computer access is available on campus. As HONOR 341 Persuasion within Social Issues has a similar basis as this course, this course is not open to a student that has received credit for HONOR 341.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- **COMPOSE IDEAS CLEARLY IN EFFECTIVE, APPROPRIATE AND WELL-ORGANIZED WRITTEN MESSAGES (SLO #1).**
- Use advanced lower-division composition techniques that address essay structure, continuity, emphasis and subtlety, elements of style, grammar as stylistic technique, audience, and persuasive essay writing.
- Apply the advanced use of clarity (agent-action-goal) and coherence (concentration, focus, maintenance, clear orientation and subject control), concision and emphasis to develop writing skills appropriate for a sophisticated style of English.
- Compose arguments cogently in a number of modes, including but not limited to making proposals, providing evaluation, and explanation of positions and the existence of causal and/or correlation relationships.
- **ANALYZE AND FORMULATE CRITICAL THINKING WITHIN THE EVIDENCE AND REASONING OF SPOKEN AND WRITTEN MESSAGES (SLO #2).**
- Construct and deliver ethical persuasive messages directed toward a specific audience in front of a live audience or other pedagogically appropriate medium.
- Apply the theoretical foundations for argument analysis, persuasion and essay construction of induction, deduction, analysis, synthesis, and sound reasoning within the readings and writing of persuasive communication messages.
- Differentiate between ethical persuasion and unethical means of influence such as manipulation, coercion, and propaganda.
- **ASSESS INDIVIDUAL RESPONSIBILITY WITHIN ONE'S ABILITY TO INFLUENCE ETHICAL, EFFECTIVE AND APPROPRIATE COMMUNICATION AMONG DIVERSE SETTINGS AND PEOPLE (SLO #3).**
- Employ critical thinking and writing skills in reflection about multi-cultural diversity issues, ethics, and politics in terms of the effectiveness and appropriateness of persuasive communication.
- **DEFINE AND IDENTIFY VARIOUS THEORETICAL PERSPECTIVES ACROSS THE DISCIPLINE OF COMMUNICATION STUDIES (SLO #4).**
- Analyze persuasive messages, including identifying and explaining the persuasive components or strategies used to effect change.
- Identify persuasive strategies and their theoretical foundations as they exist in a variety of communication contexts (e.g., interpersonal compliance-gaining, commercial advertising, political rhetoric and campaigning, public speaking, mass media, etc.).
- Explain and apply the basic concepts of the field of communication demonstrating an understanding of theories of persuasive communication.
- Determine and evaluate criteria for the development of successful persuasive campaigns.

COMM 321 Interpersonal Communication
This course will explore and apply models and theories of interpersonal communication in a variety of personal and professional contexts. Using simulations and structured exercises, students will develop a deeper understanding of communication concepts associated with developing and maintaining satisfying interpersonal relationships. Additionally, students will focus on communication competency through a heightened awareness of the complexity of interpersonal communication during verbal and nonverbal transactions and the development of skills as both senders and receivers of shared messages. Video equipment may be used as an aid to the student's self-analysis and improvement. Access to a computer with online capabilities may be required and computer access is available on campus.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- DEFINE AND IDENTIFY VARIOUS THEORETICAL PERSPECTIVES ACROSS THE DISCIPLINE OF INTERPERSONAL COMMUNICATION (SLO #1).
- Evaluate various models of communication and explain how messages may be sent and received at both conscious and unconscious levels.
- Explain salient characteristics of interpersonal and intrapersonal communication in relation to other communication contexts.
- Identify stages of development and termination for interpersonal relationships.
- Describe the characteristics, behaviors and attitudes of competent communicators and explain how competent communicators appropriately adapt messages to varied contexts.
- ASSESS INDIVIDUAL RESPONSIBILITY WITHIN ONE'S ABILITY TO INFLUENCE ETHICAL, EFFECTIVE AND APPROPRIATE COMMUNICATION AMONG DIVERSE SETTINGS AND PEOPLE (SLO #2).
- Describe the importance that self-awareness and personal identities play in the development of satisfying interpersonal relationships and identify guidelines for strengthening one's self-concept.
- Explain the importance of emotional intelligence for satisfying interpersonal relationships.
- Demonstrate ethical communication within the context of interpersonal relationships.
- Define the characteristics of interpersonal conflict and identify strategies for effective communication during conflict.
- APPLY EFFECTIVE LISTENING SKILLS TO COMPREHEND SPOKEN MESSAGES, ANALYZE INFORMATION AND CONSIDER MULTIPLE PERSPECTIVES (SLO #3).
- Analyze the process of human perception and describe the influence of various standpoints, such as culture and gender, on perception.
- Demonstrate active listening through the use of mindfulness, paraphrasing, and non-defensive responses to criticism.
- Delineate the difference between relational and literal meanings of interpersonal messages.

COMM 325 Intercultural Communication

This course introduces students to the influence of culture on identity, perception, social organization, language and nonverbal messages in intercultural experiences in the United States. Variations and commonalities in communication patterns across cultures are examined as well as processes and outcomes among persons of different group-based experiential backgrounds. Practical application of factors which influence communication among individuals of different cultures is emphasized. Access to a computer with online capabilities may be required and computer access is available on campus.
Upon completion of this course, the student will be able to:

- SLO 1: DEFINE, IDENTIFY, EXPLAIN AND APPLY VARIOUS THEORETICAL PERSPECTIVES ASSOCIATED WITH THE STUDY OF INTERCULTURAL COMMUNICATION.
  - Identify and describe cultural taxonomies that explain cultural variation (Ex. Hall, Hofstede, Kluckhohn & Strodtbeck, etc.).
  - Differentiate the communication behaviors associated with high and low context cultures.
  - Define the importance of nonverbal communication in the overall communication process.
  - Analyze, interpret and critique the nonverbal messages in intercultural encounters and recommend possible approaches for clarifying misunderstandings that might be present.
  - Explain different theoretical perspectives on language and its relation to reality (Ex. Sapir Whorf hypothesis, Hiyakawa's abstraction ladder, Chomsky and “deep structures,” etc.) and explain difficulties associated with the lack of equivalence in languages.

- SLO 2: ASSESS INDIVIDUAL RESPONSIBILITY WITHIN ONE'S ABILITY TO INFLUENCE ETHICAL, EFFECTIVE, AND APPROPRIATE COMMUNICATION AMONG DIVERSE SETTINGS AND PEOPLE.
  - Profile recent demographic trends in the United States and its impact upon cultural institutions.
  - Research and discuss the historical context for racism and prejudice in the United States.
  - Recognize and explain why statements in the analysis of a communication event may have a marginalizing effect.
  - Compare and contrast the advantages and disadvantages of living in a diverse society.

- SLO 3: IDENTIFY AND DEMONSTRATE COMMUNICATION SKILLS ASSOCIATED WITH INTERCULTURAL COMPETENCE.
  - Explain how to determine the extent to which a communication event may be considered intercultural.
  - Analyze and interpret a critical incident identifying areas of misunderstanding.
  - Analyze an intercultural situation and apply learned content regarding appropriate strategies related to interaction management and conflict management.
  - Define “culture shock” and describe strategies for reducing discomfort in culturally unfamiliar and/or ambiguous situations.

- SLO 4: EXPRESS IDEAS CLEARLY IN EFFECTIVE, APPROPRIATE AND WELL-ORGANIZED WRITTEN MESSAGES.
  - Construct short answer essays that synthesize material from separate topic areas of the course.
  - Summarize ethnographic and/or database research that explore(s) a culture in the United States different from one’s own perspective.

### COMM 331 Group Discussion

This course is designed to increase students' understanding of group communication and to prepare students to function more effectively in various types of groups, as college students, employees, as members in the community. The course is designed to assist students in developing an understanding of how group communication is uniquely different from other communication. Oral communication techniques within group settings will be analyzed in depth and assignments will include informative and persuasive oral presentations (individual and group). The course will enhance students' effectiveness in the small group dynamics of roles, functions, leadership and norms. Problem-solving and decision-making skills are emphasized through simulations and discussion. Group projects may require students to meet outside of class time for service learning or campus activities. Video-recording equipment may be used as an aid to the student's self-analysis and improvement. Access to a computer with online capabilities may be required and computer access is available on campus.

### Student Learning Outcomes
Upon completion of this course, the student will be able to:

- **DESIGN AND RELATE MESSAGES CLEARLY FOR EFFECTIVE AND APPROPRIATE ORAL COMMUNICATION (SLO #1).**

  - Analyze an audience using age, gender, cultural variation and other appropriate measures.
  - Design, deliver and differentiate a variety of speech types, including, at minimum, the speech to inform and one individual presentation within a group format (such as panel discussion, parliamentary procedure, or symposium, etc.).
  - Manage information while using a variety of formats and designs for facilitating group communication and delivering oral presentations.
  - Apply and evaluate appropriate verbal and nonverbal communication strategies for oral presentations.
  - Design presentational aids, audio and/or visual, appropriate to the audience, message and context.
  - Recognize and respond to techniques for managing communication apprehension.

- **APPLY EFFECTIVE LISTENING SKILLS TO COMPREHEND SPOKEN MESSAGES, ANALYZE INFORMATION CRITICALLY AND CONSIDER MULTIPLE PERSPECTIVES (SLO #2).**

  - Demonstrate critical listening skills.
  - Recognize and model constructive feedback.

- **COMPOSE IDEAS CLEARLY IN EFFECTIVE, APPROPRIATE AND WELL-ORGANIZED WRITTEN MESSAGES (SLO #3).**

  - Compose fully developed, structured and unified oral presentations, including formal written structure.
  - Locate, interpret and evaluate various research materials to accurately document sources (in oral and written form) according to a standard referencing style (such as MLA, APA, CBE, etc.).
  - Arrange and present views within a presentation with persuasive force.

- **ANALYZE AND FORMULATE CRITICAL THINKING WITHIN EVIDENCE AND REASONING OF SPOKEN AND WRITTEN MESSAGES (SLO #4).**

  - Assess, evaluate, and apply a variety of rhetorical strategies that are effective and appropriate per the purpose, occasion and audience.
  - Arrange, paraphrase and effectively integrate evidence and/or supportive material into a presentation.
  - Apply critical thinking skills in decision making and problem-solving through systematic procedures or techniques for group discussion.
  - Evaluate communication effectiveness by considering group dynamics, group experience, roles, norms, leadership and other factors to recognize specific strategies for refining group discussion and oral presentations.
  - **ASSESS INDIVIDUAL RESPONSIBILITY WITHIN ONE'S ABILITY TO INFLUENCE ETHICAL, EFFECTIVE AND APPROPRIATE COMMUNICATION AMONG DIVERSE SETTINGS AND PEOPLE (SLO #5).**

  - Recognize and apply ethical standards to the research, design and delivery of a message for an audience and occasion.
  - Recognize and integrate effective group leadership and conflict management skills.

- **DEFINE AND IDENTIFY VARIOUS THEORETICAL PERSPECTIVES ACROSS THE DISCIPLINE OF GROUP COMMUNICATION STUDIES (SLO #6).**

  - Examine and apply theoretical frameworks within group communication.
  - Identify and differentiate different types of groups.
  - Analyze communication behaviors within group interactions.

**COMM 341 Organizational Communication**

**Units:** 3  
**Hours:** 54 hours LEC  
**Prerequisite:** ENGWR 101 with a grade of "C" or better  
**Transferable:** CSU  
**General Education:** AA/AS Area V(b); CSU Area D7  
**Catalog Date:** June 1, 2020
This course is designed to allow students to examine both theoretical and pragmatic essentials of effective organizational messages from preparation and presentation to efficacious observation and analysis. Students will explore the dynamics of organizational communications in basic communication skills, working relationships, leadership, diversity in the workplace, conflict negotiation teams and problem solving and/or decision making groups. The roles of internal and external messages on the communication process and organizational effectiveness will be examined and analyzed. Access to a computer with on-line capabilities may be required and computer access is available on campus.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- DEFINE AND IDENTIFY VARIOUS THEORETICAL PERSPECTIVES WITHIN THE DISCIPLINE OF ORGANIZATIONAL COMMUNICATION STUDIES (SLO #1).
- Identify and analyze types of communication networks.
- Apply and analyze organizational communication theory to a variety of organizational settings.
- Identify and examine external influences on organizational culture in terms of ethical, behavioral, managerial, and technological approaches.
- Compare and critique the various theoretical perspectives of leadership.
- Examine the effects of globalization, cultural diversity, and outsourcing on organizations within current industries, based upon theoretical principles of communication.
- ANALYZE AND FORMULATE CRITICAL THINKING WITHIN EVIDENCE AND REASONING OF SPOKEN AND WRITTEN MESSAGES (SLO #2).
- Analyze issues and alternatives to implement conflict management strategies in a variety of organizational situations.
- Recognize and employ team strategies for problem-solving and decision-making.
- COMPOSE IDEAS CLEARLY IN EFFECTIVE, APPROPRIATE AND WELL-ORGANIZED WRITTEN MESSAGES (SLO #3).
- Design and compose an effective written message to report observations and analysis of communication strategies and components utilized within a working organization.
- ASSESS INDIVIDUAL RESPONSIBILITY WITHIN ONE'S ABILITY TO INFLUENCE ETHICAL, EFFECTIVE, AND APPROPRIATE COMMUNICATION AMONG DIVERSE SETTINGS AND PEOPLE (SLO #4).
- Describe and illustrate communication strategies within working relationships among diverse settings and people in contemporary organizations.
- Identify types of power and analyze relationships between power, conflict and leadership.

COMM 361 The Communication Experience

This course introduces students to the fundamental concepts necessary for effective communication in a variety of settings with a variety of audiences. Special emphasis is placed on practical experiences within groups, facilitation of interpersonal relationships, and methods of conflict management. As part of this course, students are required to actively participate in groups and deliver oral presentations, both individually and in groups. Video-recording equipment may be used as an aid to the student's self-analysis and improvement. Access to a computer with online capabilities may be required and computer access is available on campus.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- EXPRESS AND CONVEY MESSAGES CLEARLY FOR EFFECTIVE AND APPROPRIATE ORAL COMMUNICATION (SLO #1).
- Apply and demonstrate verbal and nonverbal communication strategies for oral presentations within a variety of contexts and audiences.
- Recognize and respond to techniques for managing communication apprehension.
COMM 363 Introduction to Communication Theory

| Units:     | 3 |
| Hours:     | 54 hours LEC |
| Prerequisite: | None. |
| Advisory:  | Eligibility for ENGWR 300. |
| Transferable: | CSU; UC |
| General Education: | AA/AS Area II(b); CSU Area D7 |
| C-ID:      | C-ID COMM 180 |
| Catalog Date: | June 1, 2020 |

This course will introduce the student to the symbolic process of human communication through the study of basic communication models, fundamental theory, and relevant research findings. Emphasis will be placed on achieving an understanding of the communication process, and the process through which researchers in the field add to their existing body of knowledge. Access to a computer with online capabilities may be required and computer access is available on campus.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- DEFINE, IDENTIFY, EXPLAIN AND APPLY VARIOUS THEORETICAL PERSPECTIVES ASSOCIATED WITH THE STUDY OF HUMAN COMMUNICATION (SLO #1).
- Identify and describe the major areas of study across the discipline of communication and the contributions of major scholars/researchers in terms of theoretical foundations to these areas.
- Analyze human communication as a process according to theories that vary from one communication context to another.
- Recognize the symbolic nature of communication and explain how form and function in symbols between a sender and receiver(s) impact the message content, context, and the channel through which the message is delivered.
- EXPRESS IDEAS CLEARLY IN EFFECTIVE, APPROPRIATE AND WELL-ORGANIZED WRITTEN MESSAGES (SLO #2).
Use clear and concise English in terms of spelling, grammar, paragraph structure, and continuity within essay writing.

Analyze competing points of view of subjects and determine the stances of the authors on the subjects as well to express individual stances logically and effectively on the subjects.

COMM 480 Honors Seminar: Political Campaign Communication

What do pundits, politicians and the public have in common? The ability to impact political campaign communication. This seminar-style course will introduce students to the effects of political campaign communication on public opinion and election results. Using timely data, students will evaluate news media, debate presidential debates, and analyze campaign messages using qualitative and quantitative approaches. This course is intended for the honors student interested in learning about political communication, rhetorical criticism, and techniques for writing for academic audiences. Enrollment is limited to Honors Program students. Details about the Honors Program can be found in the front of the Catalog and on the CRC website. This course is the same as HONOR 340, and only one may be taken for credit.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- EXPRESS IDEAS CLEARLY IN WELL-ORGANIZED WRITTEN MESSAGES (SLO #1).
- Express ideas clearly and completely in a variety of written formats.
- Utilize correct and appropriate conventions of mechanics, usage, and style in written communication.
- Comprehend main ideas and reasonably interpret written information.
- Compose and apply properly documented sources of information.
- UTILIZE MODES OF ANALYSIS AND CRITICAL THINKING IN A DISCIPLINE OF STUDY AS APPLIED TO SIGNIFICANT ISSUES AND/OR PROBLEMS (SLO #2).
- Contrast historical campaign communication with contemporary examples.
- Distinguish between quantitative and qualitative theoretical approaches in research of political communication.
- Analyze the critical process by differentiating between “maxims” that guide critical invention.
- Compare and contrast different rhetorical approaches. Analyze contemporary pieces of rhetorical criticism and consider applications for current political messages.
- Analyze reasoning processes to evaluate issues, value judgments or conclusions that determine the quality, validity, and/or reliability of information.
- Construct an accurate and/or logical interpretation of reasoning while applying a framework of analytic concepts.
- Explain the importance of the study of political campaign communication in the broader picture of society.
- ACTIVELY ENGAGE IN INTELLECTUAL INQUIRY BEYOND THAT REQUIRED IN ORDER TO PASS A COURSE OF STUDY (SLO #3).
- Apply information and resources necessary to develop academically and personally.
- Utilize skills from one’s “academic tool kit” including time management, study skills, etc.
- RECOGNIZE THE ETHICAL DIMENSIONS OF DECISIONS AND ACTIONS (SLO #4).
- Demonstrate the ability to engage in ethical reasoning necessary to exercise responsibility as an ethical individual, professional, local and global citizen.
- ARTICULATE AN AWARENESS OF A VARIETY OF PERSPECTIVES WITHIN A DISCIPLINE AND THE RELEVANCE OF THESE PERSPECTIVES TO ONE’S OWN LIFE (SLO #5).
COMM 482 Honors Seminar: Persuasion within Social Issues

- Collect and critically evaluate media messages. Focusing on news mediums (e.g., television, radio, newspapers, the Internet), assess the role of the media and its impact on campaign communication.
- Contrast and assess the effectiveness of candidate messages. Construct rhetorical visions expressed in the campaign communication of presidential (and possibly other) candidates.
- Debate the presidential debates. Analyze the presidential candidates’ positions on political issues and performance effectiveness.
- Assess voter reaction to the political debates and other forms of campaign communication. Select common themes communicated in focus groups research as a way to interpret public opinion.
- Design and construct a critical paper evaluating some aspect of political campaign communication.
- Consider the implications of writing for an academic audience.

This seminar-style course will introduce students to the fundamental theories and techniques of persuasion as they occur in various communication contexts, including commercial, interpersonal, public and mass media. A series of writing assignments will focus on the skills of critical thinking, persuasion, and the sophistication of argumentative essay skills. Essays of advanced composition shall be evaluated for their quality in both critical thinking and composition. The writing assignments will apply theoretical models of critical thinking and communication studies to rhetoric, examining message production, analyzing messages, and exploring the fields of electronic and print media, advertising (product campaign), political campaign strategy, and ideological campaign techniques for mass communication. Students explore ethical considerations of persuasive communication, learn about types of reasoning, and identify fallacious arguments as they occur in persuasion. Students will focus on the design and organization of persuasive messages within a speech format for an individual or group presentations for a live audience. This course offers honors students the opportunity to study, critique, discuss and present advanced topics to focus on the impact of persuasive attempts within ethical, social and political issues. Access to a computer with online capabilities may be required and computer access is available on campus. Enrollment is limited to Honors Program students. Details about the Honors Program can be found in the front of the Catalog and on the CRC website. As COMM 315, Persuasion, has a similar basis as this Honors course, this course is not open to a student that has received credit for COMM 315, Persuasion. This course is the same as HONOR 341, and only one may be taken for credit.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- COMPOSE IDEAS CLEARLY IN EFFECTIVE, APPROPRIATE AND WELL-ORGANIZED WRITTEN MESSAGES (SLO #1).
- Use advanced lower-division composition techniques that address essay structure, continuity, emphasis and subtlety, elements of style, grammar as stylistic technique, audience, and persuasive essay writing.
- Apply the advanced use of clarity (agent-action-goal) and coherence (concentration, focus, maintenance, clear orientation and subject control), concision and emphasis to develop writing skills appropriate for a sophisticated style of English.
- Compose arguments cogently in a number of modes, including but not limited to making proposals, providing evaluation, and explanation of positions and the existence of causal and/or correlation relationships.
- Design and organize persuasive messages within a speech format for an individual or group presentations for a live audience.
- ANALYZE AND FORMULATE CRITICAL THINKING WITHIN THE EVIDENCE AND REASONING OF SPOKEN AND WRITTEN MESSAGES (SLO #2).
- Identify, review, and utilize methods of persuasion for messages designed within a specific content issue or arena, such as a series of public service announcements for a social issue (such as anti-drug messages, or environmental green issues, or human civil rights, etc.), and/or political campaign or public office speeches, and other website or multimedia presentations.
- Understand the nature of critical thinking and quality composition.
- Apply the theoretical foundations for argument analysis, persuasion and essay construction of induction, deduction, analysis, synthesis, sound reasoning, and fallacy identification within the readings and writing of persuasive communication messages.
• Analyze and respond to competing points of views to determine the stances of the authors on the subjects as well to express individual stances logically and effectively.

• ASSESS INDIVIDUAL RESPONSIBILITY WITHIN ONE’S ABILITY TO INFLUENCE ETHICAL, EFFECTIVE AND APPROPRIATE COMMUNICATION AMONG DIVERSE SETTINGS AND PEOPLE (SLO #3).

• Employ critical thinking and writing skills in reflection about multi-cultural diversity issues, ethics, and politics in terms of the effectiveness and appropriateness of persuasive communication.

• DEFINE AND IDENTIFY VARIOUS THEORETICAL PERSPECTIVES ACROSS THE DISCIPLINE OF COMMUNICATION STUDIES (SLO #4).

• Analyze persuasive messages, including identifying and explaining the persuasive components or strategies used to effect change.

• Identify persuasive strategies and their theoretical foundations as they exist in a variety of communication contexts (e.g., interpersonal compliance-gaining, commercial advertising, political rhetoric and campaigning, public speaking, mass media, etc).

• Differentiate between humanistic and social science approaches to persuasion.

• Determine and evaluate criteria for the development of successful persuasive campaigns, focusing on a specific set of message designs in a specified content, such as a series of public service announcements in multimedia presentation, website information, published and/or transcribed speeches, and/or publication of printed materials.

• Define and identify various theoretical perspectives across the discipline of Communication Studies within written and verbal messages prepared to present analysis of persuasive techniques and strategies to the other students participating in an Honors seminar-style format.

COMM 494 Topics in Communication

| Units: | 0.5 - 4 |
| Hours: | 9 - 72 hours LEC |
| Prerequisite: | None. |
| Transferable: | CSU |
| Catalog Date: | June 1, 2020 |

This course is designed to allow a student to focus on a set of contemporary communication concepts or theoretical frameworks in communication studies. Possible options for topics may include, but are not limited to: extemporaneous speaking, intercultural communication in the workplace or diverse settings, stages within interpersonal relationships, communication in the classroom, conflict, principles of visual communication, nonverbal communication, readers' theater, rhetorical criticism, parliamentary procedure and decision making techniques. Consult class schedule for specific topics offered.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• Actively engage in intellectual inquiry beyond that required in order to pass a course of study (SLO #1; College Wide Learning Outcome – Area 4).

• Discuss and apply a study plan (that can be accomplished within one semester term) with a supervising instructor qualified within the discipline of Communication Studies.

• Use information resources to gather discipline-specific information.

• Utilize modes of analysis and critical thinking to apply theoretical perspectives and/or concepts in communication studies to issues and/or educational activities pertaining to a specific topic (SLO #2; PSLO #4; and College Wide Learning Outcome – Area 3).

• Analyze and apply the knowledge, skills and experience that are involved in the study of a topic of communication studies to theoretical perspectives and/or concepts in the major discipline of study.

• Express ideas clearly in effective, appropriate and well-organized written messages (SLO #3; PSLO #3).

• Construct short answer essays and/or written analysis that synthesize material from separate topic areas of the course.

• Compose short answer essays and/or written reporting with correct grammar, sentence structure, and continuity.

COMM 495 Independent Studies in Communication
An independent studies project involves an individual student or small group of students in study, research, or activities beyond the scope of regularly offered courses. See the current catalog section of "Special Studies" for full details of Independent Studies.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- **SLO #1:** Actively engage in intellectual inquiry beyond that required in order to pass a course of study (College Wide Learning Outcome – Area 4).
- Discuss and outline a proposal of study (that can be accomplished within one semester term) with a supervising instructor qualified within the discipline.
- Design an independent study (to be completed individually or by collaboration of a small group) to foster special knowledge, skills, and experience that are not available in any one regularly scheduled course.
- Use information resources to gather discipline-specific information.
- **SLO #2:** Utilize modes of analysis and critical thinking to apply theoretical perspectives and/or concepts in the major discipline of study to significant problems and/or educational activities (College Wide Learning Outcome – Area 3).
- Analyze and apply the knowledge, skills, and experience that are involved in the independent study to theoretical perspectives and/or concepts in the major discipline of study.
- Explain the importance of the major discipline of study in the broader picture of society.
- **SLO #3:** Communicate a complex understanding of content matter of the major discipline of study (College Wide Outcome – Area 3).
- Demonstrate competence in the skills essential to mastery of the major discipline of study that are necessary to accomplish the independent study.
- **SLO #4:** Identify personal goals and pursue these goals effectively (College Wide Outcome – Area 4).
- Utilize skills from the “academic tool kit” including time management, study skills, etc., to accomplish the independent study within one semester term.

**COMM 498 Work Experience in Communication and Media Studies**

| Units: | 1 - 4 |
| Hours: | 60 - 300 hours LAB |
| Prerequisites: | None. |
| Enrollment Limitation: | Students must be in a paid or unpaid internship, volunteer position or job related to career goals. |
| Transferable: | CSU |
| General Education: | AA/AS Area III(b) |
| Catalog Date: | June 1, 2020 |

This course provides students with opportunities to develop marketable skills in preparation for employment in their major field of study or advancement within their career. It is designed for students interested in work experience and/or internships in transfer level degree occupational programs. Course content includes understanding the application of education to the workforce; completion of required forms which document the student’s progress and hours spent at the work site; and developing workplace skills and competencies. Appropriate level learning objectives are established by the student and the employer. During the semester, the student is required to participate in a weekly orientation and 75 hours of related paid work experience, or 60 hours of unpaid work experience for one unit. An additional 75 or 60 hours of related work experience is required for each additional unit. Work Experience may be taken for a total of 16 units when there are new or expanded learning objectives. Only one Work Experience course may be taken per semester.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- **DEMONSTRATE AN UNDERSTANDING AND APPLICATION OF PROFESSIONAL WORKPLACE BEHAVIOR IN A FIELD OF STUDY RELATED ONE’S CAREER (SLO 1)**
- Understand the effects time, stress, and organizational management have on performance.
- Demonstrate an understanding of consistently practicing ethics and confidentiality in a workplace.
- Demonstrate an understanding of basic communication tools and their appropriate use.
- Demonstrate an understanding of workplace etiquette.
- DESCRIBE THE CAREER/LIFE PLANNING PROCESS AND RELATE ITS RELEVANCY TO ONE’S CAREER.(SLO 2)
- Link personal goals to long term achievement.
- Display an understanding of creating a professional first impression.
- Understand how networking is a powerful job search tool.
- Understand necessary elements of a résumé.
- Understand the importance of interview preparation.
- Identify how continual learning increases career success.
- DEMONSTRATE APPLICATION OF INDUSTRY KNOWLEDGE AND THEORETICAL CONCEPTS AS WRITTEN IN LEARNING OBJECTIVES IN PARTNERSHIP WITH THE EMPLOYER WORK SITE SUPERVISOR.(SLO 3)
Computer Information Science | Cosumnes River College

CRC computer information science programs include study in computer programming, information systems security, computer networking, management information systems, and computer applications. A wide range of degree and certificate programs are available to meet the needs of transfer students who plan to complete a four-year degree as well as career/technical students who plan to enter the workforce.

Dean

 (916) 691-7359

 Willial3@crc.losrios.edu (mailto:Willial3@crc.losrios.edu)

Associate Degrees

A.S. in CIS - Computer Science

This program provides a foundation in algorithm development, programming techniques, data structures, and structured problem solving.

This A.S. Degree would be appropriate for a student planning to transfer to the California State University (CSU) or the University of California (UC) to major in either Computer Science or Computer Engineering.

It is critical that transfer students regularly meet with a CRC counselor and the CRC programming faculty to select specific CRC courses that match university degree requirements.

Catalog Date: June 1, 2020

Degree Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st Semester:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CISP 300</td>
<td>Algorithm Design/Problem Solving</td>
<td>3</td>
</tr>
<tr>
<td>2nd Semester:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CISP 360</td>
<td>Introduction to Structured Programming</td>
<td>4</td>
</tr>
<tr>
<td>3rd Semester:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CISP 400</td>
<td>Object Oriented Programming with C++</td>
<td>4</td>
</tr>
<tr>
<td>Spring Semester only:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CISP 310</td>
<td>Assembly Language Programming for Microcomputers</td>
<td>4</td>
</tr>
<tr>
<td>4th Semester:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CISP 430</td>
<td>Data Structures</td>
<td>4</td>
</tr>
<tr>
<td>Fall Semester in odd-numbered years only:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CISP 440</td>
<td>Discrete Structures for Computer Science</td>
<td>3</td>
</tr>
<tr>
<td>Total Units:</td>
<td></td>
<td>22</td>
</tr>
</tbody>
</table>
The corequisite for this course can be applied to the CRC graduation requirements.

The CIS - Computer Science Associate in Science (A.S.) degree may be obtained by completion of the required program, plus general education requirements, plus sufficient electives to meet a 60-unit total. See CRC graduation requirements.

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- Redefine a complex problem into a sequential set of parts that can be translated into the language of programming logic.
- Design, write, test, and debug computer programs in a structured language, a low-level language, and an object-oriented language.
- Incorporate foundational data management concepts such as data structures within computer programs.

A.S. in CIS - Information Systems Security

This degree is designed to give students currently employed as an Information Technology (IT) Professional the additional skill sets necessary to work in this rapidly growing field.

HIGHLIGHTS:

* Hands-on experience in a state-of-the-art computer center
* Opportunities to work on specialized projects relating to computer information science, business and computer programming.
* Study in a field that has great employment opportunities and encompasses many careers.

NOTE TO TRANSFER STUDENTS: If you are interested in transferring to a four-year college or university to pursue a Bachelor's degree in this major, it is critical that you meet with a CRC counselor to select and plan the courses for your major. The courses that CRC requires for an Associate's degree in this major may be different from the requirements needed for the Bachelor's degree.

Catalog Date: June 1, 2020

Degree Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>CISC 310</td>
<td>Introduction to Computer Information Science</td>
<td>3</td>
</tr>
<tr>
<td>CISC 498</td>
<td>Work Experience in Computer Information Science - Core</td>
<td>1-4</td>
</tr>
<tr>
<td>CISN 300</td>
<td>Network Systems Administration</td>
<td>3</td>
</tr>
<tr>
<td>CISN 304</td>
<td>Networking Technologies</td>
<td>3</td>
</tr>
<tr>
<td>CISS 310</td>
<td>Network Security Fundamentals</td>
<td>3</td>
</tr>
<tr>
<td>CISS 320</td>
<td>Implementing Network Security and Counter Measures</td>
<td>3</td>
</tr>
<tr>
<td>CISS 330</td>
<td>Implementing Internet Security and Firewalls</td>
<td>3</td>
</tr>
<tr>
<td>CISS 341</td>
<td>Implementing Windows Operating System Security (3)</td>
<td>3</td>
</tr>
<tr>
<td>or CISS 342</td>
<td>Implementing Linux Operating System Security (3)</td>
<td>3</td>
</tr>
<tr>
<td>CISS 350</td>
<td>Disaster Recovery</td>
<td>3</td>
</tr>
<tr>
<td>CISS 356</td>
<td>Introduction to Information Assurance</td>
<td>3</td>
</tr>
<tr>
<td>CISS 360</td>
<td>Computer Forensics and Investigation</td>
<td>3</td>
</tr>
<tr>
<td>Total Units:</td>
<td></td>
<td>31-34</td>
</tr>
</tbody>
</table>

The CIS - Information Systems Security Associate in Science (A.S.) degree may be obtained by completion of the required program, plus general education requirements, plus sufficient electives to meet a 60-unit total. See CRC graduation requirements.

Student Learning Outcomes

Upon completion of this program, the student will be able to:
SLO #01: Evaluate the different types of access control methods used to secure a network, in particular authentication, authorization and audit.

SLO #02: Construct a Business Continuity and a Disaster Recovery Plan. These plans are used by an organization to resume partially or completely interrupted critical function(s) within a predetermined time after a disaster or temporary disruption.

SLO #03: Analyze the different types of cryptography used in computer and network security in such area as access control and information confidentiality.

SLO #04: Recognize some of the methods used to properly conduct a computer forensics investigation. This discussion should begin with a discussion on ethics.

SLO #05: Evaluate a firewall to prevent unauthorized access to a network or computer. Students will also learn how to allow access to key services while maintaining an organization's security.

SLO #06: Evaluate, implement and manage secure remote-access technologies, such as Internet Detection Systems (IDS), which are powerful tools used for identifying and responding to network- and host-based intrusions.

SLO #07: Distinguish the different ways to secure an operating system. Students will know how to maintain the integrity, authenticity, availability, and privacy of data.

SLO #08: Analyze risks to a network and be able to implement a workable security policy that protects information assets from potential intrusion, damage or theft.

Career Information

Computer Operator; Information Systems Security Specialist; Computer Systems Specialist; Computer Technician

A.S. in CIS - Information Technology

This degree allows students to acquire basic core Information Technology competencies that will prepare them for a career in Computer Networking, Cybersecurity, and related fields.

Catalog Date: June 1, 2020

Degree Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>CISC 310</td>
<td>Introduction to Computer Information Science</td>
<td>3</td>
</tr>
<tr>
<td>CISC 360</td>
<td>Information &amp; Communication Technology Essentials (A+)</td>
<td>4</td>
</tr>
<tr>
<td>CISN 304</td>
<td>Networking Technologies (3)</td>
<td>3</td>
</tr>
<tr>
<td>CISP 370</td>
<td>Beginning Visual Basic (4)</td>
<td>4</td>
</tr>
<tr>
<td>or CISP 360</td>
<td>Introduction to Structured Programming (4)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>A minimum of 6 units from the following:</td>
<td>6</td>
</tr>
<tr>
<td>CISN 300</td>
<td>Network Systems Administration (3)</td>
<td></td>
</tr>
<tr>
<td>CISP 351</td>
<td>Introduction to Relational Database Design and SQL (3)</td>
<td></td>
</tr>
<tr>
<td>CISS 310</td>
<td>Network Security Fundamentals (3)</td>
<td></td>
</tr>
<tr>
<td>CISS 356</td>
<td>Introduction to Information Assurance (3)</td>
<td></td>
</tr>
<tr>
<td>CISS 360</td>
<td>Computer Forensics and Investigation (3)</td>
<td></td>
</tr>
<tr>
<td>BUS 310</td>
<td>Business Communications (3)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>A minimum of 4 units from the following:</td>
<td>4</td>
</tr>
<tr>
<td>STAT 300</td>
<td>Introduction to Probability and Statistics (4)</td>
<td></td>
</tr>
<tr>
<td>MATH 341</td>
<td>Calculus for Business and Economics (4)</td>
<td></td>
</tr>
<tr>
<td>MATH 343</td>
<td>Modern Business Mathematics (4)</td>
<td></td>
</tr>
<tr>
<td>MATH 400</td>
<td>Calculus I (5)</td>
<td></td>
</tr>
</tbody>
</table>
The CIS - Information Technology Associate in Science (A.S.) degree may be obtained by completion of the required program, plus general education requirements, plus sufficient electives to meet a 60-unit total. See CRC graduation requirements.

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- Apply fundamental knowledge of computing and the current use of technology techniques, skills, and tools necessary for the computing practice.
- Evaluate and solve business problems with technology solutions using qualitative and quantitative information.
- Assess user needs in the selection, creation, evaluation and administration of computer-based information systems.
- Demonstrate appreciation of the Information Technology career field and the need to be lifelong learners.

Career Information

The Associate's degree in Information Technology prepares students to either enter the workforce as an entry-level computer or network support technician or pursue a bachelor's degree in managing information systems. Several CSUs currently offer baccalaureate IT or CT programs, as do several private universities. More CSUs are already working on build upper division programs based on the recently approved IT Model Curriculum.

A.S. in CIS - Server Administrator

CRC computer information science programs include study in computer programming, information systems security, computer networking, management information systems, and computer applications. A wide range of degree and certificate programs are available to meet the needs of transfer students who plan to complete a four-year degree as well as career/technical students who plan to enter the work force. Several of the programs are designed to promote a career ladder from certificate to associate degree to university transfer. Other programs are designed to upgrade the skill set of working IT professionals. All program options are designed with advice from business and industry representatives and conform to industry standards. For more information, refer to specific information about each program in the pages that follow. Transfer students should see a counselor to develop an educational plan based upon the specific requirements of the transfer institution.

This degree is designed for networking professionals who want to manage the components of a network system, based on the Microsoft Windows platform and Microsoft server software, on an ongoing basis; monitor and optimize the components of a network system; and diagnose and resolve problems regarding the components of a network system.

HIGHLIGHTS:
* Hands-on experience in a state-of-the-art computer lab.
* Opportunities to work on specialized projects relating to computer information science, business and computer programming.
* Study in a field that has great employment opportunities and encompasses many careers.

GUIDELINES TO STUDENTS:
* Microsoft Certified Solutions Associate (MCSA) certification requires three Microsoft exams (70-410, 70-411 and 70-412), which are covered in this degree.
* It is recommended that students use their best judgment and talk to a counselor or a CIS instructor to help guide them with their selection of the appropriate courses for their personal and/or professional needs.

NOTES TO TRANSFER STUDENTS:
* If you are interested in transferring to a four-year college or university to pursue a bachelor’s degree in this or a related major, it is critical you meet with a CRC counselor to select the appropriate transfer courses for your particular major.
* Schools vary widely in terms of their graduation requirements.

Catalog Date: June 1, 2020

Degree Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>CISC 310</td>
<td>Introduction to Computer Information Science</td>
<td>3</td>
</tr>
<tr>
<td>CISC 360</td>
<td>Information &amp; Communication Technology Essentials (A+)</td>
<td>4</td>
</tr>
<tr>
<td>CISC 498</td>
<td>Work Experience in Computer Information Science - Core</td>
<td>1-4</td>
</tr>
<tr>
<td>COURSE CODE</td>
<td>COURSE TITLE</td>
<td>UNITS</td>
</tr>
<tr>
<td>-------------</td>
<td>-------------------------------------------------------</td>
<td>-------</td>
</tr>
<tr>
<td>CISN 300</td>
<td>Network Systems Administration</td>
<td>3</td>
</tr>
<tr>
<td>CISN 302</td>
<td>Intermediate Network Systems Administration</td>
<td>3</td>
</tr>
<tr>
<td>CISN 304</td>
<td>Networking Technologies</td>
<td>3</td>
</tr>
<tr>
<td>CISN 306</td>
<td>Advanced Network Systems Administration</td>
<td>3</td>
</tr>
<tr>
<td>CISP 370</td>
<td>Beginning Visual Basic</td>
<td>4</td>
</tr>
<tr>
<td>CISS 310</td>
<td>Network Security Fundamentals</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>A minimum of 9 units from the following:</td>
<td>9^1</td>
</tr>
<tr>
<td>CISN 301</td>
<td>Network Client Systems Administration (3)</td>
<td></td>
</tr>
<tr>
<td>CISN 303</td>
<td>Network Administration - Linux Server (3)</td>
<td></td>
</tr>
<tr>
<td>CISN 374</td>
<td>Messaging Server Administration (3)</td>
<td></td>
</tr>
<tr>
<td>CISN 378</td>
<td>Database Administration for Microsoft SQL Server (3)</td>
<td></td>
</tr>
<tr>
<td>CISS 342</td>
<td>Implementing Linux Operating System Security (3)</td>
<td></td>
</tr>
<tr>
<td>CISS 341</td>
<td>Implementing Windows Operating System Security (3)</td>
<td></td>
</tr>
<tr>
<td>CISS 350</td>
<td>Disaster Recovery (3)</td>
<td></td>
</tr>
<tr>
<td>CISS 360</td>
<td>Computer Forensics and Investigation (3)</td>
<td></td>
</tr>
<tr>
<td>Total Units:</td>
<td></td>
<td>36 - 39</td>
</tr>
</tbody>
</table>

^1 Students interested in Windows should take CISN 301, CISN 374, CISN 378 and CISS 341. Students interested in Linux should take CISN 303 and CISS 342. Students interested in security should take CISS 341 or 342, CISS 350 and CISS 360.

The CIS - Server Administrator Associate in Science (A.S.) degree may be obtained by completion of the required program, plus general education requirements, plus sufficient electives to meet a 60-unit total. See CRC graduation requirements.

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- PSLO #01: Manage, implement, and maintain the typically complex computing environment of medium- to large-sized companies
- PSLO #02: Manage and maintain a Windows server environment
- PSLO #03: Manage, implement, and maintain a Windows server network infrastructure
- PSLO #04: Develop the critical verbal, written, and quantitative skills needed to analyze complex issues
- PSLO #05: Develop an understanding of the basic concepts and major modes of inquiry used in a variety of disciplines
- PSLO #06: Develop a depth of understanding, including critical cognitive, psychomotor and affective skills, in this discipline
- PSLO #07: Make progress toward becoming engaged and self-reliant learners demonstrating habits of intellectual inquiry and striving toward their maximum potential
- PSLO #08: Become more prepared to contribute to a diverse democratic society with a pluralistic perspective

Career Information


A.S. in Management Information Systems
CRC's programs in CIS include study in computer programming, information systems security, computer networking, management information systems, and computer applications. A wide range of degree and certificate programs is available to meet the needs of transfer students who plan to complete a four-year degree as well as career/technical students who plan to enter the workforce. Several of the programs are designed to promote a career ladder from certificate to associate degree to university transfer. Other programs are designed to upgrade the skill set of working IT professionals. All program options are designed with advice from business and industry representatives and conform to industry standards. For more information, refer to specific information about each program in the pages that follow. Transfer students should see a counselor to develop an educational plan based upon the specific requirements of the transfer institution.

This program provides the basic skills necessary for a career in business, while allowing the student to select courses that fit individual needs and desires. This degree also meets some of CSU Sacramento's lower-division coursework for a BS in Business Administration with a Management Information Systems concentration.

**Highlights:**
* Hands-on experience in a state-of-the-art computer center
* Opportunities to work on specialized projects relating to computer information science, business and computer programming
* Study in a field that has great employment opportunities and encompasses many careers

**Note to Transfer Students:**
If you are interested in transferring to a four-year college or university to pursue a bachelor's degree in this major, it is critical that you meet with a CRC counselor to select and plan the courses for your major. Schools vary widely in terms of the required preparation. The courses that CRC requires for an Associate's degree in this major may be different from the requirements needed for the Bachelor's degree.

**Catalog Date:** June 1, 2020

**Degree Requirements**

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Business:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BUS 300</td>
<td>Introduction to Business</td>
<td>3</td>
</tr>
<tr>
<td>BUS 340</td>
<td>Business Law</td>
<td>3</td>
</tr>
<tr>
<td><strong>Accounting:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ACCT 301</td>
<td>Financial Accounting</td>
<td>4</td>
</tr>
<tr>
<td>ACCT 311</td>
<td>Managerial Accounting</td>
<td>4</td>
</tr>
<tr>
<td><strong>Economics:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ECON 302</td>
<td>Principles of Macroeconomics</td>
<td>3</td>
</tr>
<tr>
<td>ECON 304</td>
<td>Principles of Microeconomics</td>
<td>3</td>
</tr>
<tr>
<td><strong>Mathematics:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MATH 341</td>
<td>Calculus for Business and Economics (4)</td>
<td>4 - 5¹</td>
</tr>
<tr>
<td>or MATH 343</td>
<td>Modern Business Mathematics (4)</td>
<td></td>
</tr>
<tr>
<td>or MATH 355</td>
<td>Calculus for Biology and Medicine I (4)</td>
<td></td>
</tr>
<tr>
<td>or MATH 400</td>
<td>Calculus I (5)</td>
<td></td>
</tr>
<tr>
<td>STAT 300</td>
<td>Introduction to Probability and Statistics</td>
<td>4</td>
</tr>
<tr>
<td>CISA 318</td>
<td>Exploring Spreadsheet Software (1)</td>
<td>1 - 2</td>
</tr>
<tr>
<td>or CISA 315</td>
<td>Introduction to Electronic Spreadsheets (2)</td>
<td></td>
</tr>
<tr>
<td>CISA 308</td>
<td>Exploring Word Processing Software (1)</td>
<td>1 - 4</td>
</tr>
<tr>
<td>or [ CISA 305</td>
<td>Beginning Word Processing (2)</td>
<td></td>
</tr>
<tr>
<td>and CISA 340</td>
<td>Presentation Graphics (2)</td>
<td></td>
</tr>
<tr>
<td><strong>Computer Information Science:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CISC 310</td>
<td>Introduction to Computer Information Science</td>
<td>3</td>
</tr>
<tr>
<td><strong>Lower Division Requirement for MIS Concentration:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>COURSE CODE</td>
<td>COURSE TITLE</td>
<td>UNITS</td>
</tr>
<tr>
<td>-------------</td>
<td>-----------------------------------------------------</td>
<td>-------</td>
</tr>
<tr>
<td>CISP 370</td>
<td>Beginning Visual Basic</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td><strong>Total Units:</strong></td>
<td><strong>37 - 42</strong></td>
</tr>
</tbody>
</table>

1MATH 341 is recommended, but the other courses listed in this group will also meet the second MATH course requirement for Business Administration majors (all Concentrations, including Management Information Systems) transferring to CSU Sacramento.

The Management Information Systems Associate in Science (A.S.) degree may be obtained by completion of the required program, plus general education requirements, plus sufficient electives to meet a 60-unit total. See CRC graduation requirements.

**Student Learning Outcomes**

Upon completion of this program, the student will be able to:

- Apply information and communication technology concepts to business problems (SLO #01).
- Demonstrate in-depth knowledge of common office computerized application software and operating systems (SLO #02).
- Create business documents such as letters, spreadsheets, presentations, publications and reports using appropriate business writing style, document appearance, grammar usage, and writing mechanics (SLO #03).
- Analyze the fundamentals of an operating system. Examine the relationship of the operating system to other applications programs (SLO #04).
- Analyze the effects of malware on an application and an operating system (SLO #05).
- Apply accounting concepts and principles in making decisions about business operations (SLO #06).
- Apply accounting concepts for costs used in manufacturing and service operations and analyze the behavior of the cost types (SLO #07).
- Apply economic concepts and principles in making decisions about business operations (SLO #08).
- Apply basic legal concepts and principles in various business environments (SLO #09).
- Propose solutions to basic business problems while applying critical thinking methods (SLO #10).
- Apply mathematics in a financial situation (SLO #11).
- Apply statistical methods to make predictions, and draw conclusions to make a hypothesis (SLO #12).

**Career Information**

Systems Analyst; Applications Software Specialist; Entry-level Programmer; Small Business Manager

**A.S. in Web Developer**

Web Developers are proficient at creating Web site structure and interactivity. The Web Developer degree requires students to design, code, and modify websites from layout to function, in accordance to a client’s specification. Students will work with a variety of tools, environments, and applications to learn and practice website programming, scripting languages, and interacting with databases.

**Catalog Date:** June 1, 2020

**Degree Requirements**

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>CISW 300</td>
<td>Web Publishing</td>
<td>3</td>
</tr>
<tr>
<td>CISW 304</td>
<td>Cascading Style Sheets</td>
<td>2</td>
</tr>
<tr>
<td>CISC 323</td>
<td>Linux Operating System</td>
<td>1</td>
</tr>
<tr>
<td>CISP 353</td>
<td>Application Development in a Client Server Environment</td>
<td>3</td>
</tr>
<tr>
<td>CISW 321</td>
<td>Web Site Development using Dreamweaver</td>
<td>3</td>
</tr>
</tbody>
</table>
### Course List

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>CISW 350</td>
<td>Imaging for the Web</td>
<td>1</td>
</tr>
<tr>
<td>CISW 400</td>
<td>Client-side Web Scripting</td>
<td>4</td>
</tr>
<tr>
<td>CISW 410</td>
<td>Middleware Web Scripting</td>
<td>4</td>
</tr>
<tr>
<td>CISW 440</td>
<td>XML: Introduction to Extensible Markup Language</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>A minimum of 5 units from the following:</td>
<td></td>
</tr>
<tr>
<td>CISC 324</td>
<td>Intermediate Linux Operating System (1)</td>
<td>5</td>
</tr>
<tr>
<td>CISW 308</td>
<td>Mobile Web Development (2)</td>
<td></td>
</tr>
<tr>
<td>CISW 310</td>
<td>Advanced Web Publishing (4)</td>
<td></td>
</tr>
<tr>
<td>CISW 355</td>
<td>Web Imaging Projects (2)</td>
<td></td>
</tr>
<tr>
<td>CISW 402</td>
<td>Intermediate JavaScript (2)</td>
<td></td>
</tr>
<tr>
<td>CISP 350</td>
<td>Database Programming (3)</td>
<td></td>
</tr>
<tr>
<td>Total Units:</td>
<td></td>
<td>28</td>
</tr>
</tbody>
</table>

The Web Developer Associate in Science (A.S.) degree may be obtained by completion of the required program, plus general education requirements, plus sufficient electives to meet a 60-unit total. See CRC graduation requirements.

### Student Learning Outcomes

Upon completion of this program, the student will be able to:

- Manage a multi-level Web site hosted on a Web server.
- Utilize multiple programs simultaneously in order to develop Web sites.
- Recommend Web scripting language, current markup language or Web authoring software, and cascading style sheets to develop complex Web sites that are uploaded via File Transfer Protocol (FTP) to a Web server.
- Research and implement current, valid World Wide Web Consortium (W3C) standards including technical recommendations for markup languages, and other recommendations as they are introduced.
- Plan a structured approach to Web site development that identifies the information dissemination needs of a client and organizes the content effectively and efficiently in order to communicate to an identified audience; then develop and implement an appropriate Web solution.
- Utilize client-side scripting in order to manipulate interactive objects like navigation bars, forms, rollovers, other event handling, and the control of windows, frames, and/or layers.
- Develop Web solutions that include form validation and processing, server-side programming, and database-driven Web development.
- Demonstrate proficiency in the process of Web project management on a real-world Web site including design specification, research, production, modification, time estimation, and presentation.
- Write code in a currently used Web scripting language.

### Career Information


### Certificates of Achievement

#### Business Information Worker Certificate

The Business Information Worker Certificate is designed to prepare students for entry-level office and administrative support in a variety of organizations.

**Catalog Date:** June 1, 2020
Certificate Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUSTEC 302</td>
<td>Computer-Keyboarding</td>
<td>2</td>
</tr>
<tr>
<td>BUSTEC 110</td>
<td>Business Procedures for Professional Success</td>
<td>3</td>
</tr>
<tr>
<td>BUSTEC 120</td>
<td>Skills for Today's Office</td>
<td>1</td>
</tr>
<tr>
<td>CISC 308</td>
<td>Exploring Computer Environments and the Internet</td>
<td>1</td>
</tr>
<tr>
<td>CISA 305</td>
<td>Beginning Word Processing</td>
<td>2</td>
</tr>
<tr>
<td>CISA 315</td>
<td>Introduction to Electronic Spreadsheets</td>
<td>2</td>
</tr>
<tr>
<td>BUS 100</td>
<td>English for the Professional</td>
<td>3</td>
</tr>
<tr>
<td>CISC 310</td>
<td>Introduction to Computer Information Science</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Total Units:</strong></td>
<td><strong>17</strong></td>
</tr>
</tbody>
</table>

Enrollment Eligibility

To be eligible for enrollment in the program, the student must meet the following criteria:

- (None)

Enrollment Process

Eligible students are selected for the program according to the following steps:

- (None)

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- PSLO #1. DEMONSTRATE COMMON OFFICE APPLICATIONS SKILLS.
  - Diagram and differentiate basic computer terminology and apply it to communication.
  - Construct and modify solutions to simple personal, educational or business needs applying use of office workplace computer programs.
  - Design, diagram, and construct simple file folder structure on local storage, and access files for upload/download to/from online tools.
  - Formulate expressions and construct logic comparisons using proper symbols and syntax in workplace computer programs.
  - Create and organize various types of files using various workplace computer programs.
  - Construct projects efficiently generating solutions using various workplace computer programs and shortcuts.
  - Demonstrate the mechanics and use of word processing software to organize and present data in a multicolumn, multipage newsletter format including banner, bordering, tables, text effects and embedded graphics.
  - Demonstrate appropriate pagination and word processing features to apply a formal (MLA/APA/Chicago) style of documentation in the creation of a multi-section research paper or report with Table of Contents, Index, and Bibliography.
  - Design and construct a form using multiple content controls.
  - Apply advanced Excel tools such as pivot tables, pivot charts, and templates to workbooks.
  - Create audience centric business documents to enhance readability.
  - PSLO #2. DEMONSTRATE COMMON OFFICE ADMINISTRATION SKILLS.
    - Integrate the features of working with tasks and schedules to organize both professional and personal information.
- Design and assess plans for backup and maintenance of Outlook files and information.
- Analyze trends in technologies and evaluate their effects on organizational data analysis.
- PSLO #3. DEMONSTRATE BASIC OFFICE COMMUNICATION SKILLS.
- Identify techniques to send, receive and manage email messages.
- Analyze business situations and determine appropriate methods to deliver negative and positive messages.
- PSLO #4. EXAMINE CUSTOMER SERVICE NEEDS AND REQUIREMENTS.
- Explain the elements of a service culture.
- Analyze strategies for promoting a positive service culture.
- Analyze the extent to which customer service is facilitated by the effective use of technology.

Career Information

Students who successfully complete the Business Information Worker Certificate are prepared for entry-level positions in general office environments in a variety of fields.

CIS - Computer Programmer-SQL Certificate

This certificate is designed for students who have completed the Database Analyst-SQL Certificate and aspire to be entry level programmers using the Structured Query Language (SQL). This is the second in a series of three certificate programs in Relational Database Management Systems. Courses taken towards the completion of the Database Analyst-SQL Certificate may also be used towards this certificate.

Catalog Date: June 1, 2020

Certificate Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>CISC 310</td>
<td>Introduction to Computer Information Science</td>
<td>3</td>
</tr>
<tr>
<td>CISC 323</td>
<td>Linux Operating System</td>
<td>1</td>
</tr>
<tr>
<td>CISC 324</td>
<td>Intermediate Linux Operating System</td>
<td>1</td>
</tr>
<tr>
<td>CISP 300</td>
<td>Algorithm Design/Problem Solving</td>
<td>3</td>
</tr>
<tr>
<td>CISP 351</td>
<td>Introduction to Relational Database Design and SQL</td>
<td>3</td>
</tr>
<tr>
<td>CISP 352</td>
<td>Intermediate SQL</td>
<td>3</td>
</tr>
<tr>
<td>CISP 353</td>
<td>Application Development in a Client Server Environment</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>A minimum of 2 units from the following:</td>
<td>2</td>
</tr>
<tr>
<td>CISP 370</td>
<td>Beginning Visual Basic (4)</td>
<td></td>
</tr>
<tr>
<td>or CISA 320</td>
<td>Introduction to Database Management (1)</td>
<td></td>
</tr>
<tr>
<td>or CISA 321</td>
<td>Intermediate Database Management (1)</td>
<td></td>
</tr>
<tr>
<td>Total Units:</td>
<td></td>
<td>19</td>
</tr>
</tbody>
</table>

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- List and describe the hardware components of a computer system and differentiate among system and application software.
- Describe and assess the relationship of operating systems to database file management.
- Devise computerized solutions in the development of databases by applying a solid foundation of algorithmic principles.
• compare and contrast hierarchical, network, and relational databases.
• design, create, and administer relational databases
• design and develop tables, forms, queries, and reports using SQL.

Career Information
Computer Operator; Programmer; Computer Systems Specialist

CIS - Database Analyst-SQL Certificate
This certificate is designed for beginning students as well as technical professionals who aspire to design, create, or administer relational databases and create client applications. Successful students will be prepared to apply for entry-level positions for industry such as business analyst. The Database Analyst Certificate is the first in a series of three certificate programs designed for the entry-level student and business user.

Catalog Date: June 1, 2020

Certificate Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>CISC 310</td>
<td>Introduction to Computer Information Science</td>
<td>3</td>
</tr>
<tr>
<td>CISC 323</td>
<td>Linux Operating System</td>
<td>1</td>
</tr>
<tr>
<td>CISC 324</td>
<td>Intermediate Linux Operating System</td>
<td>1</td>
</tr>
<tr>
<td>CISP 300</td>
<td>Algorithm Design/Problem Solving</td>
<td>3</td>
</tr>
<tr>
<td>CISP 351</td>
<td>Introduction to Relational Database Design and SQL</td>
<td>3</td>
</tr>
<tr>
<td>CISP 352</td>
<td>Intermediate SQL</td>
<td>3</td>
</tr>
<tr>
<td>Total Units:</td>
<td></td>
<td>14</td>
</tr>
</tbody>
</table>

Student Learning Outcomes
Upon completion of this program, the student will be able to:
• list the hardware components of a computer system and differentiate among system and application software.
• describe the relationship of operating systems to database file management.
• devise computerized solutions in the development of databases by applying a solid foundation of algorithmic principles.
• compare and contrast hierarchical, network, and relational databases.
• design, create, and administer relational databases.
• create client applications using structured query language (SQL).

CIS - Database Design Certificate
This certificate aims at preparing the students to understand the entire design, programming methodology and life cycle of databases. This certificate is designed for the student who requires programming skills in Relational Database Management Systems (RDBMS) and Structured Query Language (SQL) techniques using ORACLE, SQLServer and or Microsoft Access.

Catalog Date: June 1, 2020

Certificate Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>CISP 351</td>
<td>Introduction to Relational Database Design and SQL</td>
</tr>
<tr>
<td>CISP 352</td>
<td>Intermediate SQL</td>
</tr>
</tbody>
</table>
CISA 320 Introduction to Database Management 1
CISA 321 Intermediate Database Management 1
CISP 350 Database Programming 3
CISP 356 Relational Database Design and Information Retrieval 3
A minimum of 4 units from the following: 4
CISP 400 Object Oriented Programming with C++ (4)
or CISP 370 Beginning Visual Basic (4)
or CISP 360 Introduction to Structured Programming (4)
or CISP 300 Algorithm Design/Problem Solving (3)
or CISC 498 Work Experience in Computer Information Science - Core (1 - 4)
A minimum of 4 units from the following: 4
CISW 300 Web Publishing (3)
or CISW 400 Client-side Web Scripting (4)
or CISW 410 Middleware Web Scripting (4)
or CISC 306 Introduction to Web Page Creation (1)
or CISC 305 Introduction to the Internet (1)
Total Units: 16

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- **SLO# 1:** Describe relational database technologies for desktop, enterprise and Internet platforms.
- **SLO# 2:** Analyze and employ relational database technologies to solve common business problems using standard database principles and practices.
- **SLO# 3:** Explain and discuss database theory and principles.
- **SLO# 4:** Select Entity-Relationship diagrams to solve problems related to database design.
- **SLO# 4:** Devise computerized solutions in the development of databases by applying a solid foundation of algorithmic principles and SQL.
- **SLO# 5:** Apply techniques of Structured Query Language Programming to solve problems related to information retrieval from relational databases.
- **SLO# 5:** Evaluate proposed database design solutions and create relational databases to meet stated objections

Career Information

Computer Operator; Applications Software Specialist; Programmer; Data Entry Specialist; Database Designer; Database Developer.

CIS - Information Systems Security Certificate

This certificate is designed to give students currently employed as an Information Technology (IT) professional or those currently working on their Networking degree the additional skill sets necessary to work in this rapidly growing field.

**HIGHLIGHTS:**
* Hands-on experience in a state-of-the-art computer center.
* Opportunities to work on specialized projects relating to computer information science, business and computer programming.
* Study in a field that has great employment opportunities and encompasses many careers.

**Catalog Date:** June 1, 2020
## Certificate Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>CISC 310</td>
<td>Introduction to Computer Information Science</td>
<td>3</td>
</tr>
<tr>
<td>CISN 300</td>
<td>Network Systems Administration</td>
<td>3</td>
</tr>
<tr>
<td>CISN 304</td>
<td>Networking Technologies</td>
<td>3</td>
</tr>
<tr>
<td>CISS 310</td>
<td>Network Security Fundamentals</td>
<td>3</td>
</tr>
<tr>
<td>CISS 320</td>
<td>Implementing Network Security and Counter Measures</td>
<td>3</td>
</tr>
<tr>
<td>CISS 330</td>
<td>Implementing Internet Security and Firewalls</td>
<td>3</td>
</tr>
<tr>
<td>CISS 356</td>
<td>Introduction to Information Assurance</td>
<td>3</td>
</tr>
<tr>
<td>CISS 341</td>
<td>Implementing Windows Operating System Security (3)</td>
<td>3</td>
</tr>
<tr>
<td>or CISS 342</td>
<td>Implementing Linux Operating System Security (3)</td>
<td>3</td>
</tr>
<tr>
<td>or CISS 350</td>
<td>Disaster Recovery (3)</td>
<td>3</td>
</tr>
<tr>
<td>or CISS 360</td>
<td>Computer Forensics and Investigation (3)</td>
<td>3</td>
</tr>
<tr>
<td>Total Units:</td>
<td></td>
<td>24</td>
</tr>
</tbody>
</table>

### Student Learning Outcomes

Upon completion of this program, the student will be able to:

- **SLO #01:** Evaluate the different types of access control methods in particular authentication, authorization, and audit.
- **SLO #02:** Configure a firewall to prevent unauthorized access to a network or computer. Students will also learn how to allow access to key services while maintaining an organization's security.
- **SLO #03:** Evaluate, implement and manage secure remote-access technologies, such as Internet Detection Systems (IDS), which are powerful tools used for identifying and responding to network- and host-based intrusions.
- **SLO #04:** Critique the different ways to secure an operating system. Students will learn how to maintain the integrity, authenticity, availability, and privacy of data.
- **SLO #05:** Analyze risks to a network and be able to implement a workable security policy that protects information assets from potential intrusion, damage or theft.

### Career Information

Information Security Systems Specialist; Computer Technician; Network Administrator; Network Systems Engineer—Windows; Internet Technician

### CIS - Linux Systems Administrator Certificate

This certificate provides an introductory certification for students, who are interested in Linux. This certificate allows the Linux Professional the opportunity of honing their skills on basic Linux competencies encountered with a home or small business network. Students will start by understanding the basics surrounding a successful installation and configuration of a Linux server. Further courses will provide in-depth knowledge of command-line as well as other tools needed for successful daily system administration. Finally, the needed skill-sets to provide security for a Linux-based computer in a networked environment will be emphasized. This certificate will prepare students for the SAIR Level One Certified Linux Administrator certificate.

**Guideline To Students:** SAIR candidates on the Level One Certified Linux Administrator track are required to satisfy four certification exams.

Take these courses for these Level One Certified Linux Administrator skill sets:

- CISN 300 (Linux) - Linux Installation and Configuration
- CISN 302 (Linux) - Linux System Administration
- CISN 303 - Linux Networking
- CISS 342 - Linux Security, Privacy and Ethics
Highlights:
* Hands-on experience in a state-of-the-art computer center
* Opportunities to work on specialized projects relating to computer information science, business and computer programming.
* Study in a field that has great employment opportunities and encompasses many careers.

**Catalog Date:** June 1, 2020

Certificate Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>CISC 323</td>
<td>Linux Operating System</td>
<td>1</td>
</tr>
<tr>
<td>CISC 324</td>
<td>Intermediate Linux Operating System</td>
<td>1</td>
</tr>
<tr>
<td>CISC 356</td>
<td>Introduction to Local Area Networks</td>
<td>1.5</td>
</tr>
<tr>
<td>CISN 300</td>
<td>Network Systems Administration</td>
<td>3</td>
</tr>
<tr>
<td>CISN 302</td>
<td>Intermediate Network Systems Administration</td>
<td>3</td>
</tr>
<tr>
<td>CISN 303</td>
<td>Network Administration - Linux Server</td>
<td>3</td>
</tr>
<tr>
<td>CISS 342</td>
<td>Implementing Linux Operating System Security</td>
<td>3</td>
</tr>
<tr>
<td>Total Units:</td>
<td></td>
<td>15.5</td>
</tr>
</tbody>
</table>

1\(^{(Linux)}\)

2\(^{(Linux)}\)

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- SLO #01: Understand the concepts behind free software, run levels, daemons, the kernel, basic networking and devices.
- SLO #02: Install the operating system and configure aspects of it (hard drive, X Window, etc.). Know how the startup and shutdown function works, as well as the basics of disk layout, user accounts, and common processes.
- SLO #03: Comprehend the file system structure and nature of inodes. Know how to create a rescue media, monitor resources, and apply patches.
- SLO #04: Demonstrate the layout of a Local Area Network and how to configure it with TCP/IP. List different protocols and services and how they are tested, including how they are configured in a host, a network, or an adapter.
- SLO #05: Implement basic security methods, such as shadow passwords, log events, and be able to look for commonly known trouble spots.

Career Information

The main goal of this certificate in this program is to align the courses to the job skills necessary to be a SAIR Systems Administrator for a company in Sacramento region. This certificate is intended for a person already working in the IT field, who wants to gain additional skill-sets so s/he can stay competitive in this field.

CIS - Network Helpdesk Technician Certificate

This certificate provides students the information necessary to obtain an entry-level career in the field of networking. Upon completion of this certificate, students will understand helpdesk concepts and responsibilities, hardware and software troubleshooting, and technical communication skill-sets. The fundamentals of supporting end users and a Local Area Network (LAN) will also be emphasized.

**Catalog Date:** June 1, 2020

Certificate Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
CISC 360 Information & Communication Technology Essentials (A+) 4
CISN 300 Network Systems Administration 3
CISN 301 Network Client Systems Administration 3
CISN 304 Networking Technologies 3
CISN 490 Networking Helpdesk Practicum 3
CISS 300 Introduction to Information Systems Security 1
A minimum of 3 units from the following: 3
CISC 498 Work Experience in Computer Information Science - Core (1 - 4)
CISN 302 Intermediate Network Systems Administration (3)
CISN 303 Network Administration - Linux Server (3)
CISS 310 Network Security Fundamentals (3)
Total Units: 20

Student Learning Outcomes
Upon completion of this program, the student will be able to:

- Analyze the fundamentals of an operating system. Examine the relationship of the operating system to other applications programs (SLO #1).
- Demonstrate knowledge of networking technology. Judge the strengths and weaknesses of the different network operating systems and technologies (SLO #2).
- Analyze the effects of an application on a network operating system (SLO #3).
- Analyze the effects of network intruders and viruses on an application and an operating system (SLO #4).

Career Information
Computer Operator; Applications Software Specialist; Computer Technician

CIS - Object Oriented Software Development Certificate
This certification will enhance students' proficiency in the development by using Object Oriented programming languages. After this certification, the student should be able to use Java, C++, C#, and etc. to develop object oriented Programs.

Catalog Date: June 1, 2020

Certificate Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>CISP 401</td>
<td>Object Oriented Programming with Java</td>
<td>4</td>
</tr>
<tr>
<td>CISP 402</td>
<td>Java - Data Handling</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>A minimum of 8 units from the following:</td>
<td>8</td>
</tr>
<tr>
<td>CISP 370</td>
<td>Beginning Visual Basic (4)</td>
<td></td>
</tr>
<tr>
<td>CISP 400</td>
<td>Object Oriented Programming with C++ (4)</td>
<td></td>
</tr>
<tr>
<td>CISP 405</td>
<td>Object Oriented Programming using C# on Visual Studio .NET (4)</td>
<td></td>
</tr>
</tbody>
</table>

Total Units: 16
Enrollment Eligibility
To be eligible for enrollment in the program, the student must meet the following criteria:

- Pass CISP360, Introduction to Structured Programming, or equivalent course with a C or better.

Student Learning Outcomes
Upon completion of this program, the student will be able to:

- Formulate problems as steps so be able to solve systematically.
- Describe the principles of object oriented programming.
- Use structure programming skills proficiently in an object oriented program.
- Apply the concepts of object oriented programming skills such as reusability, portability, data encapsulation, inheritance, polymorphism and etc. to a program.
- Design and develop programs with Graphical User Interfaces.
- Use an object oriented language to develop solutions for real life projects in a team work environment.

Career Information
This certificate is designed to prepare students for advancing their study in game programming, computer science, computer engineering, software engineering, computer graphics, and other related fields for undergraduate and graduate study. It could be used for students to improve their job skills in high tech computer science, computer programming, game programming, research, teaching, etc.

CIS - Programming in C/C++ Certificate
This CIS - Programming in C/C++ certificate provides students an advanced level of C/C++ programming skill. It will prepare students in advancing their career or transferring to four-year Universities.

HIGHLIGHTS
*Hands-on experience in a state-of-the-art computer center
*Opportunities to work on specialized projects relating to computer information science, business and computer programming
*Study in a field that has great employment opportunities and encompasses many careers

Catalog Date: June 1, 2020

Certificate Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>CISP 300</td>
<td>Algorithm Design/Problem Solving</td>
<td>3</td>
</tr>
<tr>
<td>CISP 360</td>
<td>Introduction to Structured Programming</td>
<td>4</td>
</tr>
<tr>
<td>CISP 400</td>
<td>Object Oriented Programming with C++</td>
<td>4</td>
</tr>
<tr>
<td>CISP 430</td>
<td>Data Structures</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>A minimum of 4 units from the following:</td>
<td>4</td>
</tr>
<tr>
<td>CISP 370</td>
<td>Beginning Visual Basic (4)</td>
<td></td>
</tr>
<tr>
<td>or CISP 401</td>
<td>Object Oriented Programming with Java (4)</td>
<td></td>
</tr>
<tr>
<td>or CISP 405</td>
<td>Object Oriented Programming using C# on Visual Studio .NET (4)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total Units:</td>
<td>19</td>
</tr>
</tbody>
</table>
Student Learning Outcomes

Upon completion of this program, the student will be able to:

- Apply Object and Structure programming in programs
- Use a C/C++ programming development tool to develop programs.
- Communicate and analyze programming problems, and determine what object-oriented programming approach would be most appropriate to resolve them.

Career Information

Computer Operator; Applications Software Specialist; Programmer; Data Entry Specialist; Systems Analyst, and Database Administrator.

CIS - Relational Database Administration Certificate

The Relational Database Administration Certificate is designed for a person who is responsible for interacting with SQL Programmers, Database Designers, Systems Administrators, and Network Engineers as well as the day-to-day operation of a Relational Database Management System. This course of study is appropriate for an entry level Database Administration position. Courses used towards the completion of the Computer Programmer - SQL certificate may also be used to satisfy the requirements of this certificate.

Catalog Date: June 1, 2020

Certificate Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>CISC 310</td>
<td>Introduction to Computer Information Science</td>
<td>3</td>
</tr>
<tr>
<td>CISA 320</td>
<td>Introduction to Database Management</td>
<td>1</td>
</tr>
<tr>
<td>CISA 321</td>
<td>Intermediate Database Management</td>
<td>1</td>
</tr>
<tr>
<td>CISC 323</td>
<td>Linux Operating System</td>
<td>1</td>
</tr>
<tr>
<td>CISC 324</td>
<td>Intermediate Linux Operating System</td>
<td>1</td>
</tr>
<tr>
<td>CISP 300</td>
<td>Algorithm Design/Problem Solving</td>
<td>3</td>
</tr>
<tr>
<td>CISP 351</td>
<td>Introduction to Relational Database Design and SQL</td>
<td>3</td>
</tr>
<tr>
<td>CISP 352</td>
<td>Intermediate SQL</td>
<td>3</td>
</tr>
<tr>
<td>CISP 354</td>
<td>Introduction to Relational Database Administration</td>
<td>3</td>
</tr>
<tr>
<td>Total Units:</td>
<td></td>
<td>19</td>
</tr>
</tbody>
</table>

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- Analyze and list the hardware components of a computer system and differentiate among system and application software.
- Plan and design tables, forms, queries, and reports using office database application software.
- Assess and design multi-table forms, establish table relationships
- Describe the relationship of operating systems to database file management.
- Devise computerized solutions in the development of databases by applying a solid foundation of algorithmic principles.
- Compare and contrast hierarchical, network, and relational databases.
- Demonstrate ability to design, create, and administer relational databases.
- Create client applications using structured query language (SQL).
CIS - Server Administrator Certificate

This certificate is designed for Network Help-desk Technicians, who want to gain additional skill-sets to become a Windows Server Administrator. Some of the skill-sets that are necessary for this job include the ability to deploy, install, and configure the components of a network system based on the Microsoft Windows platform and Microsoft server software; the ability to manage the components of a network system on an ongoing basis; the ability to monitor and optimize the components of a network system; and the ability to diagnose and resolve problems regarding the components of a network system.

HIGHLIGHTS:
* Hands-on experience in a state-of-the-art computer lab.
* Opportunities to work on specialized projects relating to computer information science, business and computer programming.
* Study in a field that has great employment opportunities and encompasses many careers.

GUIDELINES TO STUDENTS:
* Microsoft Certified Solutions Associate (MCSA) certification requires three Microsoft exams (70-410, 70-411 and 70-412), which are covered in this certificate.
* It is recommended that students use their best judgment and talk to a counselor or a CIS instructor to help guide them with their selection of the appropriate courses for their personal and/or professional needs.

Catalog Date: June 1, 2020

Certificate Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>CISC 360</td>
<td>Information &amp; Communication Technology Essentials (A+)</td>
<td>4</td>
</tr>
<tr>
<td>CISN 300</td>
<td>Network Systems Administration</td>
<td>3</td>
</tr>
<tr>
<td>CISN 302</td>
<td>Intermediate Network Systems Administration</td>
<td>3</td>
</tr>
<tr>
<td>CISN 304</td>
<td>Networking Technologies</td>
<td>3</td>
</tr>
<tr>
<td>CISN 306</td>
<td>Advanced Network Systems Administration</td>
<td>3</td>
</tr>
<tr>
<td>CISS 300</td>
<td>Introduction to Information Systems Security</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>A minimum of 9 units from the following:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>CISN 301 Network Client Systems Administration (3)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>CISN 303 Network Administration - Linux Server (3)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>CISN 374 Messaging Server Administration (3)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>CISN 378 Database Administration for Microsoft SQL Server (3)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>CISS 310 Network Security Fundamentals (3)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total Units:</td>
<td>26</td>
</tr>
</tbody>
</table>

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- SLO #01: Manage, implement, and maintain the typically complex computing environment of medium- to large-sized companies
- SLO #02: Manage and maintain a Windows server environment
- SLO #03: Manage, implement, and maintain a Windows server network infrastructure

Career Information
CIS - Web Programming Certificate

This certificate prepares students to design, develop, support, and maintain corporate level Web pages and full Web sites at the level of the Intranet or Internet. Additionally, this certificate will prepare students to design and develop database management applications to support Web-based commercial objectives.

HIGHLIGHTS

* Hands-on experience in a state-of-the-art computer center
* Opportunities to work on specialized projects relating to computer information science, business and computer programming
* Study in a field that has great employment opportunities and encompasses many careers

Catalog Date: June 1, 2020

Certificate Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS 100</td>
<td>English for the Professional (3)</td>
<td>3</td>
</tr>
<tr>
<td>CISP 300</td>
<td>Algorithm Design/Problem Solving</td>
<td>3</td>
</tr>
<tr>
<td>CISA 320</td>
<td>Introduction to Database Management</td>
<td>1</td>
</tr>
<tr>
<td>CISC 308</td>
<td>Exploring Computer Environments and the Internet (1)</td>
<td>1</td>
</tr>
<tr>
<td>or CISC 323</td>
<td>Linux Operating System (1)</td>
<td></td>
</tr>
<tr>
<td>CISC 324</td>
<td>Intermediate Linux Operating System</td>
<td>1(^1)</td>
</tr>
<tr>
<td>CISW 300</td>
<td>Web Publishing</td>
<td>3</td>
</tr>
<tr>
<td>CISW 410</td>
<td>Middleware Web Scripting</td>
<td>4</td>
</tr>
<tr>
<td>CISP 360</td>
<td>Introduction to Structured Programming</td>
<td>4(^2)</td>
</tr>
<tr>
<td>CISP 350</td>
<td>Database Programming</td>
<td>3</td>
</tr>
<tr>
<td>CISW 400</td>
<td>Client-side Web Scripting</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>A minimum of 5 units from the following:</td>
<td>5(^3)</td>
</tr>
<tr>
<td>CISW 440</td>
<td>XML: Introduction to Extensible Markup Language (2)</td>
<td></td>
</tr>
<tr>
<td>CISW 402</td>
<td>Intermediate JavaScript (2)</td>
<td></td>
</tr>
<tr>
<td>CISW 310</td>
<td>Advanced Web Publishing (4)</td>
<td></td>
</tr>
<tr>
<td>CISA 321</td>
<td>Intermediate Database Management (1)</td>
<td></td>
</tr>
<tr>
<td>CISW 304</td>
<td>Cascading Style Sheets (2)</td>
<td></td>
</tr>
<tr>
<td>CISW 308</td>
<td>Mobile Web Development (2)</td>
<td></td>
</tr>
</tbody>
</table>

Total Units: 32

\(^1\) Unix Operating System

\(^2\) C or C#

\(^3\) Suggested Electives: CISC 310, CISC 305, CISC 321, CISC 308, CISW 380.1

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- Design, develop, support, and maintain professional Web pages.
- Demonstrate knowledge of web-related technology and media applications.
- Be competent evaluators and users of the World Wide Web.
- Adapt to technological changes and select a current solution for a given problem.
- Understand how to deal with interoperability between different products, systems, and platforms.
- Find effective solutions to maintaining and supporting web sites and related resources.

Career Information

Computer Operator; Applications Software Specialist; Programmer; Data Entry Specialist; Internet Technician

CIS - Web Publishing Certificate

This certificate is designed to give students the benefits of hands-on training in Web Page Design and Publication, Internet usage, and proficiency with web-related media applications.

HIGHLIGHTS

*Hands-on experience in a state-of-the-art computer center
*Opportunities to work on specialized projects relating to computer information science, business and computer programming
*Study in a field that has great employment opportunities and encompasses many careers

Catalog Date: June 1, 2020

Certificate Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS 100</td>
<td>English for the Professional (3)</td>
<td>3</td>
</tr>
<tr>
<td>CISC 308</td>
<td>Exploring Computer Environments and the Internet 1</td>
<td></td>
</tr>
<tr>
<td>or CISC 323</td>
<td>Linux Operating System (1)</td>
<td>1</td>
</tr>
<tr>
<td>CISW 350</td>
<td>Imaging for the Web</td>
<td>1</td>
</tr>
<tr>
<td>CISW 300</td>
<td>Web Publishing</td>
<td>3</td>
</tr>
<tr>
<td>A minimum of 3 units from the following:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ART 301</td>
<td>Digital Drawing and Composition (3)</td>
<td>3</td>
</tr>
<tr>
<td>PHOTO 400</td>
<td>Digital Imaging</td>
<td>3</td>
</tr>
<tr>
<td>ARTNM 324</td>
<td>Digital Design</td>
<td>3</td>
</tr>
<tr>
<td>A minimum of 4 units from the following:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CISC 306</td>
<td>Introduction to Web Page Creation (1)</td>
<td></td>
</tr>
<tr>
<td>CISW 321</td>
<td>Web Site Development using Dreamweaver (3)</td>
<td></td>
</tr>
<tr>
<td>CISW 310</td>
<td>Advanced Web Publishing (4)</td>
<td></td>
</tr>
<tr>
<td>CISA 340</td>
<td>Presentation Graphics (2)</td>
<td></td>
</tr>
<tr>
<td>CISW 400</td>
<td>Client-side Web Scripting (4)</td>
<td></td>
</tr>
<tr>
<td>CISW 410</td>
<td>Middleware Web Scripting (4)</td>
<td></td>
</tr>
<tr>
<td>CISW 355</td>
<td>Web Imaging Projects (2)</td>
<td></td>
</tr>
<tr>
<td>CISW 304</td>
<td>Cascading Style Sheets (2)</td>
<td></td>
</tr>
<tr>
<td>CISW 326</td>
<td>Intermediate Web Site Development using Dreamweaver (3)</td>
<td></td>
</tr>
<tr>
<td>CISW 308</td>
<td>Mobile Web Development (2)</td>
<td></td>
</tr>
</tbody>
</table>

Total Units: 15
Select either Windows (through CISC 308) or Linux (through CISC 323) operating system.

CISW 310 is recommended to meet this 4-unit requirement.

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- Demonstrate knowledge of web-related technology and media applications.
- Be competent evaluators and users of the World Wide Web.
- Adapt to technological changes and select a current solution for a given problem.
- Understand how to deal with interoperability between different products, systems, and platforms.
- Find effective solutions to maintaining and supporting web sites and related resources.

Career Information

Applications Software Specialist; Data Entry Specialist; Computer Technician; Internet Technician

Computer Science Certificate

This program is an overview of computer programming.

Students who earn this certificate will likely be:

1) transferring as a Computer Science or Computer Engineering major to a California university campus without earning the Computer Science A.S. degree

2) learning to be a programmer to enhance their career

Catalog Date: June 1, 2020

Certificate Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>CISP 300</td>
<td>Algorithm Design/Problem Solving</td>
<td>3</td>
</tr>
<tr>
<td>CISP 360</td>
<td>Introduction to Structured Programming</td>
<td>4</td>
</tr>
<tr>
<td>CISP 400</td>
<td>Object Oriented Programming with C++ (4)</td>
<td>4</td>
</tr>
<tr>
<td>or CISP 401</td>
<td>Object Oriented Programming with Java (4)</td>
<td>4</td>
</tr>
<tr>
<td>CISP 310</td>
<td>Assembly Language Programming for Microcomputers</td>
<td>4</td>
</tr>
<tr>
<td>CISP 430</td>
<td>Data Structures</td>
<td>4</td>
</tr>
<tr>
<td>CISP 440</td>
<td>Discrete Structures for Computer Science</td>
<td>3</td>
</tr>
<tr>
<td>Total Units:</td>
<td></td>
<td>22</td>
</tr>
</tbody>
</table>

1Please speak with a CISP professor about which of these two courses are best for your educational goal.

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- PSLO #1 Design an algorithm from data types, operations, and logic structures to solve complex problems.
- PSLO #2 Refactor a complex algorithm into single job components such as functions or modules.
- PSLO #3 Translate an algorithm into a low-level or high-level programming language.
Career Information

The North/Far North Center of Excellence, April 2019 compiled a report that gave the job prospects for software development occupations in the Sacramento region. The report found that Computer Programmers, Software Developers (Applications and Systems Software), and Web Developers have been and will continue to be in demand. The demand for these occupations is expected to increase in the Greater Sacramento region. The report noted that these careers pay well above the Sacramento County Living Wage.

Cybersecurity Certificate

This one-year and fully-online certificate provides graduates with the skills needed to defend networks and information systems against cyber-attacks. Students receive extensive hands-on experience and develop the knowledge and abilities necessary to succeed in protection of an organization’s data and operations. It is a rigorous program designed to help students master the fundamentals of cybersecurity by applying industry-accepted and emerging practices to solve real-world security problems. Upon completion of the program, students will be able to evaluate security trends, recognize best practices, and understand Information Technology security products and threats. Some career opportunities associated with this degree include: security analyst, network systems security administrator, security policy analyst, and more.

Catalog Date: June 1, 2020

Certificate Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>CISC 310</td>
<td>Introduction to Computer Information Science</td>
<td>3(^1)</td>
</tr>
<tr>
<td>CISC 360</td>
<td>Information &amp; Communication Technology Essentials (A+)</td>
<td>4(^2)</td>
</tr>
<tr>
<td>CISN 304</td>
<td>Networking Technologies</td>
<td>3(^3)</td>
</tr>
<tr>
<td>CISN 341</td>
<td>CISCO Networking Academy (CCNA)tm: Networking Theory and Routing Technologies</td>
<td>3.5(^4)</td>
</tr>
<tr>
<td>CISN 300</td>
<td>Network Systems Administration (3)</td>
<td>3(^5)</td>
</tr>
<tr>
<td>CISS 310</td>
<td>Network Security Fundamentals</td>
<td>3(^6)</td>
</tr>
<tr>
<td>CISS 316</td>
<td>Cisco Networking Academy™: CCNA Cybersecurity Operations</td>
<td>3(^7)</td>
</tr>
<tr>
<td>CISS 327</td>
<td>Cisco Networking Academy™: CCNA Security: Implementing Network Security</td>
<td>3.5(^8)</td>
</tr>
</tbody>
</table>

Total Units: 26

\(^1\)CompTIA IT Fundamentals  
\(^2\)CompTIA A+  
\(^3\)CompTIA Network+  
\(^4\)CISCO CCENT  
\(^5\)or CISN 303 with the professor’s permission  
\(^6\)CompTIA Security+  
\(^7\)CCNA CyberOPS  
\(^8\)CCNA Security

Enrollment Eligibility
To be eligible for enrollment in the program, the student must meet the following criteria:

- Students enrolling in the collaborative program would complete the program in a cohort model taking courses from three or more colleges.
- Students are required to complete the “Quest for Success” modules prior to enrollment in a cohort.
- Students must participate in student support services while enrolled in the collaborative program.

Enrollment Process

Eligible students are selected for the program according to the following steps:

- First ten students, who have met the enrollment process, are eligible for the program.

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- Design and produce business information systems solutions incorporating current Information Technology, trends, security, and best practices (PSLO 1).
- Execute Linux system commands from either a keyboard or a shell script using correct command syntax (PSLO 2).
- Analyze and implement security concepts and security policies (PSLO 3).
- Analyze common threats to and vulnerabilities of computer systems and networks (PSLO 4).
- Implement and manage Cisco secure networks (PSLO 5).
- Implement network perimeter defense (PSLO 6).

Career Information

Some career opportunities associated with this degree include: security analyst, network systems security administrator, security policy analyst, and more.

Certificate

CIS - Information Technology Certificate

This certificate allows students to acquire basic core Information Technology competencies that will prepare them for a career in Computer Networking, Cybersecurity, and related fields.

Catalog Date: June 1, 2020

Certificate Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>CISC 310</td>
<td>Introduction to Computer Information Science</td>
<td>3</td>
</tr>
<tr>
<td>CISC 360</td>
<td>Information &amp; Communication Technology Essentials (A+)</td>
<td>4</td>
</tr>
<tr>
<td>CISN 304</td>
<td>Networking Technologies</td>
<td>3</td>
</tr>
<tr>
<td>CISP 370</td>
<td>Beginning Visual Basic (4)</td>
<td>4</td>
</tr>
<tr>
<td>or CISP 360</td>
<td>Introduction to Structured Programming (4)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>A minimum of 6 units from the following:</td>
<td>6</td>
</tr>
<tr>
<td>CISN 300</td>
<td>Network Systems Administration (3)</td>
<td></td>
</tr>
<tr>
<td>CISP 351</td>
<td>Introduction to Relational Database Design and SQL (3)</td>
<td></td>
</tr>
<tr>
<td>CISS 310</td>
<td>Network Security Fundamentals (3)</td>
<td></td>
</tr>
</tbody>
</table>
### Student Learning Outcomes

Upon completion of this program, the student will be able to:

- Apply fundamental knowledge of computing and the current use of technology techniques, skills, and tools necessary for the computing practice. (PSLO #1, PSLO #5)
- Evaluate and solve business problems with technology solutions using qualitative and quantitative information. (PSLO #1)
- Assess user needs in the selection, creation, evaluation and administration of computer-based information systems. (PSLO #3)
- Demonstrate appreciation of the Information Technology career field and the need to be lifelong learners. (PSLO #7)

### Career Information

The Certificate in Information Technology prepares students to either enter the workforce as an entry-level computer or network support technician. Several CSUs currently offer baccalaureate IT or CT programs, as do several private universities. More CSUs are already working on build upper division programs based on the recently approved IT Model Curriculum for California Community Colleges.

### Computer Information Science - Applications (CISA)

#### CISA 305 Beginning Word Processing

| Units: | 2 |
| Hours: | 36 hours LEC |
| Prerequisite: | None |
| Advisory: | BUSTEC 302, CISC 302, or CISC 310 |
| Transferable: | CSU |
| Catalog Date: | June 1, 2020 |

This course introduces students to fundamental and intermediate word processing skills. The course includes basic word processing operations: formatting business documents, editing, saving, retrieving, printing text, and creating and editing simple tables. The course also includes intermediate operations: inspecting documents for hidden properties, inserting and formatting graphic elements, managing reference markers, and merging multiple documents.

#### Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO1: CREATE PROFESSIONAL LOOKING BUSINESS DOCUMENTS USING WORD PROCESSING SOFTWARE
- Demonstrate ability to analyze needs and create letters, envelopes, memorandums and reports by planning, entering text, correcting, formatting, saving and printing business documents.
SLO2: EDIT AND FORMAT BUSINESS DOCUMENTS USING WORD PROCESSING COMMANDS

Demonstrate ability to edit and format documents using word processing commands and features such as: setting margins, tabs, indents and alignment; changing fonts, font sizes, and font styles; finding, replacing, moving and copying text; selecting, inserting and deleting text; creating borders, symbols, bullets and numbered lists; creating and editing tables.

SLO3: DEMONSTRATE USAGE OF THE MAIL MERGE FUNCTION

Integrate source data from different applications into business documents to create multiple, individualized copies.

CISA 306 Intermediate Word Processing

Units: 2
Hours: 36 hours LEC
Prerequisite: CISA 305 with a grade of "C" or better
Transferable: CSU
Catalog Date: June 1, 2020

This is a course designed to build upon previous training in the use of word processing. The course covers intermediate to advanced word processing features, such as styles, macros, outlines, document notations, forms, charts, and advanced mail merge techniques. Also covered are integrating word processing with other applications and creating documents for use on the Internet, i.e. web pages and e-mail attachments in word processing. Advanced business document formatting will also be included.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO1: EDIT AND FORMAT DOCUMENTS USING INTERMEDIATE AND ADVANCED WORD PROCESSING COMMANDS
  Demonstrate ability to edit and format documents using intermediate and advanced word processing commands and features such as: creating, editing and applying styles; merging a main document with a data source file; using templates and wizards to create documents; recording and running a macro; creating and using document notations; generating and modifying outlines, tables of contents and indexes; creating and modifying forms.

- SLO2: INTEGRATE WORD PROCESSING WITH OTHER APPLICATIONS AND CREATE DOCUMENTS FOR SHARED USE
  Demonstrate ability to integrate word processing with other applications by embedding and linking a spreadsheet object into a word processing document.
  Demonstrate ability to use word processing commands and features to create Web pages such as: creating and editing hyperlinks; applying background effects; saving a word processing document as a Web page; formatting a Web page.
  Demonstrate ability to compare and combine multiple document versions, track changes, and manage document properties.

- SLO3: INSERT AND MODIFY CUSTOM DOCUMENT ELEMENTS
  Demonstrate ability to insert and modify building blocks, field codes and properties, and document controls.

CISA 308 Exploring Word Processing Software

Units: 1
Hours: 18 hours LEC
Prerequisite: None.
Transferable: CSU
Catalog Date: June 1, 2020

The course introduces the student to the most widely used word processing software, Microsoft Word. The basic features and skills of creating, editing, formatting, inserting tables and graphics and enhancing Word documents are covered.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO1: UTILIZE EFFICIENT TECHNIQUES IN CREATING AND FORMATTING TYPICAL BUSINESS DOCUMENTS
  Analyze document requirements and use appropriate features when creating business documents that require the integration of text, charts, and/or graphics for distribution or presentation.
  Edit content by using various features such as cut/copy/paste, sort, and merge.
CISA 315 Introduction to Electronic Spreadsheets

Units: 2  
Hours: 36 hours LEC  
Prerequisite: None.  
Advisory: CISC 302 or 310  
Transferable: CSU  
Catalog Date: June 1, 2020

This course is designed to introduce the student to the use of spreadsheet programs. The course will include: designing a spreadsheet, developing formulas for automatic calculations, using special functions, developing what-if models, producing charts, performing spreadsheet database functions, and producing reports. Students will be using mathematical concepts and skills.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- **SLO 1: CREATE A PROFESSIONAL LOOKING SPREADSHEET THAT INCLUDES ACCURATE FORMULAS, FUNCTIONS, AND formatting**
- Produce and edit data entries in a worksheet using text, numbers, formulas, and functions.
- Prepare and produce effective worksheet presentations using appropriate formats.
- Apply the appropriate use of absolute and relative addressing when creating or copying formulas.

- **SLO 2: ANALYZE DATA AND APPLY APPROPRIATE VISUAL DISPLAYS TO A SPREADSHEET**
- Evaluate worksheet data to answer what-if questions.
- Develop and modify charts, and insert and format objects.

- **SLO 3: DEVELOP AND ANALYZE DATABASE FUNCTIONS AND USE ANALYTICAL TOOLS TO SUMMARIZE DATA**
- Utilize database functions and create and analyze pivot tables.

- **SLO 4: ANALYZE AND SUMMARIZE DATA USING CONSOLIDATED SPREADSHEETS WITH LINKED REFERENCES**
- Structure spreadsheets to utilize multiple worksheets simultaneously.
- Combine and link information from multiple worksheets and workbooks.
- Configure worksheets and workbooks for sharing.

CISA 316 Intermediate Electronic Spreadsheets

Units: 2  
Hours: 36 hours LEC  
Prerequisite: CISA 315 with a grade of "C" or better  
Transferable: CSU  
Catalog Date: June 1, 2020

This course introduces students to the intermediate features of spreadsheet programs. The course will cover macros, data tables and lookup functions, logical expressions as well as advanced file operations, functions, and convenience commands. Students will follow spreadsheet templates and design their own sheets.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- **ANALYZE AND SOLVE PROBLEMS USING ADVANCED FUNCTIONS IN SPREADSHEETS (SLO 1).**
• Understand and utilize advanced functions including logical functions, lookup tables and functions, filtering, and database functions.

• Understand and utilize advanced financial functions for financial analysis.

• UNDERSTAND THE PROCESSES USED TO AUTOMATE SPREADSHEET APPLICATIONS WITH RANGES, VALIDATION, AND MACROS (SLO 2).

• Understand and use Data validation tools.

• Understand and utilize Range Names functions.

• Utilize spreadsheet protection functions.

• Understand and Use MACROS.

• EVALUATE AND APPLY AN UNDERSTANDING OF THE USE OF ADVANCED SPREADSHEET APPLICATIONS FOR PROBLEM SOLVING AND ANALYSIS (SLO 3).

• Utilize Data Tables (One-Input and Two-Input) and Scenario Management functions.

• Utilize spreadsheet tools to facilitate Decision Making (Solver and Goal Seek).

• UNDERSTAND THE PROCESS TO IMPORT DATA INTO SPREADSHEETS FROM EXTERNAL APPLICATIONS AND DEVELOP THE ABILITY TO UTILIZE PROGRAMMING TECHNIQUES TO MODIFY SPREADSHEET APPLICATIONS (SLO 4).

• Understand and utilize the importing of data into spreadsheets from external databases and the Internet and utilize the data for analysis.

• Develop a basic understanding of the Visual Basic Editor to develop and modify spreadsheet applications.

CISA 318 Exploring Spreadsheet Software

Units: 1
Hours: 18 hours LEC
Prerequisite: None.
Transferable: CSU
Catalog Date: June 1, 2020

The course acquaints the student with widely used spreadsheet software. The basic features and skills of editing a workbook, using basic formulas and functions in a workbook, formatting a workbook, inserting and formatting charts and graphics in a workbook and analyzing and presenting a workbook are covered.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• SLO #1: EFFECTIVELY UTILIZE ELECTRONIC SPREADSHEET SOFTWARE TO INPUT AND MANAGE DATA
  - Plan, build, test and document worksheets
  - Differentiate methods for printing all or portions of a worksheet or workbook using standard or customized layouts for headers, footers and other documentation as well as special designs, borders, color and/or patterns, and number formats
  - Organize, copy, or move worksheet entries with an understanding of relative, mixed and absolute cell references

• SLO #2: CALCULATE AND ANALYZE DATA WITH VARIOUS ELECTRONIC SPREADSHEET FEATURES AND TOOLS
  - Create formulas and manipulate data using mathematical operators, and arrive at mathematical solutions using financial, statistical and logical functions
  - Demonstrate ability to perform basic "what-if" analysis and use Goal Seek to analyze worksheet data
  - Incorporate basic sorting, filtering, and summarizing of data using menus, toolbars, and pivot tables
  - Research the Internet and use the browse, search and hyperlink capabilities in addition to web query features to get real-time spreadsheet data from web sites

• SLO #3: ARRANGE AND APPLY APPROPRIATE VISUAL DISPLAYS FOR OPTIMAL DATA PRESENTATION
  - Choose and construct various types of charts based on the most effective and appropriate display for the given data
  - Employ page breaks, headers and footers, gridlines, row and column headings, and page orientation to best display information
CISA 320 Introduction to Database Management

This course is designed to introduce the student to the use of database management programs on the computer. The course will include designing a database; accessing, searching and updating files; and designing and producing printed reports. Students will be reading and interpreting written and oral instructions of a technical nature.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- UNDERSTAND THE BASIC FUNCTIONS OF A RELATIONAL DATABASE (SLO 1)
  - Understand database structures and types.
  - Evaluate the appropriate use of different elements of a database.
- UTILIZE A RELATIONAL DATABASE TO INPUT, RETRIEVE AND REPORT DATA (SLO 2)
  - Analyze the needs and requirements of a database and design an appropriate structure.
  - Understand basic database functions such as developing a query and sorting, searching, filtering, and calculating data.
  - Design and produce database reports.

CISA 321 Intermediate Database Management

This course will extend the capabilities of students who have started to use a microcomputer database. Topics and laboratory will include complex relational databases, form design, intermediate report design, advanced queries, OLE objects, macros and an introduction to visual programming.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- DEVELOP AN UNDERSTANDING OF ADVANCED QUERIES IN A RELATIONAL DATABASE (SLO 1)
  - Design complex queries using advanced processes such as: Pattern Match, List of Values Match, Not Operators, Parameter queries, and Cross-tab queries.
  - Incorporate Lookup functions to simplify data retrieval.
  - Integrate Data Validation rules to limit errors in databases.
- DESIGN AND DEVELOP CUSTOM FORMS FOR RELATIONAL DATABASES (SLO 2)
  - Create custom forms so that database input documents reflect non-database input sources.
  - Structure sub-forms so that data from related tables is viewable on a single form.
- DESIGN AND DEVELOP CUSTOM REPORTS FOR RELATIONAL DATABASES (SLO 3)
  - Plan customized reports to improve the presentation of database information.
  - Design queries to complete data required for custom reports.
CISA 340 Presentation Graphics

This course is an introduction to the use of the computer to generate graphics used in business. Topics covered include: hardware (screens, printers, input devices), software (paint, chart, CAD), types of graphics (pictures, graphs, charts, designs).

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO 1: UTILIZE PRESENTATION GRAPHICS SOFTWARE FOR PRESENTATION DEVELOPMENT
  - develop pictures, graphs, charts, and designs using the software.
  - integrate graphics, animation, text, and charts in the development of a presentation.

- SLO 2: DISTINGUISH BETWEEN VARIOUS FILES AND SYSTEM REQUIREMENTS
  - demonstrate understanding of fundamental hardware and software concepts including terminology, evaluation, installation and use.
  - evaluate types of graphics available, types of files, and system requirements.
  - link graphics presentations to Web sites.

- SLO 3: PLAN, PREPARE AND PRESENT ON-SCREEN PRESENTATIONS.
  - apply audience analysis techniques to establish criteria and best approach to presentation.

Computer Information Science - Core (CISC)

CISC 295 Independent Studies in Computer Information Science - Core

An independent studies project involves an individual student or small group of students in study, research, or activities beyond the scope of regularly offered courses. See the current catalog section of "Special Studies" for full details of Independent Studies.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO #1: Actively engage in intellectual inquiry beyond that required in order to pass a course of study (College Wide Learning Outcome – Area 4).
  - Discuss and outline a proposal of study (that can be accomplished within one semester term) with a supervising instructor qualified within the discipline.
  - Design an independent study (to be completed individually or by collaboration of a small group) to foster special knowledge, skills, and experience that are not available in any one regularly scheduled course.
  - Use information resources to gather discipline-specific information.
  - SLO #2: Utilize modes of analysis and critical thinking to apply theoretical perspectives and/or concepts in the major discipline of study to significant problems and/or educational activities (College Wide Learning Outcome – Area 3).
  - Analyze and apply the knowledge, skills and experience that are involved in the independent study to theoretical perspectives and/or concepts in the major discipline of study.
  - Explain the importance of the major discipline of study in the broader picture of society.
CISC 302 Computer Familiarization

Same As: JOUR 330
Units: 2
Hours: 36 hours LEC
Prerequisite: None.
Advisory: BUSTEC 302
Transferable: CSU
General Education: AA/AS Area III(b)
Catalog Date: June 1, 2020

This is an introductory course to provide general knowledge on how computers work, computer terminology and the impact of computers on society and the work environment. Beginning level hands-on instruction using an operating system, word processing software, spreadsheet software, database software, email and the Internet will be emphasized. Students will be reading and interpreting written and oral instructions of a technical nature. This course is the same as JOUR 330, and only one may be taken for credit. See "Cross-Listed Courses" in the catalog.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO1: DESCRIBE BASIC HARDWARE AND SOFTWARE REQUIREMENTS FOR A PERSONAL COMPUTER
  Identify different hardware required for input, output, processing and storage of data on a personal computer
  Apply appropriate log on techniques to access lab computers and online course management software

- SLO2: UTILIZE OPERATING SYSTEM TO EFFECTIVELY MANAGE PROGRAMS, FILES AND FOLDERS
  Demonstrate ability to retrieve, create, copy, move and delete files and folders within a file management hierarchy
  Locate and launch programs successfully

- SLO3: DIFFERENTIATE BETWEEN, AND APPLY BASIC CONCEPTS FOR BUSINESS APPLICATION SOFTWARE
  Define and correctly select appropriate program for a given task
  Demonstrate ability with word processing commands and features such as cursor movement, entering text; formatting including setting margins, line spacing, bold, centering, underlining, changing font typeface and size; inserting clip art; saving, printing, retrieving, and editing a file; spelling checker
  Demonstrate ability with spreadsheet commands and features such as cursor movement; entering text, values and formulas; formatting including changing column widths, bold, centering, underlining, changing font typeface and size, formatting numbers with dollar signs; inserting and deleting rows and columns; saving, printing, retrieving, and editing a file; spelling checker
  Demonstrate ability with database commands and features such as creating a database, creating tables, creating fields, setting field widths, positioning fields, entering data through tables or forms, designing forms, formatting forms, creating reports, displaying records, changing page orientation, saving, and printing

- SLO4: COMMUNICATE, SHARE, AND ACCESS INFORMATION ELECTRONICALLY
  Utilize e-mail commands and features to communicate appropriately, sending and receiving messages, including attachments.
  Operate search engines, browsers, and related web tools to effectively find information on the World Wide Web
  Evaluate web sites for accuracy based on specific criteria

CISC 305 Introduction to the Internet
This course is an introduction to how the Internet works and how to effectively use basic Internet services. Topics include browser basics, search engines and search techniques, E-mail, the World Wide Web, Internet security, Internet resources, the Cloud, social networking, and building basic web pages using HTML.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO 1: IDENTIFY AND ACCESS VARIOUS INFORMATION SOURCES.
  describe the structure of the Internet, the Domain Name System, and connectivity options.

- SLO 2: DISTINGUISH BETWEEN VARIOUS INTERNET SERVICES
  distinguish between and use the World Wide Web, a browser, E-mail, FTP, and Social Media services.

- SLO 3: UTILIZE INTERNET SERVICES AND TECHNOLOGY
  download, attach, view, and print files from the Internet.
  create a personal web page following a predefined format.

CISC 306 Introduction to Web Page Creation

The student will be able to produce a Web page, including design, layout, construction, and presentation. HTML will be used to format a Web page.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO 1: EXAMINE AND PRACTICE WEB PAGE CREATION.
  evaluate content needs and apply appropriate design techniques.
  design a Web page.

- SLO 2: CREATE WEB DOCUMENTS USING CODE.
  Use XHTML to format Web pages.
  present a completed Web page.
  Evaluate design enhancements.

CISC 308 Exploring Computer Environments and the Internet

The student will be able to produce a Web page, including design, layout, construction, and presentation. HTML will be used to format a Web page.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO 1: EXAMINE AND PRACTICE WEB PAGE CREATION.
  evaluate content needs and apply appropriate design techniques.
  design a Web page.

- SLO 2: CREATE WEB DOCUMENTS USING CODE.
  Use XHTML to format Web pages.
  present a completed Web page.
  Evaluate design enhancements.
The course acquaints the student with the fundamentals of microcomputer hardware, software and computer networking, focusing on widely used hardware and operating systems, Intel-based PCs and the Windows operating system. The fundamentals of the Internet and Internet tools are introduced, as well as effective electronic communication.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO #1: DIFFERENTIATE AND APPLY BASIC CONCEPTS OF OPERATING SYSTEMS AND COMPUTER HARDWARE.
  
  Explain how computers work, as well as the functions of basic computer components.

- Design a customized computer system utilizing the control panel and other accessories.

- Use appropriate commands to capture and print screens.

- List and discuss basic operating system and Internet terminology and concepts.

- SLO #2: ORGANIZE COMPUTER FILES AND FOLDERS.
  
  Manage files by utilizing effective procedures for creating, modifying, moving, copying, renaming, and deleting files and folders.

- Utilize effective operating system search techniques to locate files, folders and data stored on various drives using various filenames and wildcards.

- Utilize all frequently used operating system commands required to store, manage, back-up, access and maintain files stored on either network, hard drives or other external storage devices.

- SLO #3: RESEARCH AND APPLY INTERNET CONCEPTS AND SEARCH TECHNIQUES.
  
  Choose appropriate settings to control the behavior of web browsers.

- Demonstrate use of efficient Internet search techniques using search engines and subject directories.

- Create and manage Favorites, links, and browser home page settings.

- Identify some of the various security threats from Internet access and which operating system tools could be appropriate protection.

- Demonstrate effective use of electronic communication techniques.

CISC 310 Introduction to Computer Information Science

3 Units: 54 hours LEC

This course examines information systems and their role in business, including database management systems, networking, e-commerce, ethics and security, and system infrastructure. Student will apply these concepts and related methods through hands-on projects to develop computer-based solutions to business problems.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- UNDERSTAND EXISTING AND EMERGING TECHNOLOGIES AND THEIR IMPACT ON ORGANIZATIONS AND SOCIETY. (SLO#1).

- explain how a computer system works.

- distinguish the various hardware and software components of a computer system.

- differentiate between the most commonly used computer operating systems.

- differentiate between system software and application software.

- assess the differences between each of the categories of system and application software.

- evaluate the social issues pertaining to computer technology including ethics, copyright, privacy and security.
DEMONSTRATE AN UNDERSTANDING OF THE DEVELOPMENT AND USE OF INFORMATION SYSTEMS IN BUSINESS (SLO#2).

differentiate between various computer network types and scopes.

demonstrate the secure utilization of Internet resources.

demonstrate use of cloud-based applications and cloud-based file storage.

recommend methods for accessing business information systems.

discuss and relate the phases of the System Development Life Cycle.

compare various digital media file types.

propose methods for securing business information systems.

SOLVE COMMON BUSINESS PROBLEMS USING APPROPRIATE INFORMATION TECHNOLOGY APPLICATIONS AND SYSTEMS (SLO#3).

construct solutions to common business problems using electronic spreadsheets.

manipulate databases using database software.

build software solutions to business problems using internet technologies.

CISC 323 Linux Operating System

Units: 1
Hours: 18 hours LEC
Prerequisites: None.
Transferable: CSU
Catalog Date: June 1, 2020

This course introduces the Linux operating system for desktop computers. Concepts include kernels, file structures, Daemons, shells, GUIs, procedures for installing software, creation of user accounts, shell commands, scripts, and file security.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO #01: ANALYZE THE FUNDAMENTALS OF AN OPERATING SYSTEM.
  - Demonstrate use of basic Linux commands and editing, disk, file, and printer management feature.
  - Compare Linux with other operating systems.
- SLO #02: EVALUATE SERVER HARDWARE.
  - Analyze hard disk and memory management.
  - Compare physical and logical drives and describe their functionality.
- SLO #03: ASSESS COMMON APPLICATIONS, PROTOCOLS, MEDIA AND SOFTWARE.
  - Analyze the relationship of the operating system to other applications programs.
  - Evaluate and formulate various command lines with correct syntax.

CISC 324 Intermediate Linux Operating System

Units: 1
Hours: 18 hours LEC
Prerequisites: CISC 323 with a grade of "C" or better
Transferable: CSU
Catalog Date: June 1, 2020

This course covers the Linux operating system for desktop computers. It covers advanced shell scripting, C Shell, K Shell, and BASH. Other topics covered in this course include decision-making logic, looping, and nesting. Consult the class schedule for specific operating system offered.
CISC 356 Introduction to Local Area Networks

Units: 1.5
Hours: 27 hours LEC
Prerequisite: None.
Transferable: CSU
Catalog Date: June 1, 2020

From hubs to servers this course will introduce students to the exciting field of computer networking. Beginners will become comfortable with the concepts and vocabulary of computer networking and will gain hands-on experience in basic networking technology. Some topics include the Internet and its tools; the diversity of Network Operating Systems one can use in a Local Area Network; how to configure communication protocols, such as TCP/IP; the distinction between a Local Area Network and a Wide Area Network; and the fundamentals of network architecture and design.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- EXPLAIN AND CONFIGURE BASIC FUNCTIONS AND PROPERTIES OF NETWORK OPERATING SYSTEMS FOUND ON TYPICAL LOCAL AREA NETWORKS (LANS) (SLO #01).
- Explain the fundamentals of network operating systems.
Describe the basic steps of network operating system installation.

Configure network services.

DIFFERENTIATE BETWEEN CLIENT/SERVER AND CENTRALIZED NETWORKING ENVIRONMENTS (SLO #02).

Discuss the differences between centralized and client/server computing.

Identify and configure the functions of clients, servers and other networking equipment that make up a typical LAN.

Discuss the basics of cloud computing.

ASSESS BASIC NETWORK SECURITY REQUIREMENTS AND IMPLEMENT BASIC NETWORK SECURITY TOOLS (SLO #03).

Develop a network security policy.

Assess the physical security of network equipment.

Understand network data security.

DEMONSTRATE AND TEST BASIC LAN ADMINISTRATION AND SUPPORT TASKS (SLO #04).

Manage network accounts.

Monitor network performance.

Protect network servers from data loss.

DISCUSS VARIOUS METHODS FOR CONNECTING LANS TO WIDE AREA NETWORKS (WANS) (SLO #05).

Discuss the technologies used in connecting LANs to WANs.

Explain some of the terminology used in implementing WANs.

Configure and describe remote access protocols.

EXPLAIN AND DEMONSTRATE DIFFERENT APPROACHES TO NETWORK PLANNING AND TROUBLESHOOTING (SLO #06).

Describe the benefits of network management and planning.

Explain different approaches to network troubleshooting.

Explain the types of specialized equipment and other resources for troubleshooting.

Describe basic measures to take in common troubleshooting situations.
• OPERATE PERSONAL COMPUTERS, DEVICES, AND SOFTWARE FOR END USERS (SLO #02).
  
• define and correctly select an appropriate program for a given task.
• use the commands and features of office application software.
• use e-mail commands and features to send and receive messages, including attachments.
• demonstrate effective file management techniques.
• differentiate between various digital media file types.
• locate and launch programs successfully.
• differentiate between the most commonly used computer operating systems.
• differentiate between system software and application software.

• DEMONSTRATE BASIC DATA NETWORKING AND SECURITY/FORENSICS TECHNIQUES (SLO #03).

• differentiate between various computer network types and scopes.
• install and configure network adapters for effective operation on various networks.
• DEMONSTRATE BASIC VIRTUALIZATION, DESKTOP IMAGING, AND DEPLOYMENT OPERATIONS (SLO #04).
• prepare various operating system installation and deployment activities.
• install and configure operating systems in virtual environment.

• PROPERLY AND SAFELY DIAGNOSE, RESOLVE AND RECORD COMMON HARDWARE AND SOFTWARE ISSUES WHILE APPLYING TROUBLESHOOTING SKILLS (SLO #05).

• demonstrate effective troubleshooting techniques.
• operate search engines, browsers, and related web tools to effectively find information on the World Wide Web.
• demonstrate the secure utilization of Internet resources.
• PRACTICE APPROPRIATE CUSTOMER SUPPORT TECHNIQUES (SLO #06).

• demonstrate knowledge of the changing workplace, the work-site team and environment, and ethical behavior.
• analyze customer concerns effectively.
• address customer concerns appropriately and timely.

CISC 495 Independent Studies in Computer Information Science - Core

Units: 1 - 3
Hours: 54 - 162 hours LAB
Prerequisite: None.
Transferable: CSU
Catalog Date: June 1, 2020

An independent studies project involves an individual student or small group of students in study, research, or activities beyond the scope of regularly offered courses. See the current catalog section of "Special Studies" for full details of Independent Studies.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• SLO #1: Actively engage in intellectual inquiry beyond that required in order to pass a course of study (College Wide Learning Outcome – Area 4).

• Discuss and outline a proposal of study (that can be accomplished within one semester term) with a supervising instructor qualified within the discipline.

• Design an independent study (to be completed individually or by collaboration of a small group) to foster special knowledge, skills, and experience that are not available in any one regularly scheduled course.

• Use information resources to gather discipline-specific information.
SLO #2: Utilize modes of analysis and critical thinking to apply theoretical perspectives and/or concepts in the major discipline of study to significant problems and/or educational activities (College Wide Learning Outcome – Area 3).

Analyze and apply the knowledge, skills and experience that are involved in the independent study to theoretical perspectives and/or concepts in the major discipline of study.

Explain the importance of the major discipline of study in the broader picture of society.

SLO #3: Communicate a complex understanding of content matter of the major discipline of study (College Wide Outcome – Area 3).

Demonstrate competence in the skills essential to mastery of the major discipline of study that are necessary to accomplish the independent study.

SLO #4: Identify personal goals and pursue these goals effectively (College Wide Outcome – Area 4).

Utilize skills from the “academic tool kit” including time management, study skills, etc., to accomplish the independent study within one semester term.

CISC 498 Work Experience in Computer Information Science - Core

Units: 1 - 4
Hours: 60 - 300 hours LAB
Prerequisite: None.
Enrollment Limitation: Students must be in a paid or unpaid internship, volunteer position or job related to career goals in Computer Information Science.
Transferable: CSU
General Education: AA/AS Area III(b)
Catalog Date: June 1, 2020

This course provides students with opportunities to develop marketable skills in preparation for employment in their major field of study or advancement within their career. It is designed for students interested in work experience and/or internships in transfer level degree occupational programs. Course content includes understanding the application of education to the workforce; completion of required forms which document the student's progress and hours spent at the work site; and developing workplace skills and competencies. Appropriate level learning objectives are established by the student and the employer. During the semester, the student is required to participate in a weekly orientation and 75 hours of related paid work experience, or 60 hours of unpaid work experience for one unit. An additional 75 or 60 hours of related work experience is required for each additional unit. Work Experience may be taken for a total of 16 units when there are new or expanded learning objectives. Only one Work Experience course may be taken per semester.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- DEMONSTRATE AN UNDERSTANDING AND APPLICATION OF PROFESSIONAL WORKPLACE BEHAVIOR IN A FIELD OF STUDY RELATED ONE'S CAREER,(SLO 1)
- Understand the effects time, stress, and organizational management have on performance.
- Demonstrate an understanding of consistently practicing ethics and confidentiality in a workplace.
- Examine the career/life planning process and relate its relevancy to the student.
- Demonstrate an understanding of basic communication tools and their appropriate use.
- Demonstrate an understanding of workplace etiquette.
- DESCRIBE THE CAREER/LIFE PLANNING PROCESS AND RELATE ITS RELEVANCY TO ONE'S CAREER,(SLO 2)
- Link personal goals to long term achievement.
- Display an understanding of creating a professional first impression.
- Understand how networking is a powerful job search tool.
- Understand necessary elements of a résumé.
- Understand the importance of interview preparation.
- Identify how continual learning increases career success.
- DEMONSTRATE APPLICATION OF INDUSTRY KNOWLEDGE AND THEORETICAL CONCEPTS AS WRITTEN IN LEARNING OBJECTIVES IN PARTNERSHIP WITH THE EMPLOYER WORK SITE SUPERVISOR,(SLO 3)
This course will provide a student with the knowledge and skills required to build, maintain, troubleshoot and support server hardware and software technologies. The student will be able to identify environmental issues; understand and comply with disaster recovery and physical/software security procedures; become familiar with industry terminology and concepts; understand server roles/specializations and interaction within the overall computing environment. Consult the class schedule for specific operating system offered.

Upon completion of this course, the student will be able to:

- **SLO #01: EXAMINE SERVER FUNDAMENTALS**
  - Differentiate between peer-to-peer and client-server networking models
  - Investigate server functions and benefits

- **SLO #02: IDENTIFY THE HARDWARE COMPONENTS OF A SERVER**
  - Identify characteristics that distinguish server hardware from client hardware
  - Rank user demands on a server
  - Optimize server placement

- **SLO #03: EVALUATE SERVER HARDWARE**
  - Evaluate motherboard buses
  - Inspect common server processors, and common types of memory
  - Contrast how clock frequency affects performance
  - Compare physical and logical drives and describe their functionality
  - Identify characteristics of the IDE interface and configure IDE cabling and connectors

- **SLO #04: DESCRIBE THE FEATURES OF SERVER SOFTWARE**
  - Calculate, adequately test and pilot the server upgrade
  - Verify the availability of system resources

- **SLO #05: ASSESS COMMON NETWORKING PROTOCOLS, TOPOLOGIES, MEDIA AND EQUIPMENT**
  - Examine bus, ring, and star network topologies
  - Describe Token Ring and Ethernet media access methods
  - Uncover the purpose behind bridges, switches, hubs, and routers
  - Discuss NetBEUI, IPX/SPX, and TCP/IP protocols

- **SLO #06: CONTRAST DIFFERENT SERVER SOFTWARE**
  - Identify network operating system characteristics and versions
  - Examine network operating system hardware requirements
  - Judge different network operating system installations and upgrades techniques
CISN 301 Network Client Systems Administration

This course covers the administration of a client in a client/server network. Topics include designing a basic network, installing and configuring a client network operating system, managing network security with user and group accounts, creating directory structures and network shares, setting up and managing network printers, backing up servers, monitoring and troubleshooting network resources, and establishing policies and procedures for network operations.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO #01: DEDUCE THE DIFFERENCE BETWEEN A NETWORK CLIENT OPERATING SYSTEM AND A NETWORK SERVER OPERATING SYSTEM
- Evaluate client operating system support features
- Identify the role of a network client operating system in the enterprise
- SLO #02: DISTINGUISH BETWEEN THE VARIOUS INSTALLATION METHODS
- Assess the needs to upgrade from a previous operating system version
- Measure ways to migrate existing user environments to a new installation
- Inspect post-installation updates and product activation
- Reason the cause for failed installations
- SLO #03: EVALUATE METHODS TO MANAGE DISKS, FILE SYSTEMS, AND PERIPHERALS DEVICES
- Investigate, configure, and troubleshoot volumes and disks
- Design and configure removable media, such as tape devices, DVD and CD-ROM devices
- Manage, configure, and troubleshoot input and output (I/O) devices
- Manage printers and fax devices
- Manage print jobs
- SLO #04: MANAGE AND CONFIGURE THE USER'S EXPERIENCE
- Choose accessibility settings
- Manage desktop components
- Manage display options
- Choose regional and language settings
- Manage users' profiles and data
- SLO #05: MANAGE APPLICATIONS
- Manage distribution of applications
- Investigate, and troubleshoot application compatibility with the network client operating system
- Manage and configure a web browser
- SLO #06: DISCOVER HOW TO CONNECT A NETWORK CLIENT OPERATING SYSTEM TO A NETWORK
- Investigate how to configure a wireless network
- Assess how to connect to a virtual private network (VPN)
- Manage and configure Remote Desktop and Remote Assistance
- Configure and troubleshoot the TCP/IP protocol
- SLO #07: MANAGE USERS AND GROUPS
- Manage user account properties
- Manage and troubleshoot cached credentials
- Manage user and group rights
- SLO #08: PLAN FOR COMPUTER SECURITY, RECOVERY AND PERFORMANCE
- Manage security configuration with templates
- Discover how to back up and restore systems and data
- Establish, implement, and monitor a security audit policy
- Monitor system performance
- Manage scheduled tasks
- Infer how to optimize memory, disk, and CPU performance

CISN 302 Intermediate Network Systems Administration

**Units:** 3  
**Hours:** 45 hours LEC; 27 hours LAB  
**Prerequisites:** CISN 300 with a grade of "C" or better  
**Transferable:** CSU  
**Catalog Date:** June 1, 2020

This course covers advanced administrative tasks of a server in a client/server network. Topics include configuring the server environment, implementing system policies, implementing and managing fault-tolerant disk volumes, managing applications, installing and managing connectivity for different network and client operating systems, managing remote servers, implementing directory replication and file synchronization, and troubleshooting advanced network problems.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- SLO #01: EXAMINE NETWORK SERVICES
  - Measure the purpose of the Dynamic Host Configuration Protocol (DHCP) and how it streamlines network administration
  - Evaluate the process of name resolution (DNS) and why it is important to an organization
  - Set up a File Server
- SLO #02: DESIGN NETWORK SECURITY
  - Rate the network security protocols used for authorization
  - Research the basics of a security model
  - Examine user rights and understand the difference between a user right and a permission
  - Compile server security using security baseline settings and audit security settings
- SLO #03: MAKE BACKUP AND RECOVERY PLANS
  - Recommend a backup strategy
- Compile Backup Files
- Investigate the primary methods and devices used to back up critical data
- Research methods for creating a high-availability network
- Determine key server management and disaster recovery strategies for preserving system uptime

**SLO #04: SUPPORT THE NETWORK INFRASTRUCTURE**
- Evaluate network traffic
- Resolve issues related to service dependency
- Diagnose network connectivity issues
- Evaluate routing protocols, routing tables, and routing ports

---

**CISN 303 Network Administration - Linux Server**

- **Units:** 3
- **Hours:** 45 hours LEC; 27 hours LAB
- **Prerequisite:** CISN 300 with a grade of "C" or better
- **Transferable:** CSU
- **Catalog Date:** June 1, 2020

This course provides introductory coverage of Linux Network Administration. The course maps to the CompTIA Linux+ certification exam, and to SAIR/GNU's Linux Networking course. Specific course topic coverage includes: introducing Linux; exploring the desktop; using the Shell; understanding users and file systems; understanding text processing; managing processes; using network clients; installing Linux; understanding system initialization; managing software packages and file systems; managing users; configuring networks; system and kernel management; writing Shell scripts; and advanced topics and troubleshooting. The course requires many hands-on projects, which allow students to practice what they learn.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- **SLO #01: EXAMINE THE BASIC FEATURES OF THE LINUX OPERATING SYSTEM IN COMPARISON TO OTHER OPERATING SYSTEMS**
  - Describe how Linux was created and how it compares to other operating systems
  - Outline the skills required and challenges facing a system administrator
  - Distinguish between the graphical system used by Linux and command line
  - Support the basic features of the GNOME and KDE desktop interfaces

- **SLO #02: UTILIZE THE SHELL AND EVALUATE ITS FUNCTIONALITY**
  - Manipulate variables in the shell to control the working environment
  - Formulate data at the command-line and for print files
  - Manipulate text using the vi editor
  - Create and manage user and group accounts
  - Construct access permissions on files and directories

- **SLO #03: COMPARE AND CONTRAST DIFFERENT LINUX NETWORK TOOLS**
  - Demonstrate how to log in to a Linux system over a network connection. Describe how it is different from a Windows network connection.
  - Select the appropriate command-line tools for common network services such as FTP and the Web
  - Illustrate the difference between network interfaces using command-line and graphical utilities
  - Apply the skill necessary to set up a simple DHCP server, and manage networked printing services

- **SLO #04: ANALYZE AND ARTICULATE THE BASIC STEPS OF A LINUX SOFTWARE INSTALLATION**
  - Analyze the hardware components of your computer system
  - Design a hard disk space to hold a new Linux installation
Describe the steps that hardware starts a standard PC operating system

Explain the difference between the LILO and GRUB boot loader

Create the init program and the scripts used to start system services

Manage system services after start-up

CISN 304 Networking Technologies

Units: 3
Hours: 45 hours LEC; 27 hours LAB
Prerequisite: None.
Advisory: CISC 310 with a grade of "C" or better
Transferable: CSU
C-ID: C-ID ITIS 150
Catalog Date: June 1, 2020

This course introduces the architecture, structure, functions, components, and models of the Internet and other computer networks. The principles and structure of IP (Internet Protocol) addressing and the fundamentals of Ethernet concepts, media, and operations are introduced to provide a foundation for further study of computer networks. It uses the OSI (Open Systems Interconnection) and TCP (Transmission Control Protocol) layered models to examine the nature and roles of protocols and services at the application, network, data link, and physical layers. Preparation for the CompTIA Network+ certification exam.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- IDENTIFY THE PURPOSE AND FUNCTION OF THE MOST WIDELY USED PROTOCOLS (SLO #01).
- List the services provided by network protocols.
- Describe how protocols enable networked computers to communicate.
- IDENTIFY THE LAYERS OF THE OSI MODEL (SLO #02).
- Describe the functions associated with each of the OSI model layers.
- LIST THE CABLING TOPOLOGIES USED TO BUILD LOCAL AREA NETWORKS (SLO #03).
- Name the types of cables used to build LANs.
- List the grading systems used for the various cable types.
- Describe how to install cables externally, secure them in place, and run them around common obstacles.
- Explain the steps involved in an internal cable installation.
- Describe the wiring of a crossover cable.
- DESCRIBE THE FUNCTION OF TYPICAL NETWORKING HARDWARE (SLO #04).
- Associate the importance of the troubleshooting process with a network interface adapter.
- Describe the difference between a hub, switch and a router. Understand the functions of each.
- LIST THE ETHERNET PHYSICAL LAYER STANDARDS (SLO #05).
- Describe the functions of the Ethernet frame.
- List the physical layer options for Token Ring networks.
- Distinguish between the various types of FDDI network connections.
- DESCRIBE THE FUNCTIONS OF THE INTERNET PROTOCOL (IP) PROTOCOL AND THE VARIOUS IP HEADER FIELDS (SLO #06).
- Summarize the basics of IP addressing, routing, and fragmentation.
- Describe the functions of the Internetwork Packet Exchange (IPX) protocol and the various IPX header fields.
- List the function of the Address Resolution Protocol (ARP).
- Describe the functions of the Internet Control Message Protocol (ICMP).
- Describe the properties of TCP/IP's application layer protocols.
CISN 306 Advanced Network Systems Administration

Units: 3
Hours: 45 hours LEC; 27 hours LAB
Prerequisites: CISN 302 with a grade of "C" or better
Transferable: CSU
Catalog Date: June 1, 2020

Students will learn to install, configure, and administer Microsoft Windows Active Directory services. The course also focuses on implementing Group Policy and understanding the Group Policy tasks required to centrally manage users and computers. Students will use Group Policies to configure and manage the user desktop environment, to configure and manage software, and implement and manage security settings. Students will install and manage Windows Domains and Domain Controllers through Active Directory.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO #01: UNCOVER KEY NETWORK ARCHITECTURES, TOPOLOGIES, INTERDEPENDENCIES AND CONSTRAINTS
- Conceive the key sources of information with respect to architecture and topology
- Design sample networking and operating environments
Examine various network architecture, topology, hardware and software
Set up and use Microsoft Windows Active Directory
Set up and use Domain Name System (DNS) to support an installation of Active Directory
SLO #02: PREPARE OVERALL DESIGN AND INTEGRATION PLAN FOR IMPLEMENTING AN ACTIVE DIRECTORY INFRASTRUCTURE
Analyze and collect information about a network
Analyze situations and information and formulate a plan of action that is in line with business and financial constraints
Create and manage Trees and Forests in a Windows environment
Analyze the needs of a network and suggest modifications to technological systems
Analyze the needs of a network and recommend tradeoffs when necessary
SLO #03: PERFORM SERVER AND SYSTEM CONFIGURATION AND SOFTWARE LOADING
Analyze and correct operational problems with a Windows Domain Controller promotion
Implement new applications available with Windows Advanced Server
Manage software with Group Policies
Manage user environments, scripts, redirect user folders, and troubleshoot user environment management with Group Policies
SLO #04: SET UP AND MAINTAIN USER ACCOUNTS
Examine the purpose of user accounts and the requirements for new user accounts
Create and maintain user accounts using Windows account options
Create multiple user accounts by importing user information into Active Directory
Resolve issues with user account policies
SLO #05: DEVELOP AND IMPLEMENT SECURITY PROCEDURES
Assess the needs for security
Manage access to domain resources using Groups
Assess and modify policies/procedures
SLO #06: PERFORM NETWORK MAINTENANCE
Evaluate the importance of errors
Manage a network using Microsoft Active Directory management tools
Resolve common problems with publishing resources in Active Directory
Manage Active Directory replication
Manage Operations Masters roles

CISN 341 CISCO Networking Academy (CCNA)™: Networking Theory and Routing Technologies

<table>
<thead>
<tr>
<th>Units:</th>
<th>3.5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hours:</td>
<td>54 hours LEC; 27 hours LAB</td>
</tr>
<tr>
<td>Prerequisite:</td>
<td>None.</td>
</tr>
<tr>
<td>Corequisite:</td>
<td>CISN 304</td>
</tr>
<tr>
<td>Transferable:</td>
<td>CSU</td>
</tr>
<tr>
<td>Catalog Date:</td>
<td>June 1, 2020</td>
</tr>
</tbody>
</table>

This course covers networking theory and routing technologies, including the OSI Model, beginning router configurations, and routed and routing protocols. It prepares students for the CISCO Certified Network Associate (CCNA) certification examination. It also continues and expands the study of binary, decimal, and hexadecimal numbering systems to change variable length sub-net mass.

Student Learning Outcomes

Upon completion of this course, the student will be able to:
TROUBLESHOOT AND SOLVE ROUTING PROBLEMS WITHIN A ROUTING DOMAIN (SLO 1).
Understand and describe the purpose, nature, and operations of a router, routing tables, and the route lookup process, dynamic routing protocols, distance vector routing protocols, and link-state routing protocols, the purpose and types of access control lists (ACLs), and the operations and benefits of Dynamic Host Configuration Protocol (DHCP), Domain Name System (DNS) for IPv4 and IPv6, and Network Address Translation (NAT).

CONFIGURE AND TROUBLESHOOT BASIC OPERATIONS OF A SMALL SWITCHED NETWORK (SLO 2).
Configure and verify static routing and default routing; configure and troubleshoot basic operations of routers in a small routed network including Routing Information Protocol (RIPv1 and RIPv2) and Open Shortest Path First (OSPF) protocol (single-area OSPF); Configure, monitor, and troubleshoot ACLs for IPv4 and IPv6; and configure and troubleshoot NAT operations.

CONFIGURE AND TROUBLESHOOT VLANS IN A SMALL SWITCHED NETWORK (SLO 3).
Describe basic switching concepts, how VLANs create logically separate networks and how routing occurs between them, and enhanced switching technologies such as VLANs, VLAN Trunking Protocol (VTP), Rapid Spanning Tree Protocol (RSTP), Per VLAN Spanning Tree Protocol (PVSTP), and 802.1q.
Configure and troubleshoot basic operations of a small switched network, VLANs, and inter-VLAN routing.

CISN 374 Messaging Server Administration

Units: 3
Hours: 45 hours LEC; 27 hours LAB
Prerequisites: CISN 302 with a grade of "C" or better
Transferable: CSU
Catalog Date: June 1, 2020

This course provides students with the knowledge and skills required to deploy and administer/support Microsoft Exchange Server. This course covers use of Exchange Server to create and manage recipient objects; maintain an existing Exchange Server organization, as well as design and implement a new organization; create and manage public folders; perform basic backup procedures; monitor server performance and configure link monitors between connected sites; and manage electronic forms in an organization. The student will also create and configure the various messaging connectors; configure directory and public folders replication; and configure Exchange Server for connectivity to the Internet. The course also examines how Exchange Server provides for connectivity to other messaging systems.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO #01: CONFIGURE, INSTALL AND TROUBLESHOOT MESSENGER SERVER
  - Analyze the purpose of Active Directory
  - Investigate the different Active Directory elements
  - Install and configure messaging server software for clients and message recipients
  - Explore Exchange Server, protocols and services integration

- SLO #02: MANAGE, MONITOR, AND TROUBLESHOOT BACK-END AND FRONT-END EXCHANGE SERVER 2003 SERVERS
  - Plan for post implementation configuration
  - Choose an administrative model
  - Plan administrative groups
  - Plan operation mode—switch to native mode whenever possible
  - Plan server configuration—decide whether to use front-end and back-end
  - Plan for firewall configuration
  - Manage clusters and front-end and back-end servers

- SLO #03: MANAGE AND TROUBLESHOOT PUBLIC FOLDERS AND VIRTUAL SERVERS
  - Comprehend the functions and benefits of public folders
  - Create public folders
  - Set up a default public folder tree and general-purpose public folder trees
CISN 378 Database Administration for Microsoft SQL Server

Units: 3  
Hours: 45 hours LEC; 27 hours LAB  
Prerequisite: CISN 302 with a grade of "C" or better  
Transferable: CSU  
Catalog Date: June 1, 2020

This course provides students with the knowledge and technical skills required to install, configure, administer, and troubleshoot the client/server database management system of Microsoft SQL Server. The student will also learn to manage files and databases; choose and configure a login security method; plan and implement database permissions; secure SQL Server in an enterprise network; perform and automate administrative tasks; create custom administrative tools; monitor and optimize SQL Server performance; and replicate data from one SQL Server to another.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO #01: DEVELOP AND IMPLEMENT INSTALLATION OF SQL SERVER
  - Research the hardware and software requirements for Microsoft SQL Server and the SQL Server management tools
  - Deduce the various SQL Server Editions and the selection criteria for choosing each
  - Deduce the upgrade process for an installed SQL Server
  - Analyze the different licensing modes
  - Verify the proper software installation options that are appropriate for your environment

- SLO #02: SET UP AND USE PROPER ADMINISTRATIVE PROCEDURES
  - Manage the tools and Transact-SQL statements used to create and modify a database
  - Identify and perform common SQL Server configuration tasks
  - Identify and perform routine database administration tasks
  - Identify and automate routine maintenance tasks by creating and scheduling jobs
Student Learning Outcomes

- Create alerts and operators
- Identify and use administrative jobs in a multi-server environment
- Analyze a strategy for maintaining the high-availability of SQL Server
- SLO #03: ANALYZE AND IMPLEMENT SECURITY PROCEDURES
  - Identify basic security concepts including system, end-user and operational security
  - Infer the difference between Microsoft’s Windows Authentication Mode and Mixed Authentication Mode
  - Manage SQL Server security in the enterprise environment
  - Assign login accounts to database user accounts and roles
  - Assign permissions to user accounts and roles
  - Manage security with views and stored procedures
  - Create and use application roles to manage application security
- SLO #04: ANALYZE THE DIFFERENT WAYS TO TRANSFER DATA
  - Reason the process of, importing, exporting, and transforming data
  - Identify and use the tools for importing and exporting data in Microsoft SQL Server
  - Create a DTS package to transform and import and export data using Data Transformation Services (DTS)
- SLO #05: ANALYZE THE DIFFERENT WAYS TO DISTRIBUTE DATA
  - Identify the various methods to distribute data and the criteria for using each
  - Discover how each of the SQL Server replication agents are used
  - Discover the different SQL Server replication types and the business reasons for using each
  - Discover the different physical replication models and the topology in which each model would be used
- SLO #06: PERFORM SYSTEM BACKUPS AND RESTORE DATA
  - Manage a system backup and restoration procedure
  - Set up a backup for either a user or a system databases by using Transact-SQL statements and SQL Server Enterprise Manager
  - Set up a restore for either a user or a system databases by using Transact-SQL statements and SQL Server Enterprise Manager
  - Identify system problems and correct them, if necessary
- SLO #07: CREATE AND PRESENT REPORTS
  - Analyze and synthesize information
  - Analyze and identify networking improvements
  - Create reports using word processing and other presentation software
  - Create and present well-organized reports to a variety of audiences

CISN 490 Networking Helpdesk Practicum

Units: 3
Hours: 36 hours LEC; 54 hours LAB
Prerequisites: CISC 360, CISN 300, and CISN 304 with grades of "C" or better
Transferable: CSU
Catalog Date: June 1, 2020

This course focuses on key information and skills for user support professionals, including troubleshooting and problem solving, successful communication with users, determining a client's specific needs, and training end users. For those considering entering the field, alternate career paths for user-support workers are covered. With balanced coverage of both people skills and technical skills, this course is an excellent resource for those in or preparing for the technical-support field. Students are required to support end-users for twenty hours either on or off campus as part of this class.
Upon completion of this course, the student will be able to:

- **SUMMARIZE THE NEED FOR EFFECTIVE COMPUTER USER SUPPORT (SLO #01).**
  - Define the term end-user computing and briefly describe the developments that led to end-user computing and user support.
  - Describe the characteristics of early computer systems.
  - Describe a microcomputer.
  - Discuss the basic hardware and add-on peripherals that are commonly used.
  - Define the total cost of ownership (TCO).
  - Discuss the different types of user support and names for user support personnel, including help desk, call center, and technical support.

- **DEMONSTRATE EFFECTIVE COMMUNICATION SKILLS (SLO #02).**
  - Define the term customer-service ethic and explain why organizations place so much emphasis on excellent customer service.
  - Discuss strategies for building understanding.
  - Define the term incident management strategy.
  - Categorize the four dimensions of personality measured on the Myers-Briggs Type Indicator (MBTI) personality analysis.
  - Describe a difficult client.

- **REVIEW THE SKILLS FOR TROUBLESHOOTING COMPUTER PROBLEMS (SLO #03).**
  - Define the term troubleshooting and explain that troubleshooting computer problems is an iterative process that does not have a fixed series of steps.
  - Define the term problem solving and explain how problem solving might apply to fixing a malfunctioning printer, for example.
  - Explain how troubleshooters must use decision-making skills to choose between several possible solutions to a problem.
  - Describe the different ways that troubleshooters must use communication skills to get information about the problem and to communicate the solution.
  - Explain that active listening plays an important role in understanding the problem. Paraphrasing can be helpful in making sure the troubleshooter has an accurate picture of what is going on.
  - Define the term escalation and explain how this approach can help solve a problem that does not yield to more common methods.
  - Define the term replication and explain how this strategy can help to solve a problem.
  - Discuss how hardware and software device configuration should be examined for possible fixes.

- **EXAMINE COMMON SUPPORT PROBLEMS (SLO #04).**
  - Define the term bug and describe the ways in which software vendors repair bugs and add new features using patches, updates, service packs, releases, new versions, and upgrades. Describe how release numbers are used to label software versions.
  - Explain that performance problems result from poor interaction between hardware and software.
  - Describe the types of misunderstandings that may cause users to perceive that there is a computer problem.

- **DESCRIBE THE FUNCTION OF A HELP DESK (SLO #05).**
  - Define the term incident management and the more specific term call management.
  - Discuss the importance of making sure the user is qualified to receive support.
  - Describe the manner in which a support agent assigns a priority code to an incident. Explain that the priority code determines the position of the incident in the incident queue.
  - Review the factors that may cause job stress for support workers.
  - Describe the importance of the managerial role to help desk support staff.

- **DEVELOP AND IMPLEMENT TYPICAL PRODUCT SUPPORT STANDARDS (SLO #06).**
  - Examine the resources that can be used to help make product evaluation decisions.
  - Review the criteria for choosing to upgrade to a newly released product or service.
Discuss the balance between allowing users freedom to choose the best software and hardware for their specific purposes and providing support services for a diverse base of different products.

MEASURE A USER’S NEEDS (SLO #07).

Define the problem clearly.

Identify the roles of stakeholders.

Identify sources of information.

Develop an understanding of the existing system.

Investigate alternatives to the existing system.

Develop a model of the proposed solution.

DEMONSTRATE HOW TO INSTALL AND MANAGE END-USER COMPUTERS (SLO #08).

Review pre-installation site preparation tasks.

Discuss the purpose and contents of a site management notebook.

Define the steps to install and configure hardware, operating systems, networks, and application software.

Analyze ongoing site management tasks.

REVIEW HOW TO TRAIN END-USERS (SLO #09)

Identify the four steps in the training process: planning, preparation, presentation, and progression.

---

Computer Information Science - Programming (CISP)

CISP 300 Algorithm Design/Problem Solving

**Units:** 3
**Hours:** 54 hours LEC
**Prerequisite:** MATH 120 with a grade of "C" or better, or placement through the assessment process.
**Transferable:** CSU; UC
**General Education:** AA/AS Area II(b)
**Catalog Data:** June 1, 2020

This course covers the foundational concepts of computer languages such as C++, SQL, Visual Basic, JavaScript, PHP, and C#. Students will learn what lies underneath desktop, web, mobile, and database applications. Students may petition for GE Area B5 credit after transfer to CSUS.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- **SLO #1: MANAGE DATA INVOLVED IN AN ALGORITHM**
  - Recognize the valid values that can be stored as integer, real, string, and boolean data.
  - Declare variables of the appropriate data type with the smallest scope necessary for the algorithm.
  - Decide whether to represent data as variables, constants, or literals in an algorithm.
  - Combine two values of the same type into a single value using arithmetic operators such as + or MOD, comparison operators such as !=, and logical operators such as AND.
  - Design statements to get input data from keyboard entry and/or from a text file and store this data into typed variables.
  - Design statements to send output data from variables to a monitor and/or to a text file.
  - Group logically related data of the same type into an indexed array.
- **SLO #2: DESIGN A LOGICALLY AND SYNTACTICALLY CORRECT SEQUENCE OF INSTRUCTIONS TO INPUT DATA, CALCULATE ANSWER(S) FROM INPUT DATA, AND OUTPUT ANSWER(S).**
  - Change the value of variables and constants using assignment statements. Write a function call using an assignment statement.
• Combine two numeric values using arithmetic operators and library math functions. Compare the results of integer and real number division.

• Write pseudocode statements in the correct order to accomplish a task.

• SLO #3: DESIGN DECISION LOGIC STATEMENTS (IFS AND LOOPS) TO CONDITIONALLY EXECUTE PORTIONS OF AN ALGORITHM

• Create Boolean expressions with two same typed values and comparison operators. Combine two or more Boolean expressions using logical operators AND and OR into appropriate logic for an algorithm.

• Identify when to use relational (If) logic in an algorithm. Write appropriate If-Then, If-Then-Else, If-Then-ElseIf-Then-Else statements and nested If statements as required for an algorithm.

• Identify when to use repetition loop logic in an algorithm. Write appropriate While, Do-While, Do-Until, For statements and nested loops as required for an algorithm.

• Design repetition or relational statements to perform validation on input data.

• SLO #4: MODULARIZE AN ALGORITHM INTO SEPARATE SECTIONS

• Write a primary or main module to prompt for and accept input data, calculate a result from this data, and output the result. Any or all of these steps may be performed by separate modules/functions.

• Write module and function calls with the correct number and type of arguments as defined by the module/function header.

• Compare and contrast calls to a module and a function, including the way that returned data is accepted.

• Design modules and functions that use value parameters, reference parameters, local variables, and global constants to perform their task.

• SLO #5: EXPLORE SIMPLE DATA STRUCTURE ALGORITHMS

• Implement bubble, selection, and insertion sorts to organize arrays. Implement binary search to find a particular value within a sorted array.

• Create algorithms to manipulate strings character-by-character using if and loop logic and library functions.

CISP 310 Assembly Language Programming for Microcomputers

Units: 4
Hours: 54 hours LEC; 54 hours LAB
Prerequisite: CISP 360 with a grade of “C” or better
Transferable: CSU; UC
C-ID: C-ID COMP 142
Catalog Date: June 1, 2020

This course is an introduction to computer architecture using assembly language programs. Topics include: binary representation of data and instructions, memory addressing modes, subroutines and macros, operating system interrupts, processor architecture, and interfacing with high level languages.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• SLO 1: RECOGNIZE THE COMPUTER ARCHITECTURE ISSUES NEEDED TO WRITE ASSEMBLY LANGUAGE CODE.

• Analyze the architecture of a processor and the organization of its memory by discussing such topics as registers, clock speed, busses, and addressing modes.

• SLO 2: COMPARE AND CONTRAST THE BINARY REPRESENTATION OF DATA AND ASSEMBLY LANGUAGE INSTRUCTIONS.

• Analyze the binary representation of data using contextual clues to translate the data into characters, positive or negative integers, positive or negative fractional numbers, or machine instructions.

• Correlate integer values in different bases (e.g. binary, octal, decimal, and hexadecimal).

• Correlate the external (monitor) string representation of numbers and their internal (memory) binary format.

• SLO 3: CREATE ASSEMBLY LANGUAGE PROGRAMS THAT ACCEPT INPUT, PERFORM CALCULATIONS AND MAKE DECISIONS BASED ON THE INPUT, AND DISPLAY AN ANSWER.

• Solve memory access problems by using the addressing modes supported by the processor.
- Solve bit-level problems using AND, OR, NOT, XOR and bit-shifting instructions on binary values.
- Solve simple calculation issues using arithmetic instructions.
- Solve keyboard input and display monitor output problems using operating system interrupt calls.
- Differentiate between the temporary storage of the stack and named memory locations (variables).
- Compare and contrast subroutines and macros to organize assembly language statements. Create subroutines and macros, both internal and external to the main body of the program.
- Understand the role of the stack and the instruction pointer register in subroutine execution.

**SLO 4:** EXPLAIN THE ROLES OF SOFTWARE IN THE CREATION, BUILDING, AND DEBUGGING OF EXECUTABLE FILES USING ASSEMBLY LANGUAGE.

- Coordinate the use of text editors, compilers, linkers, and debuggers during the creation of assembly language programs.
- Analyze the memory space (RAM and registers) of an executing program with a debugging tool to trace the execution and determine the correctness of the execution.
- Explain how memory is allocated for a program during the compilation process.

---

**CISP 350 Database Programming**

**Units:** 3  
**Hours:** 54 hours LEC

**Prerequisites:** CISA 320 with a grade of "C" or better; and three units in any programming language.  
**Transferable:** CSU; UC

**General Education:** AA/AS Area II(b)  
**Catalog Date:** June 1, 2020

This is an introductory course in programming databases. Topics include analysis and design, modular programming, screen displays and menus, and multiple databases.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- IDENTIFY THE PURPOSE OF COMMON DATABASE LANGUAGES (SLO# 1)
- Write, develop and synthesize programs in one of the common database languages.
- Describe the fundamentals of SQL programming language.
- Analyze, comprehend problems for computer applications, as evidenced through program documentation.
- Explain how SQL programming language is used to extract data from the database.
- Assess and utilize common SQL query constructs.
- Distinguish between Data Definition Language (DDL) and Data Manipulation Language (DML).
- List common structure of a database query using SQL.
- Utilize SQL select statements for sorting and grouping data from the database.
- DEVELOP REPORTS TO DISPLAY DATA EXTRACTED FROM THE DATABASE (SLO# 2)
- Design and produce small databases, screen displays.
- Organize data to generate reports based on data in the database that conform to user requests.
- DESCRIBE THE FUNCTION OF VARIOUS JOINS (SLO# 3)
- Utilize the fundamental vocabulary and constructs of SQL to perform joins on tables in the database.
- Outline the various types of table joins.
- Distinguish among outer and inner joins.
- ANALYZE AND DEVELOP PL/SQL SCRIPTS (SLO # 4)
- Create PL/SQL as a programming tool to enable automation of multiple database interaction tasks.
• Develop PL/SQL scripts to meet programming specifications.
• Develop, write, assess and evaluate triggers.
• Analyze PL/SQL script algorithms to achieve desired output.

CISP 351 Introduction to Relational Database Design and SQL

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Transferable: CSU
Catalog Date: June 1, 2020

This course is designed to introduce relational database technology, normalization, entity relationships, logical model design, and ISO-ANSI standard Structured Query Language (SQL). Topics covered include: database design, basic properties of a relational database such as relations, tables, primary keys, foreign keys and principles of normalization, simple SQL select statements, sorting and grouping data, joining tables, subqueries and views. The course covers core concepts in identifying data and information management requirements for organizations, data modeling, and normalization techniques. The database design section focuses on logical model design and entity relationship (ER) modeling. The course exposes students to the use of Relational Database Management Systems using an industrial-strength database management system. Students will leave the course with a good working knowledge of database technology.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• SLO# 1: Demonstrate an understanding of basic Relational Database Management System terminology
• Define, compare and contrast database design and tradeoff methodologies, Relational Database Management Systems
• Develop and utilize the fundamental vocabulary and constructs of the SQL
• SLO# 2: Define and understand the concept of joins, sorting and grouping data, joining tables, subqueries and views.
• Construct and implement easy to medium difficulty queries in SQL
• create database objects using Data Definition Language.
• SLO# 3: construct subqueries, and joins using Data Query Language.
• demonstrate an understanding of transaction control statements in SQL
• SLO# 4: Demonstrate a basic understanding of logical model design and entity relationship (ER) modeling.
• Explain normalization and entity-relationships in table design

CISP 352 Intermediate SQL

Units: 3
Hours: 54 hours LEC
Prerequisite: CISP 351
Advisory: CSU
Transferable: CSU
Catalog Date: June 1, 2020

This course builds upon the Introduction to Relational Databases and SQL course with more in-depth SQL constructs common to most commercial database products and extensions to the SQL language. Topics include: complex joins including inner and outer joins, correlated subqueries, complex table definition, table and column constraints, Union, Intersection, Minus, triggers, procedures and packages.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• SLO# 1: Design, implement, and demonstrate an understanding of SQL constructs to include data definition language, data manipulation language, and data query language
CISP 353 Application Development in a Client Server Environment

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO #1: Design and develop robust Graphical User Interfaces (GUIs).
  - Choose input and output controls to place on the GUI that allow clear communication between the program and the end user, as defined by the current version of Visual Basic.
  - Design GUI behavior to limit user options with the techniques of hiding or disabling controls based on the previous user actions.
  - Ensure that positive user action is required to display the output for each new set of inputs, utilizing the specific technique that depend on the abilities of the current version of Visual Basic.
  - Use common VB.NET Windows controls effectively in an application (for example, TextBox, CheckBox, RadioButton, Label, PictureBox, GroupBox, ListBox, and ComboBox.

- SLO #2: Install a GUI application on a client workstation.
  - Choose input and output controls to place on the GUI that allow clear communication between the program, the end user and the underlying database.
  - Design GUI behavior to limit user options with the techniques of hiding or disabling controls based on the previous user actions.
  - Ensure that positive user action is required to display the output for each new set of inputs.

- SLO #3: Use software to establish connection to database server.
  - Access remote and local data on a database server.

- SLO #4: Develop and implement input data validation.
  - Implement logic that ensures that input data is valid before using the data.
  - Demonstrate the process to hide or disable controls on the GUI and alert the user of an input error for invalid input data.
  - Construct methods to identify user input errors.

- SLO #5: Construct MDI applications with menus.
  - Organize related clickable operations into a pull-down or pop-up menu.
  - Design GUI behavior to perform advanced processing options with the techniques of selecting data from the database based on user input.
  - Construct an application that allows users to input select criteria to be passed as parameters to queries.
CISP 354 Introduction to Relational Database Administration

This course is designed to introduce students to administering a relational database management system. Topics include: managing users, privileges, resources, and tablespaces; creating an operational database, managing database files; how to start up and shut down an instance or database, the data dictionary, transaction processing, and backup and recovery issues. Completion will provide students with sufficient knowledge for an entry level Database Administration position in industry.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- DESCRIBE NORMALIZATION OF DATA IN A DATABASE (SLO #01).
- Evaluate database model for conformance to various normal forms.
- Audit the normalization process to the third normal form.
- Convert database model between 1st, 2nd, and 3rd normal forms.
- SUMMARIZE THE MECHANISMS USED TO INSTALL A RELATIONAL DATABASE MANAGEMENT SYSTEM (SLO #02).
- Classify, install, incorporate, prepare and manage a Relational Database Management System (RDBMS) installation.
- Demonstrate, simulate outline and sketch start up and shut down of a database.
- LIST THE TOOLS USED TO MONITOR THE DATABASE FOR TYPICAL USER CONFIGURATION (SLO #03).
- Prepare, tabulate, employ and compile typical configurations of client workstations to access the RDBMS.
- Document common configurations to be deployed across workstations to enable access to the RDBMS.
- Differentiate between user and administration configurations of the RDBMS.
- IDENTIFY HOW TO MANAGE USERS WITH ACCESS TO THE RDBMS (SLO #04).
- Validate and demonstrate ability to create, modify and remove users, groups and roles.
- Evaluate existing user roles and manager user permissions.
- DESCRIBE THE TYPES OF BACKUP METHODOLOGIES USED TO BACKUP DATA IN THE DATABASE (SLO #05).
- Formulate, draft and incorporate database backup and recovery procedures.
- Document database backup plan for review.
- SUMMARIZE MECHANISMS USED TO MAKE USER ACCESS TO THE DATABASE CONTINUOUSLY AVAILABLE (SLO #06).
- Define, Plan, audit and critique system documentation.
- Generate user help documentation for ease of access to the RDBMS and user accounts.
- Create user FAQ to provide user self-help guide.

CISP 356 Relational Database Design and Information Retrieval

This course is designed to serve as an advanced-level course within the Database Design certificate. The course covers advanced database concepts. Topics include: data analysis, principle data models with emphasis on the relational model, entity-relationship diagrams, logical design, data administration and normalization.
Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO#1: assess and utilize knowledge of the scientific method in database design.
- compare and contrast the scientific method to other ways of information retrieval.
- evaluate and report the various advantages and disadvantages.
- SLO#2: evaluate the various relational database design approaches.
- analyze and describe the major paradigms within database architectures.
- apply and synthesize knowledge of concepts, theory, and research findings surveyed within the following sub-disciplines in database modeling: Semantic object modeling, object oriented modeling, entity relationship diagrams, data normalization, network and hierarchical architectures.
- SLO#3: infer and sketch trends within the field.
- develop and evaluate information retrieval and presentation techniques including SQL, form and report generation.
- adapt and extrapolate the database modeling and information retrieval processes and its connection to other fields.
- SLO#4: critique, analyze and demonstrate tradeoffs in relational database design methodologies

CISP 360 Introduction to Structured Programming

Upon completion of this course, the student will be able to:

- SLO 1: DEMONSTRATE AN UNDERSTANDING OF STRUCTURED PROGRAMMING CONCEPTS
  - Write clear and complete comments to describe the logic of an algorithm that has been translated into a set of structured programming instructions.
  - Create programs that accept input from either the keyboard or a file and to send output to a file or the monitor.
  - Organize conditional and repeated algorithm steps into conditional (if) and looping control statements.
  - Organize program instructions into logically separate procedures. Each procedure will communicate with other procedures through argument lists.
  - Write instructions to store data temporarily (in variables, constants, or arrays) or permanently (in files).
  - Select an appropriate data type (integer, floating point, character, string, boolean, etc.) to temporarily store intermediate results.
  - Compare the advantages and disadvantages of using local, procedure, and global scope for variables. Select the appropriate variable scope for assigned programs.
  - Compare and contrast the use of arrays and structures. Select the appropriate one for assigned programs.
  - Dynamically allocate and access memory using a language concept such as pointers.
- SLO 2: DISCUSS AT AN INTRODUCTORY LEVEL THE USE OF CLASSES AND OBJECTS IN A PROGRAM
  - Compare the use of objects to store data with the use of non-object variables or arrays or structures.
  - Recognize the format of a class definition and the relationship between a class and objects that are based on that class.
SLO 3: USE DEBUGGING SOFTWARE TO TEST PROGRAMS FOR CORRECT EXECUTION

Test completed programs for correct execution using a set of possible input values. Debugger software will be used to view intermediate results for input values that lead to incorrect results.

Find existing procedure libraries and include these in programs to take advantage of pre-defined language capabilities such as keyboard input and monitor output.

CISP 370 Beginning Visual Basic

Units: 4
Hours: 54 hours LEC; 54 hours LAB
Prerequisite: None.
Advisory: CISC 310 or CISP 300
Transferable: CSU; UC
General Education: AA/AS Area II(b)
Catalog Date: June 1, 2020

This course covers development of Windows-based desktop applications using VB.NET. Topics include best practices for GUI design, use of the Visual Studio .NET development software, organizing code into procedures and modules, calculation techniques, input data validation, file I/O, variable scope, arrays, multiple-window applications, and class development. This course is designed for students who want a strong foundation in building GUI applications and transfer MIS majors.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO #1: Design and develop robust Graphical User Interfaces (GUIs).
  - Choose input and output controls to place on the GUI that allow clear communication between the program and the end user.
  - Design GUI behavior to limit user options with the techniques of hiding or disabling controls based on the previous user actions.
  - Ensure that positive user action is required to display the output for each new set of inputs.
  - Use common VB.NET Windows controls effectively in an application. Examples are the TextBox, CheckBox, RadioButton, Label, PictureBox, GroupBox, ListBox, and ComboBox.
- SLO #2: Implement programming logic using Visual Basic procedures.
  - Implement logic within event handler procedures to respond to user actions on the GUI such as clicking, scrolling over, and tabbing.
  - Demonstrate understanding of the use of by-reference and by-value parameters in procedures.
  - Use pre-existing procedures such as Val() and IsNumeric() to simplify a program.
- SLO #3: Develop and implement input data validation.
  - Implement logic that ensures that input data is valid before using the data.
  - Hide or disable controls on the GUI and alert the user of an input error for invalid input data.
- SLO #4: Develop and implement data storage strategies.
  - Create variables of the appropriate type and scope for temporary storage of data.
  - Write to a text file to permanently store data.
  - Read input data from a text file.
- SLO #5: Group related data and procedures together.
  - Temporarily store related constants in a construct such as an enumeration.
  - Temporarily store related data in one-dimensional and two-dimensional arrays.
  - Organize functionally related controls in a “grouping” control such as a GroupBox.
  - Organize a block of code that performs a single task into a custom procedure. If the task is calculation of a single value, use a function. For all other tasks, use a subroutine.
  - Organize related clickable operations into a pull-down or pop-up menu.
  - Recognize a class as a grouping of functionally related variables and procedures.
• SLO #6: Use the Integrated Development Environment (IDE) to build, compile, execute, and debug Visual Basic applications.

• Create a Windows Application project.

• Uncover answers to syntax questions using the Help utility of the IDE.

CISP 400 Object Oriented Programming with C++

Units: 4
Hours: 54 hours LEC; 54 hours LAB
Prerequisite: CISP 360 with a grade of "C" or better
Transferable: CSU; UC
General Education: AA/AS Area II(b)
C-ID: C-ID COMP 122
Catalog Date: June 1, 2020

This course is an intermediate C++ course designed to further enhance the students’ abilities to design and develop object-oriented programs. Included is an emphasis in higher level programming skills development. Detailed information into class design and implementation, function templates, dynamic data allocation, pointers, strings, arrays, control structures, operator overloading, inheritance, virtual functions, polymorphism, data stream input and output, exception handling and file processing. (C-ID COMP 122)

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• SLO #1: DEMONSTRATE AN UNDERSTANDING OF C++ OBJECT ORIENTED PROGRAMMING (OOP) CONCEPTS.
  understand and recall an intermediate-level of OOP terminology, such as inheritance, composition, and polymorphism.
  compare and contrast C and C++ languages and understand and know how to use the existing classes and functions.

• SLO # 2: APPLY THE LEARNED CONCEPTS TO CREATE EFFECTIVE AND EFFICIENT PRODUCTION C++ PROGRAMS.
  Design and implement higher level programming interfaces through the use of abstract data type (ADT) and create new classes.
  Design and implement intermediate level programming assignments by using operator overloading, templates, exception handling, file processing, pointers and strings.

• SLO # 3: USE WINDOWS DEBUGGING SOFTWARE TO TEST PROGRAMS FOR CORRECT EXECUTIONS.
  Work with non-text files and design programs in a graphic user interface compiler.

• SLO # 4: COMMUNICATE, SUPPORT, ANALYZE AND ADAPT DIFFERENT LOGIC AND PROGRAMS.
  Work effectively as part of a project team.

CISP 401 Object Oriented Programming with Java

Units: 4
Hours: 54 hours LEC; 54 hours LAB
Prerequisite: CISP 360 with a grade of "C" or better
Transferable: CSU; UC
Catalog Date: June 1, 2020

This course is an introduction to object oriented programming using the Java language. The student will learn the Java programming language as well as the Java compiler. Topics will include: creating Java applications, writing Java applets, using the control statements, creating Java methods, declaring Java arrays, object-based programming, object-oriented programming: inheritance and polymorphism, handling strings and characters, controlling graphics by using graphics and Java 2D, generating graphics by using graphical user interface components, exception handling, multithreading, and managing files and streams handling.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• SLO #1: DISCOVER AND UNDERSTAND THE OBJECT ORIENTED JAVA PROGRAMMING CONCEPTS, KNOWLEDGE AND POTENTIALS.
  Understand the Java software development “Process and Object Oriented Methodology” (such as Inheritance, Polymorphism, Abstract Classes, and Interfaces).
- Comprehend the Java Applications, Applets, multithreading and GUI Components creations.
- Demonstrate knowledge in Strings Handling, Function Overloading, and Arithmetic Operations of Java language.
- Describe the Data and Files process, Input / Output Control and exception handling.
- SLO # 2: APPLY THE LEARNED JAVA KNOWLEDGE TO CREATE EFFECTIVE AND EFFICIENT PRODUCTION JAVA PROGRAMS USED IN COMPUTERS AND WEB SITES.
- Solve a program question by using Java language.
- SLO # 3: USE JAVA INTERGRATED DEVELOPMENT ENVIRONMENT DEBUGGING SOFTWARE TO TEST PROGRAMS FOR CORRECT EXECUTIONS.
- Work in a Java IDE.
- SLO # 4: COMMUNICATE, SUPPORT, ANALYZE AND ADAPT DIFFERENT LOGIC AND JAVA PROGRAMING SKILL LEVELS WITH PROJECT TEAM MEMBERS.
- Work effectively in a team project environment.

CISP 402 Java - Data Handling

<table>
<thead>
<tr>
<th>Units:</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hours:</td>
<td>54 hours LEC; 54 hours LAB</td>
</tr>
<tr>
<td>Prerequisites:</td>
<td>CISP 401 with a grade of &quot;C&quot; or better</td>
</tr>
<tr>
<td>Transferable:</td>
<td>CSU</td>
</tr>
<tr>
<td>Catalog Date:</td>
<td>June 1, 2020</td>
</tr>
</tbody>
</table>

This course is an intermediate JAVA class. The student will enhance their knowledge in Java Application Program Interface (API) and programming skills. Topics will include Files and Streams, Networking, Multimedia (Images, Animation and Audio), Data Structures, Java Utilities Package and Bit Manipulation, Collections, Java Database Connectivity with JDBC™, Servlets and JavaServer Pages (JSP).

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO #1: EMPLOY JAVA TO CREATE HIGHER LEVEL PROGRAMS.
  - Use Java to design a complete graphic user interface.
  - Implement a data structure by using JAVA API (such as Stack, Collections, Queues, Utilities Package, etc).
- SLO #2: CONSTRUCT DATABASE AND INFORMATION SHARING ENVIRONMENTS.
  - Compose a networking connection program and be able to share information in the environment.
  - Construct Java Database Connectivity with JDBC™.
- SLO #3: SUPPORT ANIMATION, AUDIO, VIDEO, TEXT, AND DIFFERENT DATA TYPES OF DATABASES FOR WEB ACCESS.
  - Access existing system by using Servlets.
  - Create web dynamic contents by using the JSP.
  - Create a multimedia environment and access files and information in the Internet and World Wide Web.

CISP 405 Object Oriented Programming using C# on Visual Studio .NET

<table>
<thead>
<tr>
<th>Units:</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hours:</td>
<td>54 hours LEC; 54 hours LAB</td>
</tr>
<tr>
<td>Prerequisites:</td>
<td>CISP 400 or 401 with a grade of &quot;C&quot; or better, or placement through the assessment process.</td>
</tr>
<tr>
<td>Transferable:</td>
<td>CSU; UC</td>
</tr>
<tr>
<td>Catalog Date:</td>
<td>June 1, 2020</td>
</tr>
</tbody>
</table>

This course is an introduction to C# object-oriented programming language in a Visual Studio environment. Topics will include Visual Studio IDE, Constructors, Methods, Arrays, Inheritance, Polymorphism, Exception Handling, GUI, and Multithreading. This course is designed for students to understand the web-based as well as system development capabilities of C#.
Student Learning Outcomes

Upon completion of this course, the student will be able to:

- **SLO #1**: DISCOVER AND UNDERSTAND THE OBJECT ORIENTED C# PROGRAMMING CONCEPTS, KNOWLEDGE AND POTENTIALS.
  - Define and show how to use any or all of the following: control structures, methods, array, abstract data type, constructors, and data abstraction and information hiding.
  - Implement graphic user interface, multithreading, and object oriented programming using C# program.
- **SLO #2**: APPLY THE LEARNED C# KNOWLEDGE TO CREATE EFFECTIVE AND EFFICIENT PRODUCTION C# PROGRAMS USED IN COMPUTERS AND WEB SITES.
  - Develop system and web page applications.
- **SLO #3**: USE MICROSOFT .NET INTEGRATED DEBUGGING SOFTWARES TO TEST PROGRAMS FOR CORRECT EXECUTIONS.
  - Demonstrate proficiency in using Visual Studio .NET integrated development environment.

CISP 430 Data Structures

| Units: | 4 |
| Hours: | 54 hours LEC; 54 hours LAB |
| Prerequisite: | CISP 400 or CISP 401 with a grade of "C" or better or an equivalent level programming course in the programming language used in this course |
| Transferable: | CSU; UC |
| C-ID: | C-ID COMP 132 |
| Catalog Date: | June 1, 2020 |

This course applies a case study approach which incorporates techniques for systematic problem analysis, program specification, design, coding, testing, debugging and documentation of large programs. Data structures include stacks, queues, trees, lists, etc. Advanced language features related to strings, non-text files, pointers, recursion, and object-oriented programming methodology are covered. Searching and sorting techniques are discussed. Consult the class schedule for specific topics.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- **SLO #1**: ANALYZE PROGRAMMING PROBLEMS AND DETERMINE WHAT OBJECT ORIENTED PROGRAMMING APPROACHES AND TOOLS WOULD BE MOST APPROPRIATE TO DEVELOP PROGRAMS TO RESOLVE THEM.
  - Utilize OOP methodology to create program solutions.
- **SLO #2**: UNDERSTAND STORING, SORTING, AND SEARCHING TECHNIQUES ON DATA STRUCTURES.
  - Implement dynamic data structures and determine which is appropriate for a given problem.
- **SLO #3**: COMMUNICATE, SUPPORT, ANALYZE AND ADAPT DIFFERENT LOGIC AND PROGRAMMING SKILL LEVELS WITH PROJECT TEAM MEMBERS.
  - Work effectively as part of a project team.

CISP 440 Discrete Structures for Computer Science

| Units: | 3 |
| Hours: | 54 hours LEC |
| Prerequisite: | MATH 370 with a grade of "C" or better |
| Corequisite: | CISP 430 |
| Transferable: | CSU; UC |
| C-ID: | C-ID COMP 152 |
| Catalog Date: | June 1, 2020 |

This course is an introduction to the discrete structures used in Computer Science with an emphasis on their applications. Topics covered include: counting methods, elementary formal logic and set theory, recursive programming and algorithm analysis, digital logic and combinational circuits, regular expressions, and finite state automata.
Upon completion of this course, the student will be able to:

- Validate logical arguments within the context of computer computations. (SLO 1)
- Design and analyze simple digital circuits that mimic logical arguments.
- Construct mathematically rigorous proofs of statements involving integers and sets (such as collections of characters or strings). The proofs will include induction and by contradiction forms.
- Model simple computation using finite state automata and regular languages. (SLO 2)
- Compose a valid expression from a given regular language.
- Construct a valid recognizer from a given regular language.
- Develop and analyze patterns related to programs. (SLO 3)
- Translate floating-point and signed integer numbers into IEEE binary format.
- Construct a recursive algorithm to solve a word problem.
- Exposure to the foundational mathematics behind computing. (SLO 4)
- Recognize the mathematical definitions of, and differences between, relations and functions.
- Recognize the definition of sets and basic operations on sets.
- Recognize and use counting techniques such as the pigeonhole principle and permutations and combinations.

Computer Information Science - Security (CISS)

CISS 300 Introduction to Information Systems Security

**Units:** 1  
**Hours:** 18 hours LEC  
**Prerequisite:** None.  
**Advisory:** Some experience and/or coursework in networking.  
**Transferable:** CSU  
**Catalog Date:** June 1, 2020

This course is intended for beginner users who want to increase their understanding of information security issues and practices. It is intended for end users who use computers at home or in the office. The course covers all of the need-to-know information about staying secure, including up-to-date information on relevant topics such as protecting mobile devices and wireless local area networks. Students will learn how to maintain a secure environment and avoid security attacks through a series of real-life user experiences, hands-on projects, and case projects.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- **ANALYZE FUNDAMENTAL SECURITY CONCEPTS (SLO #01).**  
  - Describe the challenges of securing information and define information security and explain why it is important.  
  - Identify the types of attackers that are common today.  
  - List the basic steps of an attack.

- **APPLY SOUND PERSONAL SECURITY PRINCIPALS (SLO #02).**  
  - Describe personal security defenses.  
  - Describe the attacks against passwords.  
  - Describe identity theft and the risks of using social networking.  
  - IDENTIFY THE NEEDS FOR A SECURE COMPUTER (SLO #03).  
  - List and describe the different types of attacks on computers.
CISS 310 Network Security Fundamentals

- Explain how to manage patches.
- Describe how to install and use antivirus software.
- Describe how to recover from an attack.
- CONFIGURE A STRATEGY TO FIGHT AGAINST INTERNET-BASED ATTACKS (SLO #05).
- Explain how the Internet and e-mail work.
- Describe how attackers can use mobile code, cookies, and fraudulent digital certificates.
- List the security risks with using e-mail.
- FORMULATE PROVEN SECURITY PRACTICES AT THE WORKPLACE (SLO #06).
- Define physical access and list the tools used to restrict it.
- Describe how tokens and cards can be used for security.
- Explain what a security policy is and list several different policies.
- Define technology and procedural access control.
- List the steps to be taken to prepare for a crisis.

This course is an introduction to the fundamental principles and topics of Information Technology security and Risk Management at the organizational level. It also addresses hardware, software, processes, communications, applications, and policies and procedures with respect to cyber-security. In addition, this course prepares students for the CompTIA Security+ certification exam.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- ANALYZE FUNDAMENTAL SECURITY CONCEPTS (SLO #01).
  - Describe the fundamental principles of information systems security.
  - Define the concepts of threat, evaluation of assets, information assets, physical, operational, and information security and how they are related.
  - Evaluate the need for the careful design of a secure organizational information infrastructure.
  - Explain the need for a comprehensive security model and its implications for the security manager or Chief Security Officer (CSO).
  - Explain the different types of information security careers and how the Security+ certification can enhance a security career.
- DESCRIBE POTENTIAL SYSTEM ATTACKS AND THE ACTORS THAT MIGHT PERFORM THEM (SLO #02).
  - Describe the different types of software-based attacks
  - List types of hardware attacks.
  - Define virtualization and explain how attackers are targeting virtual systems.
- ANALYZE WAYS TO HARDEN AN OPERATING SYSTEM (SLO #03).
  - Describe various software security applications.
  - Explain how to protect systems from communications-based attacks.
  - List ways to prevent attacks through a Web browser.
  - Explain how to harden operating systems.
• EXAMINE SOME OF THE MAJOR WEAKNESSES THAT ARE FOUND IN NETWORK SYSTEMS AND WAYS TO PREVENT THEM (SLO #04).
• Explain the types of network vulnerabilities.
• Define different methods of network attacks.
• List the different types of network security devices and explain how they can be used.
• Define network address translation and network access control.
• Explain how to enhance security through network design.
• INVESTIGATE THE BASIC WIRELESS SECURITY PROTECTIONS AVAILABLE TO THEM (SLO #05).
• Describe the basic IEEE 802 wireless security protections.
• Define the vulnerabilities of open system authentication, WEP, and device authentication. Describe the WPA and WPA2 personal security models.
• Explain how enterprises can implement wireless security.
• INVESTIGATE LOGICAL AND PHYSICAL ACCESS CONTROL METHODS (SLO #06).
• Define access control and list the four access control models.
• Describe logical access control methods.
• Explain the different types of physical access control.
• EXAMINE AUTHENTICATION AND UNDERSTAND HOW IT FITS INTO ACCESS CONTROL (SLO #07).
• Define authentication. Describe the different types of authentication credentials.
• List and explain the authentication models.
• Define basic cryptography, its implementation considerations, and key management.
• DEFINE RISK AND RISK MANAGEMENT (SLO #08).
• Perform risk analysis and risk management.
• Describe the components of risk management.
• Apply risk management techniques to manage risk, reduce vulnerabilities, threats, and apply appropriate safeguards/controls.
• Describe how usage audits can protect security.
• List the methodologies used for monitoring to detect security-related anomalies.
• EXAMINE HOW TO PROTECT DATA USING THREE COMMON TYPES OF ENCRYPTION ALGORITHMS: HASHING, SYMMETRIC ENCRYPTION, AND ASYMMETRIC ENCRYPTION (SLO #09).
• Define cryptography and hashing.
• List the basic symmetric cryptographic algorithms.
• Describe how asymmetric cryptography works.
• List types of file and file system cryptography. Explain how whole disk encryption works.
• Define digital certificates. List the various types of digital certificates and how they are used.
• Describe the components of Public Key Infrastructure (PKI).
• FORMULATE REDUNDANCY PLANS AND SECURITY POLICIES (SLO #10).
• Describe the components of redundancy planning. Describe appropriate measures to be taken should a system compromise occur.
This course equips students with the knowledge and skills needed by today's organizations that are challenged with rapidly detecting cybersecurity breaches and effectively responding to security incidents. The student would be part of a team of people in Security Operations Centers (SOC's) keeping a vigilant eye on security systems, protecting their organizations by detecting and responding to cybersecurity threats. Cisco Certified Network Associate (CCNA) CyberOPS prepares candidates to begin a career working with associate-level cybersecurity analysts within security operations centers.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- IMPLEMENT AND MANAGE CISCO SECURE NETWORKS (SLO 1)
  - Secure network devices
  - Configure Authentication, Authorization and Accounting (AAA)
- IMPLEMENT NETWORK PERIMETER DEFENSE (SLO 2)
  - Implement firewall technologies
- ANALYZE THREATS AND VULNERABILITIES TO NETWORKS (SLO 3)
  - Implement intrusion prevention
  - Implement Virtual Private Networks (VPNs)

**CISS 320 Implementing Network Security and Counter Measures**

This course introduces students to Intrusion Detection. It also covers such essential practices as developing a security policy and then implementing that policy by performing Network Address Translation; setting up packet filtering; and installing proxy servers; firewalls; and virtual private networks. Finally, this course includes many hands-on activities or labs along with realistic case studies.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- IDENTIFY NETWORK SECURITY FUNDAMENTALS (SLO #01).
  - Describe potential system attacks and the actors that might perform them.
  - Describe the threats to network security.
  - Apply cyber defense methods to prepare a system to repel attacks.
  - Describe appropriate measures to be taken should a system compromise occur.
- EXPLORE DIFFERENT APPROACHES TO RISK ANALYSIS (SLO #02).
  - Explain the fundamental concepts of risk analysis.
  - Describe cyber defense tools, methods and components.
  - Explain the process of risk analysis.
  - FORMULATE A SECURITY POLICY AND IDENTIFY SECURITY POLICY CATEGORIES (SLO #03).
  - Explain best practices in security policies.
  - Formulate a security policy and identify security policy categories.
- Explain the importance of ongoing risk analysis and define incident-handling procedures.
- IDENTIFY SUSPICIOUS TRAFFIC AND EVENTS (SLO #04).
- Describe the concepts of signature analysis.
- Detect normal and suspicious traffic signatures.
- Identify suspicious events.
- Explain the Common Vulnerabilities and Exposures (CVE) standard.
- SUMMARIZE THE ADVANTAGES AND DISADVANTAGES OF VIRTUAL PRIVATE NETWORKS (VPN) (SLO #05).
- Explain basic VPN concepts.
- Describe encapsulation, encryption and authentication in VPNs.
- Explain design considerations for a VPN.
- Explain how to set up VPNs with firewalls.
- Explain how to adjust packet-filtering rules for VPNs.
- IDENTIFY HOW TO USE AN INTRUSION DETECTION SYSTEM PROPERLY (SLO #06).
- Explain the steps of intrusion detection.
- Describe options for implementing intrusion detection systems.
- Evaluate different types of IDS products.
- Explain the six-step incident response process.
- Describe how to respond to false alarms to reduce re-occurrences.
- Explain options for dealing with legitimate security alerts.
- EXPLAIN HOW TO STRENGTHEN DEFENSE THROUGH ONGOING MANAGEMENT (SLO #07).
- Strengthen network control by managing security events.
- Improve analysis by auditing network security procedures.
- Strengthen detection by managing an intrusion detection system.
- Improve network defense by changing a defense in depth configuration.
- Increase their knowledge base by keeping on top of industry trends.
- EXPLAIN COMMON APPROACHES TO PACKET FILTERING AND RECITE HOW TO ESTABLISH A SET OF RULES AND RESTRICTIONS FOR A FIREWALL (SLO #08).
- Explain what firewalls can and cannot do.
- Describe common approaches to packet filtering.
- Establish a set of rules and restrictions for a firewall.
- Design common firewall configurations.
- Compare hardware and software firewalls.


Units: 3.5
Hours: 54 hours LEC; 27 hours LAB
Prerequisites: None.
Advisory: CISN 304 and 341 with grades of "C" or better
Transferable: CSU
Catalog Date: June 1, 2020
This course provides the theoretical understanding of network security and the hands-on skills to implement and support network security. Topics include Cisco switch and router security, Authentication, Authorization, and Accounting (AAA), Access Control Lists (ACLs), Firewalls, Intrusion Prevention System (IPS), and Virtual Private Networks (VPNs). Additionally, the Cisco Adaptive Security Appliance (ASA) and Adaptive Security Device Manager (ASDM) are covered. This course prepares students for CISCO’s Cisco Certified Network Associate (CCNA) Security certification exam.

Student Learning Outcomes
Upon completion of this course, the student will be able to:

- **IMPLEMENT AND MANAGE CISCO SECURE NETWORKS (SLO 1)**
  - Describe security threats facing modern network infrastructures.
  - Configure Cisco routers and switches for security.

- **IMPLEMENT NETWORK PERIMETER DEFENSE (SLO 2)**
  - Describe methods for implementing secure communications to ensure integrity, authenticity, and confidentiality.
  - Explain how IPsec VPNs operate.
  - Test network security and create a technical security policy.

- **ANALYZE THREATS AND VULNERABILITIES TO NETWORKS (SLO 3)**
  - Configure security via CCP and Cisco IOS CLI

CISS 330 Implementing Internet Security and Firewalls

**Units:** 3  
**Hours:** 48 hours LEC; 18 hours LAB  
**Prerequisite:** CISS 310 with a grade of “C” or better  
**Transferable:** CSU  
**Catalog Date:** June 1, 2020

With the increased connectivity to the Internet and the wide availability of automated cracking tools, organizations can no longer simply rely on operating system security to protect their valuable corporate data. The firewall has emerged as a primary tool used to prevent unauthorized access. Students will learn how to allow access to key services while maintaining your organization’s security, as well as how to implement firewall-to-firewall Virtual Private Networks (VPNs).

Student Learning Outcomes
Upon completion of this course, the student will be able to:

- **EXPLAIN THE RELATIONSHIP AMONG THE DIFFERENT ASPECTS OF INFORMATION SECURITY, ESPECIALLY NETWORK SECURITY (SLO #01).**
  - Define the key terms and critical concepts of information and network security.
  - Identify the threats posed to information and network security, as well as the common attacks associated with those threats.
  - Differentiate threats to information within systems from attacks against information within systems.

- **DESCRIBE THE BASIC ELEMENTS OF COMPUTER-BASED DATA COMMUNICATION (SLO #02).**
  - Know the key entities and organizations behind current networking standards, as well as the purpose of and intent behind the more widely used standards.
  - Explain the nature and intent of the OSI reference model, and list and describe each of the model’s seven layers.
  - Describe the nature of the Internet and the relationship between the TCP/IP protocol and the Internet.

- **DEFINE MANAGEMENT’S ROLE IN THE DEVELOPMENT, MAINTENANCE, AND ENFORCEMENT OF INFORMATION SECURITY POLICY, STANDARDS, PRACTICES, PROCEDURES, AND GUIDELINES (SLO #03).**
  - Describe an information security blueprint, identify its major components, and explain how it is used to support a network security program.
  - Discuss how an organization institutionalizes policies, standards, and practices using education, training, and awareness programs.
  - Explain contingency planning, and describe the relationships among incident response planning, disaster recovery planning, business continuity planning, and contingency planning.
• DISCUSS COMMON SYSTEM AND NETWORK VULNERABILITIES (SLO #04).
• Name the common categories of vulnerabilities.
• Locate and access sources of information about emerging vulnerabilities.
• Identify the names and functions of the widely available scanning and analysis tools.
• IDENTIFY THE LIMITATIONS OF FIREWALLS (SLO #05).
• Identify common misconceptions about firewalls.
• Explain why a firewall is dependent on an effective security policy.
• Describe the types of firewall protection.
• Evaluate and recommend suitable hardware and software for a firewall application.
• DESCRIBE PACKETS AND PACKET FILTERING (SLO #06).
• Explain the approaches to packet filtering.
• Recommend specific filtering rules.
• WORK WITH PROXY SERVERS AND APPLICATION-LEVEL FIREWALLS (SLO #07).
• Discuss proxy servers and how they work.
• Identify the goals your organization can achieve using a proxy server.
• Choose a proxy server and work with the SOCKS protocol.
• Evaluate the most popular proxy-based firewall products.
• Explain how to deploy and use reverse proxy.
• Determine when a proxy server isn't the correct choice.
• IDENTIFY AND IMPLEMENT DIFFERENT FIREWALL CONFIGURATION STRATEGIES (SLO #08).
• Understand the nature of advanced firewall functions.
• Track firewall log files, and follow the basic initial steps in responding to security incidents.
• Use a remote management interface.
• Adhere to proven security principles to help the firewall protect network resources.
• Update a firewall to meet new needs and threats.
• DESCRIBE THE ROLE ENCRYPTION PLAYS IN A FIREWALL ARCHITECTURE (SLO #09).
• Discuss Internet Protocol Security (IPSec) and identify its protocols and modes.
• Analyze the workings of SSL, PGP, and other popular encryption schemes.
• Explain how digital certificates work and why they are important security tools.
• DESCRIBE USER, CLIENT, AND SESSION AUTHENTICATION (SLO #10).
• Explain why authentication is a critical aspect of network security.
• Explain why firewalls authenticate and how they identify users.
• List the advantages and disadvantages of popular centralized authentication systems.
• Discuss the potential weaknesses of password security systems.
• Discuss the use of password security tools.
• Describe common authentication protocols used by firewalls.
• RECOMMEND BEST PRACTICES FOR EFFECTIVE CONFIGURATION AND MAINTENANCE OF VIRTUAL PRIVATE NETWORKS (SLO #11).
• Explain the components and essential operations of virtual private networks (VPNs).
• Enable secure remote access for individual users via a VPN.
• Create VPN setups, such as mesh or hub-and-spoke configurations.
CISS 341 Implementing Windows Operating System Security

As organizations increasingly come to rely on Windows-based networks, it is essential that system administrators have a complete understanding of the security models integral to Windows Server and Workstation. This course will provide in depth explanations of operating system security features as well as step-by-step configuration guides for proper operating system configuration. It also provides the knowledge and skills students will need to know in order to maintain the integrity, authenticity, availability, and privacy of data.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- EXPLAIN WHAT OPERATING SYSTEM AND NETWORK SECURITY MEANS (SLO #01).
- Discuss why security is necessary.
- Explain the cost factors related to security.
- Describe the types of attacks on operating systems and networks.
- Discuss system hardening, including features in operating systems and networks that enable hardening.
- EXPLAIN HOW VIRUSES, WORMS, AND TROJAN HORSES SPREAD (SLO #02).
- Discuss typical forms of malicious software and understand how they work.
- Use techniques to protect operating systems from malicious software and to recover from an attack.
- EXPLAIN ENCRYPTION AND AUTHENTICATION METHODS AND HOW THEY ARE USED (SLO #03).
- Discuss attacks on encryption and authentication methods.
- Explain and configure IP Security.
- CREATE ACCOUNT NAMING AND SECURITY STRATEGIES (SLO #04).
- Discuss how to develop account naming and security policies.
- Explain and configure user accounts.
- Discuss and configure account policies and logon security techniques.
- Discuss and implement global access privileges.
- Use group policies and security templates.
- IMPLEMENT DIRECTORY, FOLDER, AND FILE SECURITY (SLO #05).
- Configure shared resource security, using share permissions in Windows.
- Use groups to implement security.
- Troubleshoot security.
- CONFIGURE THE FIREWALL CAPABILITIES IN OPERATING SYSTEMS (SLO #06).
- Understand how TCP, UDP, and IP work and understand the security vulnerabilities of these protocols.
- Explain the use of IP addressing on a network and how it is used for security.
- Explain border and firewall security.
- EXPLAIN PHYSICAL SECURITY METHODS FOR WORKSTATIONS, SERVERS, AND NETWORK DEVICES (SLO #07).
- Implement a network topology for security.
CISS 342 Implementing Linux Operating System Security

Units: 3
Hours: 48 hours LEC; 18 hours LAB
Prerequisite: CISS 310 with a grade of "C" or better
Transferable: CSU
Catalog Date: June 1, 2020

The UNIX family of operating systems is prized by developers and other IT professionals for their flexibility and openness. Vulnerabilities in standard configurations, however, can make UNIX systems susceptible to security threats. For the many organizations that depend upon UNIX systems, protection against intrusion is an absolute requirement. This course provides the knowledge and skills you need to establish security for the Linux platform. It will present in depth explanations of operating system security features as well as step-by-step configuration guides for proper operating system configuration. This course also will cover the knowledge and skills students will need to maintain the integrity, authenticity, availability, and privacy of data.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- EXPLAIN WHAT OPERATING SYSTEM AND NETWORK SECURITY MEANS (SLO #01).
- Discuss why security is necessary.
- Explain the cost factors related to security.
- Describe the types of attacks on operating systems and networks.
- Discuss system hardening, including features in operating systems and networks that enable hardening.
- EXPLAIN HOW VIRUSES, WORMS, AND TROJAN HORSES SPREAD (SLO #02).
- Discuss typical forms of malicious software and understand how they work.
- Use techniques to protect operating systems from malicious software and to recover from an attack.
• EXPLAIN ENCRYPTION AND AUTHENTICATION METHODS AND HOW THEY ARE USED (SLO #03).
• Discuss attacks on encryption and authentication methods.
• Explain and configure IP Security.

CREATE ACCOUNT NAMING AND SECURITY STRATEGIES (SLO #04).
• Discuss how to develop account naming and security policies.
• Explain and configure user accounts.
• Discuss and configure account policies and logon security techniques.
• Discuss and implement global access privileges.
• Use group policies and security templates.

IMPLEMENT DIRECTORY, FOLDER, AND FILE SECURITY (SLO #05).
• Configure shared resource security, using share permissions in Linux or UNIX.
• Use groups to implement security.
• Troubleshoot security.

CONFIGURE THE FIREWALL CAPABILITIES IN OPERATING SYSTEMS (SLO #06).
• Understand how TCP, UDP, and IP work and understand the security vulnerabilities of these protocols.
• Explain the use of IP addressing on a network and how it is used for security.
• Explain border and firewall security.

EXPLAIN PHYSICAL SECURITY METHODS FOR WORKSTATIONS, SERVERS, AND NETWORK DEVICES (SLO #07).
• Implement a network topology for security.
• Explain network communications media in relation to security.

CONFIGURE SECURITY FOR WIRELESS INTERFACES IN WORKSTATION OPERATING SYSTEMS (SLO #08).
• Explain wireless networking and why it is used.
• Describe IEEE 802.11 radio wave networking.
• Explain Bluetooth networking.
• Describe attacks on wireless networks.
• Discuss wireless security measures.

EXPLAIN HOW E-MAIL CAN BE SECURED THROUGH CERTIFICATES AND ENCRYPTION (SLO #09).
• Discuss general techniques for securing e-mail.
• Configure security in popular e-mail tools.

EXPLAIN HOW TO USE DISASTER RECOVERY TECHNIQUES TO SECURE OPERATING SYSTEMS, PREVENT DATA LOSS, AND REDUCE DOWNTIME (SLO #10).
• Deploy UPS systems.
• Create hardware redundancy and apply fault-tolerance.
• Deploy RAID.
• Back up data and operating system files.
• Understand the relationship between baselining and hardening.
• Explain intrusion-detection methods.
• Use audit trails and logs.
• Monitor logged-on users.
• Monitor a network.
This course teaches students how to identify network vulnerabilities and how to take the appropriate countermeasures to prevent and mitigate failure risks for an organization. Students will gain an understanding of the steps needed for good disaster recovery including, how to prepare a disaster recovery plan, the various risks associated with an enterprise network, the diverse job functions of employees in a Disaster Recovery Plan, and the methods needed to implement a plan once it is complete. In addition, each student will develop a Disaster Recovery Plan with a group for a real or fictitious organization.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- DEFINE AND EXPLAIN INFORMATION SECURITY (SLO #01).
  - Define and explain the basic concepts of risk management.
  - Identify and define the components of contingency planning.
  - Know and understand the role of information security policy in the development of contingency plans.

- MANAGE INCIDENT RESPONSE AND DISASTER RECOVERY PROCEDURES (SLO #02).
  - Identify an individual or group to create a contingency policy and plan.
  - Understand the elements needed to begin the contingency planning process.
  - Create an effective contingency planning policy.
  - Comprehend the steps needed for a business impact analysis report.
  - Summarize the steps needed to create and maintain a budget for enabling the contingency planning process.

- ANALYZE THE PROCESS OF INCIDENT RESPONSE PREPARATION (SLO #03).
  - Describe the process used to organize the incident response process.
  - Understand how policy affects the incident response planning process and how policy can be implemented to support incident response practices.
  - Describe the techniques that can be employed when forming a security incident response team (SIRT).
  - Learn the skills and components required to devise an incident response plan.
  - Know some of the concerns and trade-offs to be managed when assembling the final IR plan.

- IDENTIFY TRUE INCIDENTS FROM INCIDENT CANDIDATES AND FALSE POSITIVES (SLO #04).
  - Identify the elements necessary to detect incidents that pose risk to the organization.
  - Summarize the components of an intrusion detection system.
  - Explain the processes used in making decisions surrounding incident detection and escalation.

- UNDERSTAND THE ELEMENTS OF AN INCIDENT RECOVERY RESPONSE (SLO #05).
  - Build the elements of an incident recovery response, and be aware of the impact of selecting a reaction strategy, developing a notification mechanism, and the creation of escalation guidelines.
  - Explain how an organization plans for and executes the recovery process when an incident occurs.
  - Summarize the need for and the steps involved in the ongoing maintenance of the incident response plan.
  - Summarize what forensic analysis entails, and gain an improved understanding in the processes used to collect and manage data in an electronic environment.

- PLAN FOR BUSINESS RESUMPTION FOLLOWING AN INCIDENT (SLO #06).
  - Outline the relationships between the overall use of contingency planning and the subordinate elements of incident response, business resumption, disaster recovery, and business continuity planning.
  - Become familiar with the techniques used for data and application backup and recovery.
• Outline the strategies employed for resumption of critical business processes at alternate and recovered sites.

• PLAN FOR A DISASTER RECOVERY (SLO #07).

• Summarize the ways to classify disasters, both by speed of onset and source.

• Explain who should form the membership of the disaster recovery team.

• Summarize the key functions of the disaster plan. Explain the key concepts included in the NIST approach to technical contingency planning.

• Describe the elements of a sample disaster recovery plan.

• Identify the need for simultaneous wide access to the planning documents as well as the need for securing the sensitive content of the DR plans.

• SUMMARIZE THE KEY CHALLENGES AN ORGANIZATION FACES WHEN ENGAGED IN DISASTER RECOVERY OPERATION (SLO #08).

• Recognize what actions organizations take to prepare for the activation of the DR plan.

• Recognize what critical elements compose the response phase of the DR plan.

• Comprehend what occurs in the recovery phase of the DR plan.

• Identify how an organization uses the resumption phase of the DR plan.

• Identify how an organization resumes normal operations using the restoration phase of the DR plan.

• OUTLINE THE ELEMENTS OF BUSINESS CONTINUITY (SLO #09).

• Recognize who should be included in the business continuity team.

• Recognize and be able to reference two sample business continuity plans.

• Describe the steps taken to maintain the BC plan.

• Summarize the methods used to continuously improve the BC process.

• CREATE AND DEVELOP A CRISIS MANAGEMENT PLAN (SLO #10).

• Recognize the role of crisis management in the typical organization.

• Conduct the creation of a plan preparing for crisis management.

• Value and deal with post-crisis trauma and work toward getting people back to work after a crisis.

• Identify the impact of the decisions regarding law enforcement involvement.

• Manage a crisis communications process.

• Prepare for the ultimate crisis in an organization through succession planning.

CISS 356 Introduction to Information Assurance

<table>
<thead>
<tr>
<th>Units:</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hours:</td>
<td>45 hours LEC, 27 hours LAB</td>
</tr>
<tr>
<td>Prerequisite:</td>
<td>CISS 310 with a grade of &quot;C&quot; or better</td>
</tr>
<tr>
<td>Transferable:</td>
<td>CSU</td>
</tr>
<tr>
<td>Catalog Date:</td>
<td>June 1, 2020</td>
</tr>
</tbody>
</table>

This course introduces the network security specialist to the various methodologies for attacking a network. Students will be introduced to the concepts, principles, and techniques, supplemented by hands-on exercises, for attacking and disabling a network within the context of properly securing a network. The course will emphasize network attack methodologies with the emphasis on student use of network attack techniques and tools and appropriate defenses and countermeasures. Students will receive course content information through a variety of methods: lecture and demonstration of hacking tools will be used in addition to a virtual environment. Students will experience a hands-on practical approach to penetration testing measures and ethical hacking.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• SLO #01: UNDERSTAND ETHICAL HACKING CONCEPTS, INCLUDING THE TERM ‘ETHICAL HACKER’, AS WELL AS PENETRATION AND SECURITY TESTING CONCEPTS AND THE DIFFERENCES BETWEEN THEM
- Describe the role of an ethical hacker. Differentiate between what you can or cannot do legally as an ethical hacker.
- Describe how the fundamental concepts of cyber defense can be used to provide system security.
- List the fundamental concepts of the Information Assurance discipline.
- Describe the TCP/IP protocol stack and be able to review the addressing schemes and how they relate to TCP/IP protocol and security
- Explain the basic concepts of IP addressing.
- Explain the binary, octal, and hexadecimal numbering systems.
- SLO #03: CATEGORIZE THE DIFFERENT TYPES OF MALICIOUS SOFTWARE AND THEIR EFFECT ON A SOFTWARE OR HARDWARE
- Critique the physical security attacks and their vulnerabilities.
- Describe the different types of malicious software.
- Classify the different methods of protecting against malware attacks.
- Examine the architecture of a typical, complex system and identify significant vulnerabilities, risks, and points at which specific security technologies/methods should be employed.
- SLO #04: EVALUATE THE VARIOUS TOOLS USED FOR PORT SCANNING
- Research the different types of port scans currently being used; the tools available to most hackers; their purpose, and function.
- Reason what ping sweeps are used for.
- Uncover how shell scripting is used to automate security tasks.
- SLO #05: ANALYZE SEVERAL NETWORK SECURITY DEVICES THAT SECURITY PROFESSIONALS AND NETWORK ADMINISTRATORS CAN USE TO BETTER PROTECT THEIR NETWORKS
- Describe symmetric and asymmetric encryption algorithms. Describe possible attacks on cryptosystems.
- Critique the advantages and disadvantages of different Intrusion Detection (IDS) technology currently available.
- Critique the advantages and disadvantages of different software firewall technology currently available.
- Investigate honeypots, their purpose and usefulness in a network security plan.
- SLO #06: ABILITY TO CREATE SIMPLE SCRIPTS/PROGRAMS TO AUTOMATE AND PERFORM SIMPLE OPERATIONS.
- Demonstrate their proficiency in the use of scripting languages to write simple scripts (e.g., to automate system administration tasks).
- Write simple and compound conditions within a programming language or similar environment (e.g., scripts, macros, SQL).
- Write simple linear and looping scripts.

CISS 360 Computer Forensics and Investigation

<table>
<thead>
<tr>
<th>Units</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hours</td>
<td>45 hours LEC; 27 hours LAB</td>
</tr>
<tr>
<td>Prerequisite</td>
<td>CISS 310 with a grade of &quot;C&quot; or better</td>
</tr>
<tr>
<td>Advisory</td>
<td>CISC 308</td>
</tr>
<tr>
<td>Transferable</td>
<td>CSU</td>
</tr>
<tr>
<td>Catalog Date</td>
<td>June 1, 2020</td>
</tr>
</tbody>
</table>

This course is an introduction to the methods used to properly conduct a computer forensics investigation beginning with a discussion of ethics, while mapping to the objectives of the International Association of Computer Investigative Specialists (IACIS) certification. Topics covered include an overview of computer forensics as a profession; the computer investigation process; understanding operating systems boot processes and disk structures; data acquisition and analysis; technical writing; and a review of familiar computer forensics tools.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- REVIEW OF THE COMPUTER FORENSICS PROFESSION (SLO #01)
Illustrate how to prepare for computer investigations and explain the difference between law enforcement agency and corporate investigations.

Explain how other organizations' codes of ethics apply to expert testimony.

SUMMARIZE HOW TO PREPARE FOR A COMPUTER INVESTIGATION (SLO #02).

Apply a systematic approach to an investigation.

Describe procedures for corporate high-tech investigations.

Explain requirements for data recovery workstations and software.

Describe how to conduct an investigation.

SUMMARIZE THE CERTIFICATION REQUIREMENTS FOR COMPUTER FORENSICS LABS (SLO #03).

Catalog the physical requirements for a computer forensics lab.

Draft the criteria for selecting a basic forensic workstation.

MEASURE THE DIFFERENT WAYS FOR PROPER DATA ACQUISITION (SLO #04).

Summarize the different digital evidence storage formats being used today.

Explain ways to determine the best acquisition method.

Explain how to use acquisition tools properly.

Explain how to validate data acquisitions.

CLASSIFY THE RULES FOR PROPER DIGITAL EVIDENCE HANDLING (SLO #05).

Describe how to collect evidence at private-sector incident scenes.

Explain guidelines for processing law enforcement crime scenes.

Review a case to identify requirements and plan your investigation.

ANALYZE HOW DATA IS STORED AND MANAGED ON AN OPERATING SYSTEMS (SLO #06).

Analyze an operating system's file structure.

ANALYZE SOME OF THE DIFFERENT COMPUTER FORENSICS TOOLS (SLO #07).

Explain how to evaluate needs for computer forensics tools.

Describe methods for validating and testing computer forensics tools.

VALIDATE THE EVIDENCE DURING THE ANALYSIS PROCESS (SLO #08).

Describe methods of performing a remote acquisition.

Determine what data to analyze in a computer forensics investigation.

Integrate the necessary tools to validate data and for the most common data-hiding techniques.

IDENTIFY AND RECONSTRUCT GRAPHICS FILES (SLO #09).

Summarize the different types of graphics file formats being used today and describe how to identify unknown ones.

Explain types of data compression and how to locate and recover graphics files.

Summarize the copyright issues associated with graphic files.

DESCRIBE THE IMPORTANCE OF NETWORK FORENSICS (SLO #10).

Illustrate the primary concerns in conducting forensic examinations of virtual machines.

Analyze the standard procedures for performing a live or network acquisition.

ANALYZE EMAIL INVESTIGATIONS (SLO #11).

GENERATE A FORENSIC REPORT (SLO #12).

Explain the importance of reports.

Describe guidelines for writing reports.

Explain how to use forensics tools to generate reports.
Computer Information Science - Web (CISW)

CISW 300 Web Publishing

| Units:   | 3 |
| Hours:   | 54 hours LEC |
| Prerequisite: | None. |
| Advisory: | CISC 305 |
| Transferable: | CSU |
| Catalog Date: | June 1, 2020 |

This course is an introduction to publishing on the Internet's World Wide Web (www). Topics include creating www pages with the HyperText Markup Language (html), organizing a series of pages into a website, and uploading web pages to a server. The course makes extensive use of the computer tools necessary to insert html tags, create images, and view web documents. This course prepares apprentice web designers and publishers to identify the information dissemination needs of a client, design appropriate World Wide Web solutions, and implement it.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- **SLO 1: EXAMINE AND PRACTICE WEB PUBLISHING**
  - identify information dissemination situations that are suitable for online publishing on the Internet's World Wide Web.
  - compare and contrast the goals, techniques and costs of web publishing with traditional print publishing.

- **SLO 2: CREATE WEB DOCUMENTS USING CODE**
  - apply structured design principles to the creation of World Wide Web documents using HyperText Markup Language (HTML).
  - demonstrate competence and facility with the software, hardware, and networking tools necessary for publishing documents on the World Wide Web.
  - explain the World Wide Web's open standards process and the evolution of the Web as a international communication medium.

- **SLO 3: PLAN, CONSTRUCT AND EVALUATE A WEB SITE PROJECT**
  - participate in realistic web design projects individually and as a member of a team.
  - identify the information dissemination needs of a client, design an appropriate WWW solution, implement it, present the solution to the client, and revise a necessary.
  - evaluate existing World Wide Web sites for style, structure, and usability.
  - develop strategies for expanding, maintaining and improving WWW sites once they have been created.

CISW 304 Cascading Style Sheets

| Units:   | 2 |
| Hours:   | 27 hours LEC; 27 hours LAB |
| Prerequisite: | CISW 300 with a grade of "C" or better |
| Transferable: | CSU |
| Catalog Date: | June 1, 2020 |

This course continues the study of technical aspects of standards-based Web design for experienced students and Web professionals. Topics include the separation of content from presentation, dynamic user interaction and designing for alternative devices, using Cascading Style Sheets (CSS) in combination with Extensible Hypertext Markup Language (XHTML).

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- **SLO 1: EXAMINE AND PRACTICE USING CSS**
- describe the differences among versions of Cascading Style Sheets (CSS), including issues of cross-platform compatibility.
- utilize proper CSS syntax for developing internal and external style sheets.
- differentiate between a class and id, determine which should be used for a specific situation, and apply it appropriately.
- SLO 2: CREATE WEB DOCUMENTS USING CSS
  - combine selectors to refine style definitions for a group of elements, and/or contextually to one or more elements when used together.
  - demonstrate proficiency in Cascading Style Sheets Positioning (CSS-P), including positioning and layering of objects on multiple web pages.

CISW 308 Mobile Web Development

Units: 2
Hours: 27 hours LEC; 27 hours LAB
Prerequisite: CISW 300 with a grade of "C" or better
Advisory: CISW 304
Transferable: CSU
Catalog Date: June 1, 2020

In this course, students will learn to create websites that are responsive: sites that adapt their layout to the client device being used, whether it be a smartphone, tablet computer, or desktop computer/laptop. Students will learn to use CSS media queries, mobile-friendly HTML5 features, JavaScript enhancements, and various frameworks to build websites that are fluid and flexible.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO #1: ANALYZE WAYS A WEBSITE CAN RESPOND TO THE SPECIFIC NEEDS OF THE ENVIRONMENT ON WHICH IT IS BEING VIEWED.
- Learn how a website can present a layout that is equally - and differently - appropriate for mobile, tablet, and desktop devices.
- SLO #2: EXAMINE WAYS TO LEVERAGE THE CAPABILITIES OF HTML5 TO PRESENT MOBILE-FRIENDLY SITES.
- Understand the varying levels of support for HTML5 features among different devices.
- SLO #3: INVESTIGATE HOW TO USE CSS MEDIA QUERIES.
- Experiment and demonstrate how to use CSS Media Queries to display content modified to fit the client device.
- Integrate video and other media appropriately for mobile devices.
- SLO# 4: USE MOBILE FRAMEWORKS
  - Learn how to use the jQuery Mobile and/or other similar frameworks to add support for touch and other gestures.
  - Learn about and how to create grid-based layouts.

CISW 310 Advanced Web Publishing

Units: 4
Hours: 72 hours LEC
Prerequisite: CISW 300 with a grade of "C" or better
Transferable: CSU
Catalog Date: June 1, 2020

This course builds upon previous web publishing concepts and study. The primary focus of this course is the systematic development of interactive web sites. Topics include cascading style sheets, dynamic HTML, forms, client-side programming with JavaScript, CGI scripting with Perl, and web-database interactivity.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO 1: EXAMINE AND PRACTICE WEB PUBLISHING.
• identify information dissemination situations that are suitable for online publishing on the Internet’s World Wide Web.
• inventory the software, hardware, and networking tools necessary for publishing interactive web sites on the World Wide Web.
• SLO 2: CREATE WEB DOCUMENTS USING CODE.
• SLO 3: STUDY AND PRACTICE USING MULTIPLE LANGUAGES AND/OR METHODS FOR CREATING WEB PAGES.
• apply structured design and programming principles to the creation of interactive World Wide Web sites using HyperText MarkUp language (HTML), JavaScript, Perl, and Structured Query Language (SQL).
• SLO 4: PLAN, CONSTRUCT AND EVALUATE WEB SITES.
• construct interactive web sites individually and as a member of a team.
• assess the web programming needs of a client.
• formulate and prepare an appropriate web programming solution for a client.

CISW 321 Web Site Development using Dreamweaver

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Advisory: CISC 305
Transferable: CSU
Catalog Date: June 1, 2020

This course covers the use of Dreamweaver, a visual Web-authoring tool, to develop and implement Web sites. The topics covered include creating Web pages that contain text, images, links, tables, frames, forms, Cascading Style Sheets and image maps, as well as enhancing Web pages Flash elements and built-in scripting. Additional topics include developing effective Web site structures, using Web site management tools, Web site documentation, making global updates to a Web site, and extending Dreamweaver. Students will work individually and as a member of a team to plan, implement, test, and evaluate Web sites.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• SLO 1: UTILIZE WEB AUTHORING SOFTWARE TO CREATE, MANAGE AND MAINTAIN WEB SITES.
  • Utilize built-in code editing features to modify and repair web pages.
  • Utilize built-in scripting language to implement appropriate web page enhancements.
• SLO 2: DEVELOP AND MANAGE EFFECTIVE WEB SITES.
  • Develop and manage effective web site file structures.
  • Design and create web sites that have effective information design and site navigation.
  • Plan and construct web sites, working individually and as a member of a team.
• SLO 3: DEVELOP STANDARDS FOR WEB SITE CONSISTENCY.
• SLO 4: CREATE DOCUMENTATION FOR WEB PAGES AND WEB SITES.

CISW 326 Intermediate Web Site Development using Dreamweaver

Units: 3
Hours: 54 hours LEC
Prerequisite: CISW 321 with a grade of "C" or better
Transferable: CSU
Catalog Date: June 1, 2020

This course will reinforce and deepen many Dreamweaver topics covered in the beginning course CISW 321 by providing a more in-depth approach. In addition the course will introduce the other Adobe components such as Flash, Flash Script, and content management using Contribute software. Other topics covered include the following: advanced page formatting using style sheets, web site behaviors, work flow enhancement, templates, libraries, dynamic data, search functions, shopping cart functions, site security, user authentication, and other web services.
Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO 1: CREATE AND MAINTAIN WEBSITES UTILIZING ADVANCED FEATURES OF A WEB AUTHORING TOOL
  - demonstrate the use and purpose of style sheets, frames and framesets, forms and form elements, and behaviors in a web site.
- SLO 2: DEVELOP PROFESSIONAL WEB SITES IN A REAL-WORLD ENVIRONMENT
  - develop a fully functional web site through team collaboration and task automation.
  - demonstrate how to build a dynamic Web site which include the topics of server-side technologies, databases, and the language used to extract, insert, delete, and update data with databases such as Structured Query Language (SQL).
- SLO 3: PRACTICE UTILIZING WEB ANIMATION
  - develop, edit and maintain rich media content in a web site using Adobe's Flash software.

CISW 350 Imaging for the Web

Units: 1
Hours: 18 hours LEC
Prerequisite: None.
Advisory: CISC 306 and CISW 300
Transferable: CSU
Catalog Date: June 1, 2020

This course takes a look at designing graphics for the web. Using industry standard graphic software, students will manipulate images and create original graphics. Through lecture, demonstration and hands-on methods as well as class/instructor critiques, students will learn and practice designing graphics for use on the World Wide Web. Topics include developing graphic elements for a web site using a visual theme, creating buttons and intuitive navigational elements, making background textures and images, understanding web file formats, scanning, and creating animation.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO 1: CREATE IMAGES FOR WEB PAGES.
  - create buttons, bars and navigation icons for Web pages.
  - develop appropriate background images and textures.
- SLO 2: DEDUCE THE DIFFERENCE BETWEEN VARIOUS GRAPHIC FILE FORMATS.
  - compare and contrast the various graphic file formats and determine when it is appropriate to use each format.
  - develop simple animated graphics.
- SLO 3: DEMONSTRATE AND PRACTICE SCANNING PROCESSES.
  - demonstrate an understanding of the scanning process and technology.
  - compare scanning techniques.
  - transform and enhance existing graphics with transparency and special effects.
  - create graphics which can be downloaded quickly.
- SLO 4: DISCOVER HOW TO CREATE IMAGE MAPS AND ROLLOVERS.
  - design and create image maps.
  - create multiple-state image rollovers using copy and paste script code.

CISW 355 Web Imaging Projects
This course is a continuation of CISW 350. Projects and simulations developing graphics for the web are created for the purpose of marketing and advertising on the Web. The steps, procedures, and common problems encountered when producing quality graphics for professional Web sites are discussed and practiced. Real and simulated projects will include the following: compressing and uploading times, cropping and resizing, digital camera imaging, retouching and fixing photographs, photographic special effects and filters, rasterizing text, implementing backgrounds, buttons, themes, image maps, slicing, and simple animations.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO 1: CREATE IMAGES FOR WEB PAGES
  - Generate and manipulate graphics from a variety of graphics software
  - Appraise and implement graphics for client and client base

- SLO 2: EXAMINE AND COMPARE DIFFERENT IMAGE EDITING TOOLS AND TECHNIQUES
  - Compare different technologies that can be used to capture and acquire digital images.
  - Examine how color and image resolution affect image quality.
  - List and differentiate Web graphic file formats and when to use them.

- SLO 3: PLAN, CONSTRUCT, AND EVALUATE A WEB SITE PROJECT
  - Analyze web site concepts and marketing techniques.
  - Evaluate user's short-term and long-term goals
  - Plan how to get information/photos/existing logos, etc. from users in a non-technical environment

CISW 400 Client-side Web Scripting

This course emphasizes the creation of dynamic and interactive web sites using a client-side scripting language such as JavaScript. Topics include the Document Object Model of web pages, core features of the client-side scripting language, event handling, control of windows and frames, functions, and form validation.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO 1: EXAMINE AND PRACTICE CLIENT-SIDE SCRIPTING.
  - identify dynamic and interactive client-side scripting situations appropriate for client-side scripting.
  - recognize the various components of a web page as objects in the Document Object Model.
  - analyze web publishing problems and situations and develop solutions using the client-side scripting language.

- SLO 2: CREATE SCRIPTS USING CODE.
  - define the core structures, statements, and syntax of the client-side scripting language.
  - write functions and event handlers in the client-side scripting language.

- SLO 3: CONSTRUCT DYNAMIC WEB APPLICATIONS.
  - create dynamic and interactive web applications.
CISW 402 Intermediate JavaScript

In this course, students will learn advanced JavaScript techniques and good standard coding conventions. Topics include advanced form validation, creating jump menus and cascading select menus, and learning to control CSS with JavaScript to manipulating the HTML DOM. Students will also learn about AJAX and practice using it to create interactive, asynchronous web pages. Finally, students will learn to use jQuery and other similar JavaScript frameworks.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO#1: EXAMINE JAVASCRIPT CODING CONVENTIONS AND THE DOM.
- Learn to use advanced techniques, such as anonymous function.
- Learn to create dynamic forms and menus with JavaScript.
- Learn to use regular expressions for advanced form validation.
- SLO #2: CREATE DYNAMIC WEB APPLICATIONS WITH JAVASCRIPT AND DYNAMIC HTML.
- Learn to create visual effects with Dynamic HTML.
- Learn to position elements dynamically.
- SLO #3: ANALYZE XML-HTTP-REQUEST AND AJAX.
- Learn to modify content on the fly.
- SLO #4: EXAMINE JQUERY.
- Learn how to use jQuery and/or similar Frameworks to manipulate the DOM.
- SLO #5: EXAMINE NEW AND UPCOMING JAVASCRIPT TOOLS AND APPLICATIONS.

CISW 410 Middleware Web Scripting

This course emphasizes the creation of dynamic and interactive web sites using a middleware scripting language such as PHP or ASP. Topics include core features of the middleware scripting language, embedding server commands in HTML pages, control structures, functions, arrays, form validations, cookies, environmental variables, email applications, and database-driven web applications.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO 1: EXAMINE AND PRACTICE MIDDLEWARE SCRIPTING.
  - identify interactive web publishing situations appropriate for middleware web scripting.
  - define the core structures, statements, and syntax of the middleware scripting language.
  - analyze web publishing problems and situations and develop solutions in the middleware scripting environment.
- SLO 2: CREATE SCRIPTS USING CODE.
- write functions using the middleware scripting language.
CISW 440 XML: Introduction to Extensible Markup Language

**Units:** 2
**Hours:** 36 hours LEC
**Prerequisite:** CISW 300 with a grade of "C" or better
**Advisory:** CISA 320 or CISP 350
**Transferable:** CSU
**Catalog Date:** June 1, 2020

XML is a universal method for representing information that is especially well suited for distribution over the Internet. This course will address the most fundamental XML questions - what XML is, why it is needed, and how it can be used. Students will learn the most current, practical XML technologies available at the present time.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- **SLO 1: EXAMINE AND PRACTICE USING EXTENSIBLE MARKUP LANGUAGE (XML).**
- identify and utilize fundamental syntax of XML structure.
- utilize and employ XML applications.
- **SLO 2: CREATE AND PRESENT XML DOCUMENTS.**
- produce XML documents.
- design and present XML documents using style sheets.
Construction | Cosumnes River College

The Construction Technology programs at Cosumnes River College are preparing students for work in new construction, remodel, and energy auditing industries. Course offerings include everything from entry level trades courses, all the way to national certification. Students will train at the college, and at real jobsites. Traditional building practices are covered, but advanced framing techniques, energy efficiency, health and safety, and sustainability are emphasized.

Dean

(916) 691-4300

HarrisC2@crc.losrios.edu

Associate Degree

A.S. in Construction

This program trains students for an industry that is one of the largest employers in the nation. CRC’s construction program is designed to provide students with basic and applied technical skills and knowledge necessary for employment in the building and construction industry. Standard construction procedures are emphasized throughout the program.

HIGHLIGHTS
* Articulation agreements for transfer to specific four-year institutions
* Field trips to a variety of new and existing construction structures for study and appreciation

Catalog Date: June 1, 2020

Degree Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>CMT 112</td>
<td>Construction Estimating</td>
<td>3</td>
</tr>
<tr>
<td>CMT 120</td>
<td>Legal Aspects of Construction</td>
<td>3</td>
</tr>
<tr>
<td>CMT 136</td>
<td>Construction Safety</td>
<td>3</td>
</tr>
<tr>
<td>CMT 300</td>
<td>Introduction to Construction Plans and Specifications (3)</td>
<td>3</td>
</tr>
<tr>
<td>or BIT 102</td>
<td>Plan Reading and Non-Structural Plan Review (3)</td>
<td>3</td>
</tr>
<tr>
<td>CMT 310</td>
<td>Materials of Construction</td>
<td>3</td>
</tr>
<tr>
<td>CMT 313</td>
<td>Computer Estimating for Construction</td>
<td>3</td>
</tr>
<tr>
<td>BIT 100</td>
<td>Introduction to the International Building Code</td>
<td>3</td>
</tr>
<tr>
<td>CONST 105</td>
<td>Rough Carpentry I - Tools, Materials, and Foundations</td>
<td>3</td>
</tr>
<tr>
<td>CONST 106</td>
<td>Rough Carpentry II - Floors, Walls, and Roof Framing</td>
<td>3</td>
</tr>
<tr>
<td>CONST 107</td>
<td>Rough Carpentry III - Exterior Finishes</td>
<td>3</td>
</tr>
<tr>
<td>CONST 108</td>
<td>Finish Carpentry I - Interior Finish</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Units: 33
The Construction Associate in Science (A.S.) degree may be obtained by completion of the required program, plus general education requirements, plus sufficient electives to meet a 60-unit total. See CRC graduation requirements.

**Student Learning Outcomes**

Upon completion of this program, the student will be able to:

- **PSLO #1:** Career Options and Goals - Summarize career options in the industry, and formulate initial career goals.
- **PSLO #2:** Tools - Identify common hand and power tools used in the trades and residential building science, and demonstrate competence in their safe and efficient use.
- **PSLO #3:** Analysis of building materials - Examine various building materials, and compare their strengths and weaknesses as they relate to structural integrity, sustainability, and environmental impact.
- **PSLO #4:** Safety - Explain the relevance of the Occupational Safety and Health Administration, and interpret those regulations specific to the construction industry.
- **PSLO #5:** Building principles - Utilize fundamental building principles to layout and construct residential and light carpentry structures.
- **PSLO #6:** Analysis of Sustainability - Understand the principles of Green Building and compare and contrast emerging techniques with traditional production building methods.
- **PSLO #7:** Building Performance Testing - Perform shell and duct diagnostics, and prescribe measures that can be tested and retested for marked improvement in the energy efficiency of the home.

**Career Information**

Building and Construction Tradesperson; General Contracting; Estimators; Construction Supervisors; Material Salespersons; Building Inspection; Construction Apprenticeship programs. Some career options may require more than two years of college study. Classes beyond the associate degree may be required to fulfill some career options or for preparation for transfer to a university program.

**Certificates of Achievement**

**Construction Pre-Apprenticeship Certificate**

This program prepares students for entry into formal apprenticeship programs and other entry level jobs in the building and construction industry.

*Catalog Date: June 1, 2020*

**Certificate Requirements**

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>CONST 102</td>
<td>Introduction to Construction Practices</td>
<td>4</td>
</tr>
<tr>
<td>CONST 103</td>
<td>OSHA 10 Hour Safety Training</td>
<td>1</td>
</tr>
<tr>
<td>CONST 105</td>
<td>Rough Carpentry I - Tools, Materials, and Foundations</td>
<td>3</td>
</tr>
<tr>
<td>CONST 106</td>
<td>Rough Carpentry II - Floors, Walls, and Roof Framing</td>
<td>3</td>
</tr>
<tr>
<td>CONST 107</td>
<td>Rough Carpentry III - Exterior Finishes</td>
<td>3</td>
</tr>
<tr>
<td>CONST 108</td>
<td>Finish Carpentry I - Interior Finish</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total Units:</strong></td>
<td></td>
<td><strong>17</strong></td>
</tr>
</tbody>
</table>

**Enrollment Eligibility**

To be eligible for enrollment in the program, the student must meet the following criteria:

- Students need to be able to lift 50 pounds and be willing to work outside in all weather conditions.
- Students need to be able and willing to travel to jobsites to build houses and various projects in conjunction with normal class hours.
Student Learning Outcomes
Upon completion of this program, the student will be able to:

- PSLO #1. Understand the career opportunities in the construction field including entry level expectations in various sectors, opportunities for an upward mobility, and strategies for career advancement.
- PSLO #2. Identify and safely operate many of the industry’s common hand and power tools
- PSLO #3. Interpret basic working drawings for residential construction projects, and layout and erect basic floor, wall, and roof assemblies

Career Information
Entry level trades jobs, such as carpenter, electrician, plumber, cement mason. Those jobs can lead to other jobs such as foreman, superintendent, project manager, General contractor, estimator, scheduler, building inspector, safety manager, and even energy auditor.

Construction Certificate
This program prepares students for entry into the building and construction industry as a general tradesperson; and prepares students currently working within the industry for advancement.

Catalog Date: June 1, 2020

Certificate Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>CMT 112</td>
<td>Construction Estimating</td>
<td>3</td>
</tr>
<tr>
<td>CMT 136</td>
<td>Construction Safety</td>
<td>3</td>
</tr>
<tr>
<td>CMT 300</td>
<td>Introduction to Construction Plans and Specifications (3)</td>
<td>3</td>
</tr>
<tr>
<td>or BIT 102</td>
<td>Plan Reading and Non-Structural Plan Review (3)</td>
<td></td>
</tr>
<tr>
<td>CMT 310</td>
<td>Materials of Construction</td>
<td>3</td>
</tr>
<tr>
<td>CONST 105</td>
<td>Rough Carpentry I - Tools, Materials, and Foundations</td>
<td>3</td>
</tr>
<tr>
<td>CONST 106</td>
<td>Rough Carpentry II - Floors, Walls, and Roof Framing</td>
<td>3</td>
</tr>
<tr>
<td>CONST 107</td>
<td>Rough Carpentry III - Exterior Finishes</td>
<td>3</td>
</tr>
<tr>
<td>CONST 108</td>
<td>Finish Carpentry I - Interior Finish</td>
<td>3</td>
</tr>
<tr>
<td>Total Units:</td>
<td></td>
<td>24</td>
</tr>
</tbody>
</table>

Student Learning Outcomes
Upon completion of this program, the student will be able to:

- PSLO #1: Career Options and Goals- Summarize career options in the industry, and formulate initial career goals.
- PSLO #2: Tools- Identify common hand and power tools used in the trades and residential building science, and demonstrate competence in their safe and efficient use.
- PSLO #3: Analysis of Building Materials- Examine various building materials, and compare their strengths and weaknesses as they relate to structural integrity, sustainability, and environmental impact.
- PSLO #4: Safety- Explain the relevance of the Occupational Safety and Health Administration, and interpret those regulations specific to the construction industry
- PSLO #5: Building Principles- Utilize fundamental building principles to layout and construct residential and light carpentry structures
- PSLO #6: Analysis of Sustainability- Understand the principles of Green Building and compare and contrast emerging techniques with traditional production building methods.
Green Buildings Certificate

The purpose of this certificate is to develop job skills and an understanding of green strategies for high performance buildings and livable communities. It is focused at students and professionals in the fields of architecture; construction; building management; construction management; building inspection; design technology; landscape; and planning, who want to acquire a comprehensive knowledge of an integrated, economic life-cycle approach to the design of the built environment. It includes study of green rating systems, material choices and environmental strategies for a livable, sustainable future.

**Catalog Date:** June 1, 2020

Certificate Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARCH 342</td>
<td>Introduction to Green Buildings</td>
<td>3</td>
</tr>
<tr>
<td>CMT 310</td>
<td>Materials of Construction</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>A minimum of 12 units from the following:</td>
<td></td>
</tr>
<tr>
<td>ARCH 332</td>
<td>Design Awareness (3)</td>
<td></td>
</tr>
<tr>
<td>ARCH 334</td>
<td>Advanced Design in Three Dimensions (3)</td>
<td></td>
</tr>
<tr>
<td>ADT 320</td>
<td>Architectural Design Technology - Building Information Modeling (BIM) I (3)</td>
<td></td>
</tr>
<tr>
<td>ADT 322</td>
<td>Architectural Design Technology - Building Information Modeling (BIM) II (3)</td>
<td></td>
</tr>
<tr>
<td>BIT 150</td>
<td>California Energy Code – Building Energy Efficiency Standards (3)</td>
<td></td>
</tr>
<tr>
<td>CONST 143</td>
<td>Photovoltaic Systems (3)</td>
<td></td>
</tr>
<tr>
<td>ECON 306</td>
<td>Environmental Economics (3)</td>
<td></td>
</tr>
<tr>
<td>GEOG 302</td>
<td>Environmental Studies &amp; Sustainability (3)</td>
<td></td>
</tr>
<tr>
<td>GEOG 305</td>
<td>Global Climate Change (3)</td>
<td></td>
</tr>
<tr>
<td>GEOG 306</td>
<td>Weather and Climate (3)</td>
<td></td>
</tr>
</tbody>
</table>

**Total Units:** 18

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- PSLO 1: Establish meaningful ethical, social and environmental objectives for buildings and communities based on the values of energy and resource conscious design.
- Compare and contrast societal and economic implications of utilizing renewable and non-renewable energy sources.
- Compare and contrast the effect of contextual issues and evaluate their impact on energy consumption, environment and the beneficial experience of interior and exterior spaces.
- PSLO 2: Identify and articulate issues related to the choice of various building, landscape and environmental systems; ideate responsive solutions; and compare the alternatives in making effective, sustainable decisions.
- Analyze and calculate energy use to make informed, environmentally-sound and economic choices to satisfy human needs for comfort and aesthetics.
- Explain the concepts of resource conservation and waste reduction and make sustainable design choices related to materials and construction.
• Develop a comprehensive understanding of green rating systems, livable communities strategies and the ability to apply these concepts in decision-making.

• PSLO 3: Demonstrate independent learning, teamwork and continuing education habits that will help to encourage a life long pursuit of knowledge.

• To use a team work process to identify issues, analyze criteria, research and apply learned principles to synthesize solutions to specific design projects.

• To demonstrate habits of visual note making and independent research by developing a sketch and notebook to record learning.

Career Information

This certificate helps to develop the knowledge base related to sustainable green buildings and environments for the careers of architecture, construction, construction management, building inspection, horticulture, landscape architecture and architectural design technology.

Construction (CONST)

CONST 102 Introduction to Construction Practices

Units: 4
Hours: 54 hours LEC; 54 hours LAB
Prerequisite: None.
Catalog Date: June 1, 2020

This course provides students with in-depth analysis of the organization and structure of the construction industry and the many career choices the industry offers. Many of the construction trades are represented, with formal apprenticeship opportunities highlighted. The emerging “Green Building” jobs will be examined, as well as other topics in sustainability. Guest speakers and field trips provide the students a wide view of the expectations of entry-level work, wages, benefits, and work place culture. The curriculum also emphasizes job site safety, practical working knowledge of tool and equipment use, an introduction to blueprints, and an overview of industry math.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• SLO #1: Define the roles that safety plays in the construction industry.

• Predict and evaluate some of the common safety hazards on construction sites.

• Identify and operate various hand tools of the construction industry.

• Define the purpose of OSHA and their regulations for the construction industry.

• SLO #2: Comprehend and value the connection of the fundamental math skills required to lay out, build, and communicate in the construction industry.

• Solve basic math functions including addition, subtraction, multiplication, and division of whole numbers, fractions, and decimals.

• Demonstrate fluency reading a tape measure.

• Recognize and measure basic geometric shapes commonly used in the construction industry.

• Examine and interpret the drawings and symbols used in residential and light commercial construction.

• SLO #3: Summarize the major career paths in the construction industry, and their entry-level expectations.

• Research and list the various career paths in the construction industry.

• Compare and contrast the apprenticeship requirements and responsibilities for a variety of the construction trades.

• Understand the local and global mechanisms driving the emergence of Green Building practices, and define who the major industry organizations are and how they contribute to the movement.

CONST 103 OSHA 10 Hour Safety Training
This OSHA Outreach Training Program is for training construction students and industry workers in basic safety and health hazard recognition and prevention. This course is taught by authorized industry outreach trainers, and successful students will receive the OSHA 10 Hour card. Topics include: Intro to OSHA, Fall Protection, Electrical, Ladders and Stairs, Scaffolds, PPE, Hand and Power Tools, Hazcom, Motor Vehicles, Confined Space Entry, Fire Protection, and Ergonomics.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO #1-Recognize common workplace hazards on jobsites.
- SLO #2- Avoid or prevent workplace health hazards.
- SLO #3- Understand the magnitude of the dangers involved with daily work activity in construction.
- SLO #4- Assess the impact that accidents have on the construction industry
- SLO #5- Discuss how daily work activities on a construction site may lead to a severely disabling injury and the effects this has on the worker and their families.

CONST 105 Rough Carpentry I - Tools, Materials, and Foundations

This course is designed to teach the introductory skills required to be successful in the construction industry. Course topics include an Introduction to the Industry, Hand and Power Tools, Building Materials, Introduction to Plans and Building Codes, Site Layout and Foundations. A heavy emphasis is placed on "hands on" demonstration of proficiency with safe and efficient use of tools, plan reading, as well as the fundamental layout techniques for foundations.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO #1 - Demonstrate a fundamental understanding of the nature of the construction industry and the career opportunities to choose from.
- SLO #2 - Identify and describe the major historical milestones that have affected the technologies used in the construction industry
- SLO #3 - Summarize the current and future career opportunities for carpenters and other trades workers
- SLO #4 - Identify personal characteristics and responsibilities of a professional construction trades worker.
- SLO #5 - Examine various building materials and compare their strengths and weaknesses relative to other global resources and production methods
- SLO #6 - Compare and contrast solid sawn lumber with engineered wood products.
- SLO #7 - Discuss topics in sustainability, embodied energy of materials, and the green building movement
- SLO #8 - Describe the common fasteners and adhesives used in construction
- SLO #9 - Recognize and interpret various construction drawings in a set of architectural plans
- SLO #10 - Estimate quantities of materials needed for simple, residential wood-framed building assemblies, using blueprints.
- SLO #11 - Utilize fundamental building principles to layout and construct concrete foundations.
CONST 106 Rough Carpentry II - Floors, Walls, and Roof Framing

Units: 3
Hours: 27 hours LEC; 81 hours LAB
Prerequisite: None.
Catalog Date: June 1, 2020

This course is designed to teach the skills required to be successful in the construction industry. Course topics include Skill Development in Hand and Power Tool use, as well as techniques in Floor Framing, Wall Framing and Roof Framing. A heavy emphasis is placed on “hands-on” demonstration of proficiency with safe and efficient use of tools, plan reading, as well as the fundamental layout techniques for floor, wall, and roof framing.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO #1 - Identify common hand and power tools used in the construction industry and develop skills and competence in their safe and efficient use.
- Demonstrate fluency and skill development in tool use through the efficient, accurate, and safe use of individual tools.
- SLO #2 - Utilize fundamental building principles to layout and construct Floor Framing assemblies.
- Recognize and interpret various construction drawings to apply techniques in layout, cutting, and installation of floor framing members.
- SLO #3 - Utilize fundamental building principles to layout and construct exterior and interior wall Framing assemblies.
- Recognize and interpret various construction drawings to apply techniques in layout, cutting, and installation of wall framing members.
- SLO #4 - Utilize fundamental building principles to layout and construct various types of roof framing Framing assemblies.
- Recognize and interpret various construction drawings to apply techniques in layout, cutting, and installation of Stick framed and engineered roof truss framing assemblies.

CONST 107 Rough Carpentry III - Exterior Finishes

Units: 3
Hours: 27 hours LEC; 81 hours LAB
Prerequisite: None.
Catalog Date: June 1, 2020

This course is designed to teach the skills required to be successful in the construction industry. Course topics include skill development for hand and power tools, review of framing principles, windows and doors, insulation and ventilation, exterior siding, and roofing. A heavy emphasis is placed on “hands-on” demonstration of proficiency with safe and efficient use of tools, window and door installations, as well as siding and roofing.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO #1 - Demonstrate basic proficiency with the hand and power tools commonly associated with the installation of windows and doors, exterior siding, insulation and roofing.
- SLO #2 - Identify common types and styles of exterior doors and windows, and their proper installation techniques.
- Explain the proper procedure for setting exterior doors, as well as the common characteristics, dimensions, and materials used in their manufacture.
- Explain the proper procedure for setting exterior windows, with special emphasis on flashing techniques for water tightness, and smooth operation of moving parts.
- Evaluate and discuss the role that windows play in the long term energy consumption of the building, and the current trends in energy code compliance.
- SLO #3 - Identify common types and styles of exterior siding, and roofing.
- SLO #4 - Identify common types and styles of insulation and ventilation strategies, commonly used in the industry.
- Evaluate and discuss the role that insulation plays in the long term energy consumption of the building, and the current trends in energy code compliance.
- Explain the correlation between a building's thermal envelope, and the need to address mechanical ventilation in newer more air tight buildings.

**CONST 108 Finish Carpentry I - Interior Finish**

**Units:** 3  
**Hours:** 27 hours LEC; 81 hours LAB  
**Prerequisite:** None.  
**Catalog Date:** June 1, 2020

This course is designed to teach the skills required to be successful in the construction industry. Course topics include Skill development with tools, Drywall, Interior doors and door frames, Interior trim, Stairs and cabinets. A heavy emphasis is placed on "hands-on" demonstration of proficiency with safe and efficient use of tools, drywall applications, as well as the accurate installation of interior trim.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- SLO #1 - Identify common hand and power tools used in Interior finish and demonstrate competence and skill development in their safe and efficient use.
- SLO #2 - Identify commonly used materials and techniques used drywall applications, including various types of drywall, fasteners, and interior finishes.
- Demonstrate techniques in layout, cutting, fastening, and finishing drywall projects.
- SLO #3 - Utilize fundamental installation techniques to install interior doors and trim.  
- Identify the various styles of interior doors, and demonstrate how to interpret doors specified in working drawings.
- Demonstrate competence in installing interior doors.
- SLO #4 - Utilize fundamental building principles to layout, cut, and install stairs.
- SLO #5 - Utilize fundamental installation practices to layout and install upper and lower unit cabinets.

**CONST 142 Energy, Performance, and Indoor Air Quality**

**Units:** 3  
**Hours:** 54 hours LEC  
**Prerequisite:** None.  
**Catalog Date:** June 1, 2020

This course is intended to be the third in the series of Green Building courses, although the sequence is not mandatory. Each course in the series focuses on specific pieces of the larger Green Building sector. This course covers the following topics: The science of energy and its sources, as well as the common alternative and renewable sources of energy that are being researched and developed. Green building guidelines and state energy efficiency standards for buildings and appliances will also be examined. The "Whole House approach" to Building Performance will be an under-current through out the course. Indoor Air Quality, and other health topics will be introduced. This course satisfies the elective units for the CRC Green Building Certificate.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- SLO #1 Demonstrate the skills and competencies in Building Performance and Indoor Air Quality that will enable them to compete effectively in the emerging green building industry.
- Demonstrate critical thinking skills showing their ability to research and predict the direction of the newest technologies and the advances in the use of existing materials and methods.
- SLO #2 Recognize common residential systems and construction assemblies, and identify typical deficiencies in those systems.
Use the "Whole House Approach" to predict how common problems with systems and construction assemblies adversely affect other parts of the house.

SLO #3 Calculate residential heating and cooling loads using Manual J, as well as determining heating and air conditioning equipment and duct sizes with Manual D and Manual S.

**CONST 143 Photovoltaic Systems**

<table>
<thead>
<tr>
<th>Units:</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hours:</td>
<td>54 hours LEC</td>
</tr>
<tr>
<td>Prerequisite:</td>
<td>None.</td>
</tr>
<tr>
<td>Catalog Date:</td>
<td>June 1, 2020</td>
</tr>
</tbody>
</table>

This course will cover general solar industry topics with an emphasis photovoltaic principles and products. There will be a brief study of the political landscape in California in support of the California Solar Initiative, and market strategies and incentives will also be discussed. There will be some hands on projects to help students learn basic electrical theory and circuits, and an introduction to print reading. System Sizing and components will be covered as well. This class is part of the Green Buildings: Environmental Design, Energy Management and Performance Based Construction Certificate.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- SLO #1 Demonstrate safe working practices associated with photovoltaic installations.
- SLO #2 Summarize the performance and operating characteristics of PV systems and components.
- Differentiate between acceptable PV systems electrical installations and grounding.
- Describe how interconnected PV systems can affect the utility.
- SLO #3 Further one's interests in a position, or general knowledge in the photovoltaic field.
- Expand upon this course for a foundation of continued interest.

**CONST 160 Introduction to Residential Building Performance**

<table>
<thead>
<tr>
<th>Units:</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hours:</td>
<td>81 hours LEC; 81 hours LAB</td>
</tr>
<tr>
<td>Prerequisite:</td>
<td>None.</td>
</tr>
<tr>
<td>Catalog Date:</td>
<td>June 1, 2020</td>
</tr>
</tbody>
</table>

This class focuses on preparing students for jobs within the Residential Building Performance and Weatherization industries. This class will train students in residential building science, energy efficiency, and combustion appliance safety. Topics will include nationally recognized Building Performance Institute standards and California Weatherization Installation Standards, Duct and Shell Sealing Measures, and Combustion Appliance Zone testing. This is the first course in the Residential Building Performance and Energy Assessment certificate.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- SLO #1 Define the role that building performance and weatherization play in helping to reduce the demand for energy.
- Describe the cycle of energy production and consumption across the three major sectors of transportation, industry, and the built environment.
- Identify the energy saving measures performed in accordance with the state and nationally recognized standards.
- SLO #2 Perform shell and duct diagnostics, and prescribe measures that can be tested and retested for marked improvement in the energy efficiency of the home.
- Set up blower door testing equipment to depressurize a home, and test it for air leakage with the use of digital manometers and infrared cameras.
- Set up duct pressurizing equipment to measure duct leakage, a major source of energy waste.
• Analyze information gathered in both of these tests to prescribe cost effective remedies for improved energy efficiency in the home.

• SLO #3 Perform Combustion Appliance Safety Inspections.

• Detect defects and hazards in combustion appliances that may jeopardize the health and safety of the occupants.

**CONST 161 Intermediate Residential Building Performance and Energy Auditing**

**Units:** 4  
**Hours:** 54 hours LEC; 54 hours LAB  
**Prerequisite:** CONST 160 with a grade of "C" or better  
**Catalog Date:** June 1, 2020

This course focuses on preparing students for jobs in the Building Performance and Residential Energy Assessment industry. This class will train students about current auditing methods and standards including inspection, whole house performance diagnostics, building science, software applications for the energy professional, utility fee structure and bill disaggregation, and the industry’s recognized rating systems. This course will also prepare the student for the Building Performance Institute “Building Analyst” exam.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

• SLO #1 Identify the industry’s recognized energy assessment and audit measures.

• Examine the energy consuming devices in the home, and identify deficiencies in energy saving potential.

• Perform Combustion Appliance Safety inspections and make appropriate recommendations to insure occupant safety.

• SLO #2: Perform advanced whole house performance diagnosis with Blower Door and Duct Blasters.

• Set up the Blower Door and the Duct Blaster, and make appropriate recommendations for cost effective measures to reduce air leakage.

• Use current software applications for the standardized and/or recognized audit, in conjunction with the results from the pressurizing equipment.

**CONST 163 Advanced Energy Auditing and Energy Modeling**

**Units:** 3  
**Hours:** 54 hours LEC  
**Prerequisite:** None.  
**Advisory:** CONST 161  
**Catalog Date:** June 1, 2020

This course prepares students for jobs in the building performance and energy auditing industry. This class will train students in advanced energy auditing techniques using energy modeling software, and thermography. Students will be trained to use energy modeling software recognized by the California Energy Commission for both new and existing structures. Students will also be trained to use infra red imaging for accurate, non-invasive inspection of homes, assisting the auditor in locating thermal bridging in the building envelope. Topics in Multifamily and “Envelope Professional” certification will also be discussed.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

• SLO #1 Demonstrate entry level proficiency with energy modeling software.

• Collect and enter specific building information required to produce accurate energy efficiency ratings.

• SLO #2 Utilize infra red technology and imaging to assist in the energy auditing of a home.

• SLO #3 Perform the prescribed tests and protocols in the recognized national standards for “Envelope Professional” testing and certification.

• SLO #4 Discuss the current trends for testing and training for Multifamily, low rise, residential structures.
CONST 294 Topics in Green Building Technology

Upon completion of this course, the student will be able to:

- SLO #1 Demonstrate the skills and competencies that will enable them to compete effectively in the emerging green building industry.
- Students will demonstrate critical thinking skills showing there ability to research and predict the direction of the newest technologies and the advances in the use of existing materials.
- SLO #2 Communicate the importance of green building guidelines, and how green building methods help achieve these high standards.
- Students will demonstrate competence in the commonly accepted green building criteria for both residential and commercial construction.
- SLO #3 Compare and contrast a variety of green building materials and methods, and apply the appropriate technologies to meet a clients needs.
- Students will have comprehensive knowledge of many of the green building products, and their manufacturing processes. Students will see case studies of different combinations of green technologies used, and consider budget constraints.

CONST 298 Work Experience in Construction

Upon completion of this course, the student will be able to:

- DEMONSTRATE AN UNDERSTANDING AND APPLICATION OF PROFESSIONAL WORKPLACE BEHAVIOR IN A FIELD OF STUDY RELATED ONE'S CAREER.(SLO 1)
- Understand the effects time, stress, and organizational management have on performance.
- Demonstrate an understanding of consistently practicing ethics and confidentiality in a workplace.
- Examine the career/life planning process and relate its relevancy to the student.
- Demonstrate an understanding of basic communication tools and their appropriate use.
- Demonstrate an understanding of workplace etiquette.
- DESCRIBE THE CAREER/LIFE PLANNING PROCESS AND RELATE ITS RELEVANCY TO ONE'S CAREER.(SLO 2)
- Link personal goals to long term achievement.
- Display an understanding of creating a professional first impression.
- Understand how networking is a powerful job search tool.
- Understand necessary elements of a résumé.
- Understand the importance of interview preparation.
- Identify how continual learning increases career success.

DEMONSTRATE APPLICATION OF INDUSTRY KNOWLEDGE AND THEORETICAL CONCEPTS AS WRITTEN IN LEARNING OBJECTIVES IN PARTNERSHIP WITH THE EMPLOYER WORK SITE SUPERVISOR (SLO 3)
Construction Management Technology
| Cosumnes River College

This CRC program offers training of management-level employees for the construction industry, as well as preparation for transfer to a four-year college or university construction program. Graduates may be employed by contractors, business and government agencies for work in project planning, estimating and project coordinating. A student planning to transfer to a four-year college or university should consult the lower division requirements of the anticipated college program.

Dean
 (916) 691-4300
 HarrisC2@crc.losrios.edu (mailto:HarrisC2@crc.losrios.edu)

Associate Degree

A.S. in Construction Management Technology

This program offers training of management-level employees for the construction industry, as well as preparation for transfer to a four-year college or university construction program. Graduates may be employed by contractors, business and government agencies for work in project planning, estimating and project coordinating. A student planning to transfer to a four-year college or university should consult the lower division requirements of the anticipated college program.

HIGHLIGHTS
* Current curriculum emphasizes analytical problem solving and management skills
* Field trips to a variety of construction sites to study construction methods and procedures (instructor option)
* Transfer potential to four-year programs in Construction Technology

Catalog Date: June 1, 2020

Degree Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT 101</td>
<td>Fundamentals of College Accounting (3)</td>
<td>3 - 4</td>
</tr>
<tr>
<td>or ACCT 301</td>
<td>Financial Accounting (4)</td>
<td></td>
</tr>
<tr>
<td>ADT 310</td>
<td>Architectural Computer-Aided Drawing I</td>
<td>3</td>
</tr>
<tr>
<td>CISC 302</td>
<td>Computer Familiarization</td>
<td>2</td>
</tr>
<tr>
<td>CMT 300</td>
<td>Introduction to Construction Plans and Specifications (3)</td>
<td>3</td>
</tr>
<tr>
<td>or BIT 102</td>
<td>Plan Reading and Non-Structural Plan Review (3)</td>
<td></td>
</tr>
<tr>
<td>CMT 112</td>
<td>Construction Estimating</td>
<td>3</td>
</tr>
<tr>
<td>CMT 120</td>
<td>Legal Aspects of Construction</td>
<td>3</td>
</tr>
<tr>
<td>CMT 134</td>
<td>Construction Scheduling and Critical Path Method</td>
<td>3</td>
</tr>
<tr>
<td>CMT 136</td>
<td>Construction Safety</td>
<td>3</td>
</tr>
<tr>
<td>CMT 310</td>
<td>Materials of Construction</td>
<td>3</td>
</tr>
<tr>
<td>CMT 313</td>
<td>Computer Estimating for Construction</td>
<td>3</td>
</tr>
</tbody>
</table>
The Construction Management Technology Associate in Science (A.S.) degree may be obtained by completion of the required program, plus general education requirements, plus sufficient electives to meet a 60-unit total. See CRC graduation requirements.

Career Information

Plan Checker; Estimator; Superintendent; Project Manager; Contractor; Retail/Wholesale; Office Manager; Developer; Foreman; Laborer. Some career options may require more than two years of college study. Classes beyond the associate degree may be required to fulfill some career options or for preparation for transfer to a university program.

Certificates of Achievement

Construction Management Technology Certificate

This CRC program offers training of management-level employees for the construction industry, as well as preparation for transfer to a four-year college or university construction program. Graduates may be employed by contractors, business and government agencies for work in project planning, estimating and project coordinating. A student planning to transfer to a four-year college or university should consult the lower division requirements of the anticipated college program.

HIGHLIGHTS:

* Current curriculum emphasizes analytical problem solving and management skills
* Field trips to a variety of construction sites to study construction methods and procedures (Instructor option)
* Transfer potential to 4-year programs in Construction Technology

NOTE TO TRANSFER STUDENTS: If you are interested in transferring to a four-year college or university to pursue a bachelor's degree in this major, it is critical that you meet with a CRC counselor to select and plan the courses for your major. Schools vary widely in terms of the required preparation. The courses that CRC requires for an Associate's degree in this major may be different from the requirements needed for the Bachelor's degree.

Catalog Date: June 1, 2020

Certificate Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADT 310</td>
<td>Architectural Computer-Aided Drawing I</td>
<td>3</td>
</tr>
<tr>
<td>CISC 302</td>
<td>Computer Familiarization</td>
<td>2</td>
</tr>
<tr>
<td>CMT 112</td>
<td>Construction Estimating</td>
<td>3</td>
</tr>
<tr>
<td>CMT 120</td>
<td>Legal Aspects of Construction</td>
<td>3</td>
</tr>
<tr>
<td>CMT 134</td>
<td>Construction Scheduling and Critical Path Method</td>
<td>3</td>
</tr>
<tr>
<td>CMT 300</td>
<td>Introduction to Construction Plans and Specifications (3)</td>
<td>3</td>
</tr>
<tr>
<td>or BIT 102</td>
<td>Plan Reading and Non-Structural Plan Review (3)</td>
<td></td>
</tr>
<tr>
<td>CMT 310</td>
<td>Materials of Construction</td>
<td>3</td>
</tr>
<tr>
<td>CMT 313</td>
<td>Computer Estimating for Construction</td>
<td>3</td>
</tr>
<tr>
<td>Total Units:</td>
<td></td>
<td>23</td>
</tr>
</tbody>
</table>
Green Buildings Certificate

The purpose of this certificate is to develop job skills and an understanding of green strategies for high performance buildings and livable communities. It is focused at students and professionals in the fields of architecture; construction; building management; construction management; building inspection; design technology; landscape; and planning, who want to acquire a comprehensive knowledge of an integrated, economic life-cycle approach to the design of the built environment. It includes study of green rating systems, material choices and environmental strategies for a livable, sustainable future.

Catalog Date: June 1, 2020

Certificate Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARCH 342</td>
<td>Introduction to Green Buildings</td>
<td>3</td>
</tr>
<tr>
<td>CMT 310</td>
<td>Materials of Construction</td>
<td>3</td>
</tr>
<tr>
<td>ARCH 332</td>
<td>Design Awareness (3)</td>
<td></td>
</tr>
<tr>
<td>ARCH 334</td>
<td>Advanced Design in Three Dimensions (3)</td>
<td></td>
</tr>
<tr>
<td>ADT 320</td>
<td>Architectural Design Technology - Building Information Modeling (BIM) I (3)</td>
<td></td>
</tr>
<tr>
<td>ADT 322</td>
<td>Architectural Design Technology - Building Information Modeling (BIM) II (3)</td>
<td></td>
</tr>
<tr>
<td>BIT 150</td>
<td>California Energy Code – Building Energy Efficiency Standards (3)</td>
<td></td>
</tr>
<tr>
<td>CONST 143</td>
<td>Photovoltaic Systems (3)</td>
<td></td>
</tr>
<tr>
<td>ECON 306</td>
<td>Environmental Economics (3)</td>
<td></td>
</tr>
<tr>
<td>GEOG 302</td>
<td>Environmental Studies &amp; Sustainability (3)</td>
<td></td>
</tr>
<tr>
<td>GEOG 305</td>
<td>Global Climate Change (3)</td>
<td></td>
</tr>
<tr>
<td>GEOG 306</td>
<td>Weather and Climate (3)</td>
<td></td>
</tr>
<tr>
<td>Total Units:</td>
<td></td>
<td>18</td>
</tr>
</tbody>
</table>

Upon completion of this program, the student will be able to:

- PSLO 1: Establish meaningful ethical, social and environmental objectives for buildings and communities based on the values of energy and resource conscious design.
- Compare and contrast societal and economic implications of utilizing renewable and non-renewable energy sources.
- Compare and contrast the effect of contextual issues and evaluate their impact on energy consumption, environment and the beneficial experience of interior and exterior spaces.
- PSLO 2: Identify and articulate issues related to the choice of various building, landscape and environmental systems; ideate responsive solutions; and compare the alternatives in making effective, sustainable decisions.
- Analyze and calculate energy use to make informed, environmentally-sound and economic choices to satisfy human needs for comfort and aesthetics.
- Explain the concepts of resource conservation and waste reduction and make sustainable design choices related to materials and construction.
• Develop a comprehensive understanding of green rating systems, livable communities strategies and the ability to apply these concepts in decision-making.

• PSLO 3: Demonstrate independent learning, teamwork and continuing education habits that will help to encourage a life long pursuit of knowledge.

• To use a team work process to identify issues, analyze criteria, research and apply learned principles to synthesize solutions to specific design projects.

• To demonstrate habits of visual note making and independent research by developing a sketch and notebook to record learning.

Career Information
This certificate helps to develop the knowledge base related to sustainable green buildings and environments for the careers of architecture, construction, construction management, building inspection, horticulture, landscape architecture and architectural design technology.

Construction Management Technology (CMT)

CMT 112 Construction Estimating

<table>
<thead>
<tr>
<th>Units:</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hours:</td>
<td>54 hours LEC</td>
</tr>
<tr>
<td>Prerequisite:</td>
<td>None</td>
</tr>
<tr>
<td>Advisory:</td>
<td>CMT 310</td>
</tr>
<tr>
<td>Catalog Date:</td>
<td>June 1, 2020</td>
</tr>
</tbody>
</table>

This course covers construction quantity survey and estimating practices for residential, light commercial and green building projects.

Student Learning Outcomes
Upon completion of this course, the student will be able to:

• SLO #1: Demonstrate independent learning and effective communication skills.

• Function independently by attending or logging in to class regularly.

• Communicate professionally and effectively (orally and/or in writing).

• SLO #2: Development of introductory skills in construction estimating.

• Identify the elements required to prepare an estimate.

• Identify the skill set required by an estimator.

• Understand and demonstrating the use of internet search, subcontractor communication and employee contributions to an estimate.

• SLO #3: Define skills necessary to measure and quantify the elements in a residence or building.

• Understand units of measure for different materials.

• Perform calculations required to convert dimensions from feet and inches into feet expressed as a decimal.

• Demonstrate knowledge of the relationships between the quantities measured and pricing as used in estimating.

• Estimate quantities and materials for a complete bid.

• Identify the logical inclusion of green products within a construction project and be able to perform value engineering.

• SLO #4: Demonstrate entry-level proficiency in generating a construction materials Take-Off list.

• Identify and quantify required materials.

• Construct cost reports for material, labor and production quantities.

• Calculate reliable cost of a construction task or project.
CMT 120 Legal Aspects of Construction

This course is a summary of the legal implications of licensing, contracts, specifications and their interpretations. Emphasis on the laws of liability, workers compensation, social security, Cal-OSHA, lien laws, and federal laws affecting construction and compliance problems.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO #1: Demonstrate independent learning and effective communication skills.
- Employ learning by functioning independently in terms of attending or logging in to class regularity.
- Communicate professionally and effectively (orally and/or in writing).
- SLO #2: Identify and recall the foundations of the law as they apply to the many phases of construction.
- Identify appropriate insurances and contracts for different types of parties and projects.
- Comprehend the steps of developing and executing the different contracts of a construction project.
- Identify the steps and options for legal action in all phases of a construction project.
- SLO #3: Apply learned knowledge of legal aspects in project/construction management.
- Employ the use of construction documents to support/clarify a position and/or manage a project.

CMT 134 Construction Scheduling and Critical Path Method

This course introduces computer and manual techniques used in planning, scheduling and controlling construction projects. Network analysis and applications using critical path method and current computer programs will be utilized.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO #1: Demonstrate independent learning and effective communication skills.
- Employ learning by functioning independently in terms of attending or logging in to class regularity.
- Serve and function effectively in project teams simulating real project coordination requirements.
- Communicate professionally and effectively (orally and/or in writing)
- SLO #2: Utilize and apply manual and computer aided scheduling systems used in the construction industry.
- Develop and explain a work breakdown structure, identifying activities, groups of activities, milestones and critical path.
- SLO #3: Apply the use of a schedule for many different project aspects – procurement, contract administration, calculating manpower needs, construction and closeout.
- Calculate real costs and develop historical data for all aspects of construction for specific activities by organization and sorting mechanisms.

CMT 136 Construction Safety

This course will be available soon.

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Catalog Date: June 1, 2020

This course will introduce the principles and practices of construction safety and health. It will cover topics such as personal protective equipment, site safety, material handling, and emergency response.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO #1: Demonstrate independent learning and effective communication skills.
- Employ learning by functioning independently in terms of attending or logging in to class regularity.
- Serve and function effectively in project teams simulating real project coordination requirements.
- Communicate professionally and effectively (orally and/or in writing)
- SLO #2: Utilize and apply manual and computer aided scheduling systems used in the construction industry.
- Develop and explain a work breakdown structure, identifying activities, groups of activities, milestones and critical path.
- SLO #3: Apply the use of a schedule for many different project aspects – procurement, contract administration, calculating manpower needs, construction and closeout.
- Calculate real costs and develop historical data for all aspects of construction for specific activities by organization and sorting mechanisms.
This course addresses the application of safety principles in construction with emphasis on the Occupation Safety and Health Act of 1970 and California OSHA.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO #1: Demonstrate independent learning and effective communication skills.
- Employ learning by functioning independently in terms of attending or logging in to class regularly.
- Communicate professionally and effectively (orally and/or in writing).
- SLO #2: Express and explain a basic safety attitude with an understanding of safety laws that apply to construction.
- Describe and explain the importance of proper planning and equipment for remaining safe on a jobsite.
- SLO #3: Explain and demonstrate how to perform safety administration.
- Design a safety plan.
- Present weekly tailgate/safety meetings.
- Describe the growing opportunities for job placement in the safety field.

CMT 295 Independent Studies in Construction Management Technology

An independent studies project involves an individual student or small group of students in study, research, or activities beyond the scope of regularly offered courses. See the current catalog section of "Special Studies" for full details of Independent Studies.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO #1: Actively engage in intellectual inquiry beyond that required in order to pass a course of study (College Wide Learning Outcome – Area 4).
- Discuss and outline a proposal of study (that can be accomplished within one semester term) with a supervising instructor qualified within the discipline.
- Design an independent study (to be completed individually or by collaboration of a small group) to foster special knowledge, skills, and experience that are not available in any one regularly scheduled course.
- Use information resources to gather discipline-specific information.
- SLO #2: Utilize modes of analysis and critical thinking to apply theoretical perspectives and/or concepts in the major discipline of study to significant problems and/or educational activities (College Wide Learning Outcome – Area 3).
- Analyze and apply the knowledge, skills and experience that are involved in the independent study to theoretical perspectives and/or concepts in the major discipline of study.
- Explain the importance of the major discipline of study in the broader picture of society.
- SLO #3: Communicate a complex understanding of content matter of the major discipline of study (College Wide Outcome – Area 3).
- Demonstrate competence in the skills essential to mastery of the major discipline of study that are necessary to accomplish the independent study.
- SLO #4: Identify personal goals and pursue these goals effectively (College Wide Outcome – Area 4).
Utilize skills from the "academic tool kit" including time management, study skills, etc., to accomplish the independent study within one semester term.

CMT 300 Introduction to Construction Plans and Specifications

This is an introductory course in how to read building plans and specifications. Intended for both the homeowner and the builder, the course gives emphasis to building plan symbols, interpretation of shop and field drawings, and requirements for obtaining building permits.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO #1: Demonstrate independent learning and effective communication skills.
- SLO #2: Identify how different contract documents affect the outcome of the construction drawings.
- SLO #3: Develop a clear understanding of the critical support of specifications in combination with drawings to complete a project.
- SLO #4: Comprehend how to read different kinds of specifications and drawings regardless of architect, discipline or type of construction.
- SLO #5: Identify Legends, Symbols and Schedules within the drawings.
- SLO #6: Demonstrate how to read different drawings including construction drawings, shop drawings, details and sections.

CMT 310 Materials of Construction

This is a general survey of materials and methods of building construction. An overall view of residential, commercial, and heavy construction practices will be studied.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO #1: Compare common construction methods which are currently being used in the field.
- SLO #2: Demonstrate knowledge of terminology related to construction processes.
- SLO #3: Evaluate appropriate installation techniques for specified materials.
- SLO #4: Evaluate common construction materials which are currently being used in the field.
- SLO #5: Demonstrate knowledge of terminology related to construction materials.
- SLO #6: Analyze composition of specific materials and products used in construction.
CMT 313 Computer Estimating for Construction

This course is designed to meet current demands for computerized estimating in the construction industry. This course will integrate computer technology with current construction estimating practices. This technology will provide the student with experience in determining construction quantities and costs quickly, economically and effectively.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO #1: Demonstrate independent learning and effective communication skills.
- Employ learning by functioning independently in terms of attending or logging in to class regularly.
- Communicate professionally and effectively (orally and/or in writing).
- SLO #2: Develop, explain and apply the foundations of estimating with historical data and computer based software systems.
- Demonstrate computer capabilities in producing man-hour labor and material pricing totals efficiently.
- Produce a variety of computer generated reports to provide format suitable to specific party the information is addressing.
- SLO #3: Comprehend the importance of historical data and how to accumulate it.
- research and analyze a scan of internet resources for product pricing and current cost impact trends.
- analyze an accumulation of estimating data for quantity comparisons in future jobs is also a primary objective.
- SLO #4: Employ the use of construction documents to support/clarify partial or total cost of a project.
- Comprehend the difference between budgets, estimates and bids.
- Identify and clearly separate and support pricing for both soft and hard construction costs.

CMT 495 Independent Studies in Construction Management Technology

An independent studies project involves an individual student or small group of students in study, research, or activities beyond the scope of regularly offered courses. See the current catalog section of "Special Studies" for full details of Independent Studies.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO #1: Actively engage in intellectual inquiry beyond that required in order to pass a course of study (College Wide Learning Outcome – Area 4).
- Discuss and outline a proposal of study (that can be accomplished within one semester term) with a supervising instructor qualified within the discipline.
- Design an independent study (to be completed individually or by collaboration of a small group) to foster special knowledge, skills, and experience that are not available in any one regularly scheduled course.
- Use information resources to gather discipline-specific information.
SLO #2: Utilize modes of analysis and critical thinking to apply theoretical perspectives and/or concepts in the major discipline of study to significant problems and/or educational activities (College Wide Learning Outcome – Area 3).

Analyze and apply the knowledge, skills and experience that are involved in the independent study to theoretical perspectives and/or concepts in the major discipline of study.

Explain the importance of the major discipline of study in the broader picture of society.

SLO #3: Communicate a complex understanding of content matter of the major discipline of study (College Wide Outcome – Area 3).

Demonstrate competence in the skills essential to mastery of the major discipline of study that are necessary to accomplish the independent study.

SLO #4: Identify personal goals and pursue these goals effectively (College Wide Outcome – Area 4).

Utilize skills from the “academic tool kit” including time management, study skills, etc., to accomplish the independent study within one semester term.

CMT 498 Work Experience in Construction Management Technology

<table>
<thead>
<tr>
<th>Units:</th>
<th>1 - 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hours:</td>
<td>60 - 300 hours LAB</td>
</tr>
<tr>
<td>Prerequisite:</td>
<td>None.</td>
</tr>
<tr>
<td>Enrollment Limitation:</td>
<td>Students must be in a paid or unpaid internship, volunteer position or job related to career goals in Construction Management Technology.</td>
</tr>
<tr>
<td>Transferable:</td>
<td>CSU</td>
</tr>
<tr>
<td>General Education:</td>
<td>AA/AS Area III(b)</td>
</tr>
<tr>
<td>Catalog Date:</td>
<td>June 1, 2020</td>
</tr>
</tbody>
</table>

This course provides students with opportunities to develop marketable skills in preparation for employment in their major field of study or advancement within their career. It is designed for students interested in work experience and/or internships in transfer level degree occupational programs. Course content includes understanding the application of education to the workforce; completion of required forms which document the student's progress and hours spent at the work site; and developing workplace skills and competencies. Appropriate level learning objectives are established by the student and the employer. During the semester, the student is required to participate in a weekly orientation and 75 hours of related paid work experience, or 60 hours of unpaid work experience for one unit. An additional 75 or 60 hours of related work experience is required for each additional unit. Work Experience may be taken for a total of 16 units when there are new or expanded learning objectives. Only one Work Experience course may be taken per semester.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- DEMONSTRATE AN UNDERSTANDING AND APPLICATION OF PROFESSIONAL WORKPLACE BEHAVIOR IN A FIELD OF STUDY RELATED ONE’S CAREER (SLO 1)
  - Understand the effects time, stress, and organizational management have on performance.
  - Demonstrate an understanding of consistently practicing ethics and confidentiality in a workplace.
  - Examine the career/life planning process and relate its relevancy to the student.
  - Demonstrate an understanding of basic communication tools and their appropriate use.
  - Demonstrate an understanding of workplace etiquette.
- DESCRIBE THE CAREER/LIFE PLANNING PROCESS AND RELATE ITS RELEVANCY TO ONE’S CAREER (SLO 2)
  - Link personal goals to long term achievement.
  - Display an understanding of creating a professional first impression.
  - Understand how networking is a powerful job search tool.
  - Understand necessary elements of a résumé.
  - Understand the importance of interview preparation.
  - Identify how continual learning increases career success.
- DEMONSTRATE APPLICATION OF INDUSTRY KNOWLEDGE AND THEORETICAL CONCEPTS AS WRITTEN IN LEARNING OBJECTIVES IN PARTNERSHIP WITH THE EMPLOYER WORK SITE SUPERVISOR (SLO 3)
Culinary Arts Management | Cosumnes River College

This program provides training for employment in commercial culinary service operations. Courses begin at entry-level training; advanced courses build upon skills acquired in pre-requisite courses.

The program includes coursework in culinary arts, baking and pastry, food and equipment use and identification, culinary sanitation, nutrition, marketing, legal control and financial analysis. Students will apply those skills with hands-on training in production centered labs.

Sanitation training is offered as an integral part of each certificate and degree and is certified by the National Restaurant Association in collaboration with the Sacramento County Environmental Health Division.

Dean
Nancy Reitz

(916) 691-7391
reitzn@crc.losrios.edu

Associate Degrees

A.A. in Culinary Arts Management

This program provides training for employment in commercial culinary service operations. Courses begin at entry-level training; advanced courses build upon skills acquired in pre-requisite courses.

The program includes coursework in culinary arts, baking and pastry, food and equipment use and identification, culinary sanitation, nutrition, marketing, legal control and financial analysis. Students will apply those skills with hands-on training in production centered labs.

Sanitation training is offered as an integral part of each certificate and degree, and is certified by the National Restaurant Association as well as Sacramento County Environmental Health Division.

HIGHLIGHTS
*Hands-on experience in all aspects of commercial culinary services
*Curriculum developed in collaboration with Sacramento employers in restaurants, schools, hospitals, and grocery stores

Catalog Date: June 1, 2020

Degree Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAM 300</td>
<td>Introduction to Culinary Arts Management</td>
<td>2</td>
</tr>
<tr>
<td>CAM 306</td>
<td>Culinary Sanitation &amp; Safety</td>
<td>2</td>
</tr>
<tr>
<td>CAM 301</td>
<td>Food Theory and Preparation</td>
<td>4</td>
</tr>
<tr>
<td>CAM 302</td>
<td>Food and Culture in America</td>
<td>3</td>
</tr>
<tr>
<td>CAM 303</td>
<td>Food Product Identification</td>
<td>2</td>
</tr>
<tr>
<td>CAM 310</td>
<td>Quantity Food Production</td>
<td>3</td>
</tr>
<tr>
<td>CAM 312</td>
<td>Baking and Pastry (3)</td>
<td>3</td>
</tr>
<tr>
<td>CAM 320</td>
<td>Culinary Management</td>
<td>2</td>
</tr>
<tr>
<td>COURSE CODE</td>
<td>COURSE TITLE</td>
<td>UNITS</td>
</tr>
<tr>
<td>-------------</td>
<td>--------------------------------------------------</td>
<td>-------</td>
</tr>
<tr>
<td>CAM 322</td>
<td>Culinary Customer Service</td>
<td>2</td>
</tr>
<tr>
<td>CAM 324</td>
<td>Culinary Supervision</td>
<td>2</td>
</tr>
<tr>
<td>CAM 330</td>
<td>Legal Aspects of Culinary Management</td>
<td>2</td>
</tr>
<tr>
<td>CAM 332</td>
<td>Culinary Financial Management</td>
<td>2</td>
</tr>
<tr>
<td>CAM 334</td>
<td>Culinary Marketing</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>A minimum of 4 units from the following:</td>
<td>4</td>
</tr>
<tr>
<td>CAM 498</td>
<td>Work Experience in Culinary Arts Management (1 - 4)</td>
<td></td>
</tr>
<tr>
<td>NUTRI 300</td>
<td>Nutrition</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Total Units:</strong></td>
<td><strong>38</strong></td>
</tr>
</tbody>
</table>

CAM 300, 306, and 301 serve as pre-requisite courses for many higher level courses.

The Culinary Arts Management Associate in Arts (A.A.) degree may be obtained by completion of the required program, plus general education requirements, plus sufficient electives to meet a 60-unit total. See CRC graduation requirements.

**Student Learning Outcomes**

Upon completion of this program, the student will be able to:

- demonstrate the ability to use professional written and oral communication skills necessary to communicate to a variety of audiences. (PSLO 1)
- will demonstrate awareness, understanding, and skills necessary to live and work in a diverse world. (PSLO 2)
- demonstrate basic mathematical principles for foodservice record keeping, baking procedures, and recipe conversions. (PSLO 3)
- understand and practice proper sanitation and safety procedures critical to the foodservice industry. (PSLO 4)
- demonstrate the ability to develop, examine, question, and explore perspectives or alternatives to problems within the foodservice industry. (PSLO 5)
- demonstrate critical thinking skills needed to assess and correct problems within food preparation, production, presentation and service. (PSLO 6)
- demonstrate effective techniques for the selection and procurement of food and non-food items used common to the foodservice industry. (PSLO 7)
- exhibit a basic understanding of nutrition and the relationship between nutrition and food preparation. (PSLO 8)
- demonstrate basic knowledge of cooking techniques and procedures. (PSLO 9)
- practice professional ethics, provide leadership, demonstrate personal and global responsibility and work effectively as a team member. (PSLO 10)
- integrate human, financial and physical resources management into foodservice operations. (PSLO 11)

**Career Information**

Culinary Manager; Culinary Supervisor; Cook; Kitchen Manager; Waiter/Waitress; Restaurant Manager; Caterer; Food Service Worker; Baker; School Food Service Specialist.

**A.A. in Restaurant and Food Service Entrepreneurship**

This program provides training and education for those wishing to own a restaurant or other food service venture. The various elements involved in starting and operating a small business are covered as well as training in food theory and production, safety and sanitation, culinary purchasing, and service.

**Catalog Date:** June 1, 2020
<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAM 300</td>
<td>Introduction to Culinary Arts Management</td>
<td>2</td>
</tr>
<tr>
<td>CAM 301</td>
<td>Food Theory and Preparation</td>
<td>4</td>
</tr>
<tr>
<td>CAM 303</td>
<td>Food Product Identification</td>
<td>2</td>
</tr>
<tr>
<td>CAM 306</td>
<td>Culinary Sanitation &amp; Safety</td>
<td>2</td>
</tr>
<tr>
<td>CAM 310</td>
<td>Quantity Food Production</td>
<td>3</td>
</tr>
<tr>
<td>CAM 320</td>
<td>Culinary Management</td>
<td>2</td>
</tr>
<tr>
<td>CAM 322</td>
<td>Culinary Customer Service</td>
<td>2</td>
</tr>
<tr>
<td>CAM 332</td>
<td>Culinary Financial Management</td>
<td>2</td>
</tr>
<tr>
<td>CAM 334</td>
<td>Culinary Marketing</td>
<td>2</td>
</tr>
<tr>
<td>BUS 215</td>
<td>Entrepreneurial Opportunity and Business Planning</td>
<td>3</td>
</tr>
<tr>
<td>BUS 300</td>
<td>Introduction to Business</td>
<td>3</td>
</tr>
<tr>
<td>BUS 340</td>
<td>Business Law</td>
<td>3</td>
</tr>
<tr>
<td>BUS 350</td>
<td>Small Business Management/Entrepreneurship</td>
<td>3</td>
</tr>
<tr>
<td>MKT 300</td>
<td>Principles of Marketing</td>
<td>3</td>
</tr>
<tr>
<td>ACCT 301</td>
<td>Financial Accounting (4)</td>
<td>3 - 4</td>
</tr>
<tr>
<td>or BUS 320</td>
<td>Concepts in Personal Finance (3)</td>
<td></td>
</tr>
<tr>
<td>NUTRI 300</td>
<td>Nutrition</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Units: 42 - 43

The Restaurant and Food Service Entrepreneurship Associate in Arts (A.A.) degree may be obtained by completion of the required program, plus general education requirements, plus sufficient electives to meet a 60-unit total. See CRC graduation requirements.
Student Learning Outcomes

Upon completion of this program, the student will be able to:

- (PSLO 1) Understand and practice proper sanitation and safety procedures critical to the food service industry.
- (PSLO 2) Demonstrate critical thinking skills needed to assess and correct problems within food preparation, production, presentation and service.
- (PSLO 3) Demonstrate effective techniques for the selection and procurement of food and non-food items used common to the food service industry.
- (PSLO 4) Demonstrate basic knowledge of cooking techniques and procedures.
- (PSLO 5) Exhibit a basic understanding of nutrition
- (PSLO 6) Demonstrate skill and comprehension in entrepreneurship as indicated by course outcomes.
- (PSLO 7) Transform an entrepreneurial idea into a viable business concept.
- (PSLO 8) Employ appropriate management, finance, accounting, and marketing techniques required in operating a business.
- (PSLO 9) Demonstrate the ability to think critically and analyze problems.
- (PSLO 10) Evaluate the feasibility of success when starting a new business venture.
- (PSLO 11) Research and compose a business plan that includes all facets of starting and managing a business.
- (PSLO 12) Express ideas and facts clearly and completely.
- (PSLO 13) Develop effective oral and written communication skills that can be applied in various business settings.

Career Information

Small Business Owner- Restaurant and Food Service field. Restaurant manager.

Certificates of Achievement

Basic Culinary Services Certificate

This program provides training in the entry-level skills necessary for a career in food service. Courses begin at basic training, culminating in an advanced course focusing on the quantity production of food.

The program includes coursework in culinary arts, culinary sanitation, and customer service. Students will apply skills with hands-on training in production centered labs.

Sanitation training is offered as an integral part of each certificate and degree in the department and is certified by the National Restaurant Association as well as Sacramento County Environmental Health Division.

This certificate is the first in a program series. After completion, students can continue CAM coursework towards a certificate in cooking and supervision and then towards an A.A. Degree, with all coursework counting as part of the requirements for the degree.

All CAM curriculum is developed in collaboration with Sacramento employers in restaurants, schools, hospitals, and grocery stores.

Catalog Date: June 1, 2020

Certificate Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAM 300</td>
<td>Introduction to Culinary Arts Management</td>
<td>2</td>
</tr>
<tr>
<td>CAM 306</td>
<td>Culinary Sanitation &amp; Safety</td>
<td>2</td>
</tr>
<tr>
<td>CAM 301</td>
<td>Food Theory and Preparation</td>
<td>4</td>
</tr>
<tr>
<td>CAM 310</td>
<td>Quantity Food Production</td>
<td>3</td>
</tr>
<tr>
<td>CAM 322</td>
<td>Culinary Customer Service</td>
<td>2</td>
</tr>
</tbody>
</table>

Total Units: 13
CAM 300, 306, and 301 serve as pre-requisite courses for many higher level department courses

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- demonstrate the ability to use professional written and oral communication skills necessary to communicate to a variety of audiences. (P-SLO 1)
- demonstrate basic mathematical principles for foodservice record keeping, baking procedures, and recipe conversions. (P-SLO 3)
- understand and practice proper sanitation and safety procedures critical to the foodservice industry. (P-SLO 4)
- demonstrate the ability to develop, examine, question, and explore perspectives or alternatives to problems within the foodservice industry. (P-SLO 5)
- demonstrate critical thinking skills needed to assess and correct problems within food preparation, production, presentation and service. (PSLO 6)
- exhibit a basic understanding of nutrition and the relationship between nutrition and food preparation. (P-SLO 8)
- demonstrate basic knowledge of cooking techniques and procedures. (PSLO 9)
- integrate human, financial and physical resources management into foodservice operations. (P-SLO 11)

Career Information

This program is designed to prepare graduates with the skills necessary to enter into entry level employment in a food service operation.

Cooking and Supervision Certificate

This program provides training in the basic skills necessary for a career in food service management. Courses begin at basic training, culminating in an advanced course focusing on the quantity production of food and intermediate skills in management relevant to the food-service industry.

The program includes coursework in culinary arts, culinary sanitation, customer service, management principles, and nutrition. Students will apply skills with hands-on training in production centered labs.

Sanitation training is offered as an integral part of each certificate and degree in the department and is certified by the National Restaurant Association as well as Sacramento County Environmental Health Division.

This certificate is the second in a program series. After completion, students can continue their CAM coursework towards an A.A. Degree, with all coursework counting as part of the requirements for the degree.

All CAM curriculum is developed in collaboration with Sacramento employers in restaurants, schools, hospitals, and grocery stores.

Catalog Date: June 1, 2020

Certificate Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAM 300</td>
<td>Introduction to Culinary Arts Management</td>
<td>2</td>
</tr>
<tr>
<td>CAM 306</td>
<td>Culinary Sanitation &amp; Safety</td>
<td>2</td>
</tr>
<tr>
<td>CAM 301</td>
<td>Food Theory and Preparation</td>
<td>4</td>
</tr>
<tr>
<td>CAM 310</td>
<td>Quantity Food Production</td>
<td>3</td>
</tr>
<tr>
<td>CAM 312</td>
<td>Baking and Pastry (3)</td>
<td>3</td>
</tr>
<tr>
<td>or CAM 316</td>
<td>Hors D'oeuvres and Canapes (3)</td>
<td></td>
</tr>
<tr>
<td>CAM 322</td>
<td>Culinary Customer Service</td>
<td>2</td>
</tr>
<tr>
<td>CAM 320</td>
<td>Culinary Management</td>
<td>2</td>
</tr>
<tr>
<td>COURSE CODE</td>
<td>COURSE TITLE</td>
<td>UNITS</td>
</tr>
<tr>
<td>-------------</td>
<td>-------------------------------</td>
<td>-------</td>
</tr>
<tr>
<td>CAM 324</td>
<td>Culinary Supervision</td>
<td>2</td>
</tr>
<tr>
<td>CAM 303</td>
<td>Food Product Identification</td>
<td>2</td>
</tr>
<tr>
<td>NUTRI 300</td>
<td>Nutrition</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Total Units:</strong></td>
<td><strong>25</strong></td>
</tr>
</tbody>
</table>

1CAM 300, 306, and 301 serve as pre-requisite courses for many higher level department courses

2Check with program instructor for schedule rotation.

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- demonstrate the ability to use professional written and oral communication skills necessary to communicate to a variety of audiences. (P-SLO 1)
- demonstrate basic mathematical principles for foodservice record keeping, baking procedures, and recipe conversions. (P-SLO 3)
- understand and practice proper sanitation and safety procedures critical to the foodservice industry. (P-SLO 4)
- demonstrate the ability to develop, examine, question, and explore perspectives or alternatives to problems within the foodservice industry. (P-SLO 5)
- demonstrate critical thinking skills needed to assess and correct problems within food preparation, production, presentation and service. (P-SLO 6)
- demonstrate effective techniques for the selection and procurement of food and non-food items used common to the foodservice industry. (P-SLO 7)
- exhibit a basic understanding of nutrition and the relationship between nutrition and food preparation. (P-SLO 8)
- demonstrate basic knowledge of cooking techniques and procedures. (P-SLO 9)
- practice professional ethics, provide leadership, demonstrate personal and global responsibility and work effectively as a team member. (P-SLO 10)
- integrate human, financial and physical resources management into foodservice operations. (P-SLO 11)

Career Information

This program is designed to prepare graduates with the skills necessary for advancement from entry level employment in a food service operation.

School Foodservice Specialist Certificate

This program provides training in the skills necessary for a career in school food service.

The program includes coursework in culinary arts, culinary sanitation, and customer service. Students will apply skills with hands-on training in production centered labs.

Sanitation training is offered as an integral part of each certificate and degree in the department and is certified by the National Restaurant Association as well as Sacramento County Environmental Health Division.

All CAM curriculum is developed in collaboration with Sacramento employers in restaurants, schools, hospitals, and grocery stores.

**Catalog Date:** June 1, 2020

Certificate Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>NUTRI 300</td>
<td>Nutrition</td>
<td>3</td>
</tr>
<tr>
<td>COURSE CODE</td>
<td>COURSE TITLE</td>
<td>UNITS</td>
</tr>
<tr>
<td>-------------</td>
<td>--------------------------------------------------</td>
<td>-------</td>
</tr>
<tr>
<td>NUTRI 322</td>
<td>Nutrition Issues Throughout Life</td>
<td>3</td>
</tr>
<tr>
<td>CAM 300</td>
<td>Introduction to Culinary Arts Management</td>
<td>2</td>
</tr>
<tr>
<td>CAM 306</td>
<td>Culinary Sanitation &amp; Safety</td>
<td>2</td>
</tr>
<tr>
<td>CAM 301</td>
<td>Food Theory and Preparation</td>
<td>4</td>
</tr>
<tr>
<td>CAM 302</td>
<td>Food and Culture in America (3)</td>
<td>3</td>
</tr>
<tr>
<td>CAM 310</td>
<td>Quantity Food Production</td>
<td>3</td>
</tr>
<tr>
<td>CAM 320</td>
<td>Culinary Management</td>
<td>2</td>
</tr>
<tr>
<td>ECE 415</td>
<td>Children's Health, Safety and Nutrition (3)</td>
<td>3</td>
</tr>
<tr>
<td>Total Units:</td>
<td></td>
<td>25</td>
</tr>
</tbody>
</table>

CAM 300, 306, and 301 serve as pre-requisite courses for many higher department level courses

### Student Learning Outcomes

Upon completion of this program, the student will be able to:

- demonstrate the ability to use professional written and oral communication skills necessary to communicate to a variety of audiences. (P-SLO 1)
- demonstrate awareness, understanding, and skills necessary to live and work in a diverse world. (P-SLO 2)
- demonstrate basic mathematical principles for foodservice record keeping, baking procedures, and recipe conversions. (P-SLO 3)
- understand and practice proper sanitation and safety procedures critical to the foodservice industry. (P-SLO 4)
- demonstrate the ability to develop, examine, question, and explore perspectives or alternatives to problems within the foodservice industry. (P-SLO 5)
- demonstrate critical thinking skills needed to assess and correct problems within food preparation, production, presentation and service. (P-SLO 6)
- exhibit a basic understanding of nutrition and the relationship between nutrition and food preparation. (P-SLO 8)
- demonstrate basic knowledge of cooking techniques and procedures. (P-SLO 9)

### Career Information

This program is designed to prepare graduates with the skills necessary to enter into employment in a school foodservice operation or to provide the knowledge and skills necessary for those in school foodservice seeking a promotion from entry level employment.

### Culinary Arts Management (CAM)

#### CAM 294 Topics in Culinary Arts Management

**Units:** 0.5 - 4  
**Hours:** 5 - 36 hours LEC; 13 - 108 hours LAB  
**Prerequisite:** None.  
**Catalog Date:** June 1, 2020

Coursework designed to cover special topics not included in current culinary offerings. Topics may be offered in a workshop or seminar presentation on timely subjects or targeted for specific audiences.

### Student Learning Outcomes

Upon completion of this course, the student will be able to:
CAM 300 Introduction to Culinary Arts Management

Units: 2
Hours: 36 hours LEC
Prerequisite: None.
Transferable: CSU
Catalog Date: June 1, 2020

This course provides an overview of the skills and attributes that predict success for professionals in the restaurant/foodservice industry. Entry skills to be taught include mise en place, work simplification/time management, computational skills including measurements and conversions, flavor profiles, plating and garnishing, interview skills, menu development, recipe writing and an overview of the history and modern state of the restaurant/foodservice industry.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO 1: Demonstrate the ability to use professional written and oral communication skills necessary to communicate to a variety of audiences (P-SLO1).
  - Objective 1a: Complete a written project and presentation outlining student career goals.
  - Objective 1b: Participate in a mock interview activity.
  - Objective 1c: Apply work simplification and time management principles by developing sample production schedules.

- SLO 2: Demonstrate the ability to develop, examine, question, and explore perspectives or alternatives to problems within the hospitality industry (P-SLO5).
  - Objective 2a: Describe career opportunities in the hospitality industry.

- SLO 3: Demonstrate basic mathematical principles for food service record keeping, baking procedures, and recipe conversions (P-SLO3).
  - Objective 3a: Pass the computation exam with at least 70% accuracy. (Computation topics to include measurements and recipe conversions)

- SLO 4: Recall basic principles in the areas of: flavor profiles, plating/garnishing, menu development, and recipe writing.

CAM 301 Food Theory and Preparation

Units: 4
Hours: 36 hours LEC; 108 hours LAB
Prerequisite: None.
Corequisite: CAM 300 and 306
Transferable: CSU
Catalog Date: June 1, 2020

A comprehensive study of the basic principles and techniques involved in professional food preparation. The principles covered within this course will serve as the foundation for all other lab courses. Topics will including: work simplification, measurements/conversions, knife skills, soups, sauces, salads, heat transfer methods, equipment recognition, cleaning, use of hand tools/measuring devices, as well as identifying, cleaning, and cutting raw materials. This course will examine the reasons for procedures and phenomena and the prevention and/or correction of cooking failures. The laboratory emphasizes theory application through the preparation of soups, sauces, salads, vegetables, meats, poultry, seafood, breakfast dishes, grains, pastas and potatoes.

This course may require out of class time attendance at events (all required events will be listed in the course syllabus).

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO 1: Demonstrate the ability to use professional written and oral communication skills necessary to communicate to a variety of audiences (P-SLO1).
- SLO 2: Demonstrate basic mathematical principles for foodservice record keeping, baking procedures, and recipe conversions (P-SLO3)
- SLO 3: Demonstrate the ability to develop, examine, question, and explore perspectives or alternatives to problems within the foodservice industry. (P-SLO5)
- SLO 4: Demonstrate basic knowledge of cooking techniques and procedures. (P-SLO9)
- SLO 1: demonstrate the ability to communicate in the hospitality industry using the correct culinary terminology to a variety of audiences (P-SLO1).
- SLO 2: demonstrate critical thinking skills needed to assess and correct problems within food preparation, production, presentation and service (P-SLO6).
- Objective 2a: analyze quality characteristics in raw and cooked foods.
- Objective 2b: correct errors in preparation where possible to produce an acceptable product
- SLO 3: apply knowledge of cooking techniques and procedures (P-SLO9).
- Objective 3a: measure and scale ingredients correctly.
- Objective 3b: recognize kitchen tools and implements by name and use them appropriately
- Objective 3c: apply different methods of heat transfer and soup/sauce production appropriately.
- SLO 4: utilize proper sanitation and safety procedures critical to the foodservice industry (P-SLO4).
- Objective 4a: apply sanitary techniques in the laboratory.

CAM 302 Food and Culture in America

| Units: | 3 |
| Hours: | 54 hours LEC |
| Prerequisite: | None. |
| Transferable: | CSU |
| General Education: | AA/AS Area VI |
| Catalog Date: | June 1, 2020 |

This course is an in-depth study of the food habits of various culinary regions in the United States. This course will examine the geography, history, and people that have shaped each region's food culture. Defining dishes and principle ingredients as well as the modern cuisine of the regions will be studied.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO 1: Demonstrate awareness, understanding, and skills necessary to live and work in a diverse world (P-SLO2).
- Objective 1a: Understand the food habits of each unique american culinary region and the groups of people that helped shape the cuisine.
- SLO 2: Demonstrate the ability to develop, examine, question, and explore perspectives or alternatives to problems within the foodservice industry (P-SLO5).
- Objective 2a: Describe the traditional food habits of each unique American Region
- SLO 3: Demonstrate basic knowledge of cooking techniques and procedures (P-SLO9).
- Objective 3a: List the foods and equipment used in each region studied.
- SLO 4: practice professional ethics, provide leadership, demonstrate personal and global responsibility and work effectively as a team member (P-SLO10).
- Objective 4a: Work in small groups to prepare projects and presentations.

CAM 303 Food Product Identification

| Units: | 2 |
| Hours: | 36 hours LEC |
| Prerequisite: | None. |
| Transferable: | CSU |
| Catalog Date: | June 1, 2020 |

This course will cover the identification of different food products. Written materials, hands-on interaction with products, and product sampling will be utilized as methods to help students identify and understand products being studied.
Student Learning Outcomes

Upon completion of this course, the student will be able to:

- **SLO 1:** demonstrate effective techniques for the selection and procurement of food and non-food items used common to the foodservice industry (P-SLO7).
- Objective 1a: identify quality standards in fresh and dried herbs
- Objective 1b: evaluate cheeses and the effect of different production methods on the final product.
- **SLO 2:** understand and practice proper sanitation and safety procedures critical to the foodservice industry (P-SLO4).
- Objective 2a: Understand proper storage conditions and standards for products discussed.

CAM 306 Culinary Sanitation & Safety

<table>
<thead>
<tr>
<th>Units</th>
<th>2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hours</td>
<td>36 hours LEC</td>
</tr>
<tr>
<td>Prerequisite</td>
<td>None.</td>
</tr>
<tr>
<td>Transferable</td>
<td>CSU</td>
</tr>
<tr>
<td>Catalog Date</td>
<td>June 1, 2020</td>
</tr>
</tbody>
</table>

This course covers the principles of food microbiology, important foodborne diseases, standards that are enforced by regulatory agencies, and applied measures for the prevention of foodborne diseases and other microbiological problems. All phases of sanitation for professional culinary operations are covered in the context of schools, hospitals and commercial restaurants and cafeterias. Subjects covered include types and causes of food borne illnesses, correct procedures for handling food in quantity, and the principles of cleaning and sanitizing. The course focuses on practical applications for culinary workers, supervisors, and trainers. Completion of the course includes optional certification by the Educational Foundation of the National Restaurant Association.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- **SLO 1:** understand and practice proper sanitation and safety procedures critical to the foodservice industry (P-SLO4).
  - Objective 1a: Analyze the importance of proper culinary sanitation to profitability and operational accreditation.
  - Objective 1b: List the survival needs of food borne, pathogenic bacteria, molds, yeasts and viruses and relate these needs to culinary conditions.
  - Objective 1c: List the foods that are potentially hazardous and subject to food borne illnesses transmission.
  - Objective 1d: Recognize major microbial causes of food borne illness and relate them to common food source.
  - Objective 1e: Describe procedures to follow in the event of food contamination by physical contaminants such as metals, glass, etc.
  - Objective 1f: Explain the principle of “first in, first out” for food storage.
  - Objective 1g: Describe and practice rules of professional personal hygiene.
- **SLO 2:** demonstrate the ability to develop, examine, question, and explore perspectives or alternatives to problems within the foodservice industry (P-SLO5).
  - Objective 2a: Explain proper methods for manual and machine dishwashing.
  - Objective 2b: Analyze common dishwashing problems and suggest solutions.
  - Objective 2c: Describe common culinary accidents and suggest preventive practices.
- **SLO 3:** demonstrate critical thinking skills needed to assess and correct problems within food preparation, production, presentation, and service (P-SLO6).
  - Objective 3a: Recognize and describe signs of deterioration in food ingredients.
  - Objective 3b: Describe the hazard to a culinary operation from insects and rodents and explain common routes of entry.
- **SLO 4:** demonstrate basic knowledge of cooking techniques and procedures (P-SLO9).
  - Objective 4a: Describe proper temperature control for potentially hazardous food.
  - Objective 4b: List the correct temperatures for refrigerated and frozen foods.
  - Objective 4c: Explain proper procedures for thawing frozen foods.
CAM 310 Quantity Food Production

Units: 3
Hours: 18 hours LEC; 108 hours LAB
Prerequisite: CAM 300, 301, and 306 with grades of “C” or better
Transferable: CSU
Catalog Date: June 1, 2020

This course is an introduction to the principles of quantity food production and service. The production and service of industry quality and quantity food will be covered. Components may include knife skills, equipment recognition, use of hand tools and measuring devices, and cleaning/cutting raw materials. This course may also cover quantity preparation of sandwiches, soups, salads, garde manger items, vegetables, meats, poultry, seafood, breakfast dishes, rice and other grains, pastas, and potatoes, sauces and simple dessert items.

This course may require out of class time attendance at events (all required events outside of class time will be listed in the course syllabus).

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO 1: Demonstrate basic mathematical principles for food-service record keeping, baking procedures, and recipe conversions (P-SLO3).
- Objective 1a: measure and scale ingredients accurately.
- SLO 2: Understand and practice proper sanitation and safety procedures critical to the food-service industry (P-SLO-4).
- Objective 2a: use acceptable sanitation practices in the laboratory.
- SLO 3: Demonstrate critical thinking skills needed to assess and correct problems within food preparation, production, presentation, and service (P-SLO6).
- SLO 4: Exhibit a basic understanding of nutrition and the relationship between nutrition and food preparation (P-SLO8).
- Objective 4a: adapt recipes to accommodate a variety of dietary restrictions.
- SLO 5: Demonstrate basic knowledge of cooking techniques and procedures (P-SLO-9).
- Objective 5a: recognize, use and clean professional hand tools including ladles, scoops, thermometers, spatulas, and skimmers, dough cutters, china cap, tongs, colander, sieve, can opener, pastry brush, pastry bag, etc.

CAM 312 Baking and Pastry

Units: 3
Hours: 18 hours LEC; 108 hours LAB
Prerequisite: CAM 300, 301, and 306 with grades of “C” or better
Advisory: CAM 310
Transferable: CSU
Catalog Date: June 1, 2020

This course is designed to introduce students to the fundamental principles of baking and procedures for preparing baked goods, pastries, and desserts. Students gain knowledge and understanding of baking science; laboratory hours are spent in commercial production. Products may include yeast breads, Danish pastry, croissants, puff pastry, tortes and fine cakes, tarts and pies, and chocolate. Emphasis is placed on production of high-quality products and professional presentation. This course may require out of class time attendance at events (all required events outside of class time will be listed in the course syllabus).

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO 1: Demonstrate basic mathematical principles for food-service record keeping, baking procedures, and recipe conversions (P-SLO3).
- Objective 1a: measure and scale ingredients accurately.
- SLO 2: Understand and practice proper sanitation and safety procedures critical to the food-service industry (P-SLO-4).
- Objective 2a: use acceptable sanitation practices in the laboratory.
- SLO 3: Demonstrate critical thinking skills needed to assess and correct problems within food preparation, production, presentation, and service (P-SLO6).
- SLO 4: Exhibit a basic understanding of nutrition and the relationship between nutrition and food preparation (P-SLO8).
- Objective 4a: adapt recipes to accommodate a variety of dietary restrictions.
- SLO 5: Demonstrate basic knowledge of cooking techniques and procedures (P-SLO-9).
- Objective 5a: recognize, use and clean professional hand tools including ladles, scoops, thermometers, spatulas, and skimmers, dough cutters, china cap, tongs, colander, sieve, can opener, pastry brush, pastry bag, etc.
SLO 1: Demonstrate basic mathematical principles for foodservice record keeping, baking procedures, and recipe conversions. (P-SLO3)

Objective 1a: Scale and measure baking ingredients accurately.

SLO 2: Demonstrate critical thinking skills needed to assess and correct problems within food preparation, production, presentation, and service. (P-SLO6)

Objective 2a: Evaluate the quality of finished products

Objective 2b: Analyze quality defects in baked products and specify possible errors in technique or ingredient selection.

SLO 3: Demonstrate basic knowledge of cooking techniques and procedures. (P-SLO9)

CAM 316 Hors D'oeuvres and Canapes

This course is designed to teach students the production of hors d'oeuvres and canapes. Hot and cold hors d'oeuvres as well as the production of canapes will be emphasized. Service styles, service issues, production pointers, and logistics of catering functions will be emphasized.

This course may require out of class time attendance at events (all required events outside of class time will be listed in the course syllabus).

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO 1: Demonstrate basic mathematical principles for foodservice record keeping, baking procedures, and recipe conversions. (P-SLO3)
- SLO 2: Understand and practice proper sanitation and safety procedures critical to the foodservice industry. (P-SLO4)
- SLO 3: Demonstrate critical thinking skills needed to assess and correct problems within food preparation, production, presentation, and service. (P-SLO6)
- Objective 3a: Plan and arrange attractive food platters for buffets.
- Objective 3b: Plan menus appropriate for receptions and parties.
- SLO 4: Demonstrate basic knowledge of cooking techniques and procedures. (P-SLO9)
- Objective 4a: Prepare a wide variety of hot and cold hors d'oeuvres.

CAM 320 Culinary Management

The course is designed to introduce students to the manager's role in organizing, planning, and control of production for a culinary operation. Topics may include menu planning and pricing, scheduling of staff and production, portion and temperature control, recipe standardization and scaling, and elements of culinary layout and design.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO 1: Demonstrate the ability to use professional written and oral communication skills necessary to communicate to a variety of audiences. (P-SLO1)
- SLO 2: Demonstrate basic mathematical principles for foodservice record keeping, baking procedures, and recipe conversions. (P-SLO3)
• Objective 2a: Cost menu items and calculate selling prices.

• SLO 3: Demonstrate the ability to develop, examine, question, and explore perspectives or alternatives to problems within the food-service industry. (P-SLO5)

• Objective 3a: List and explain methods of controlling portion size.

• SLO 4: Demonstrate basic knowledge of cooking techniques and procedures. (P-SLO9)

• Objective 4a: Standardize and accurately scale recipes for specific operational needs.

• SLO 5: Integrate human, financial and physical resources management into foodservice operations. (P-SLO11)

• Objective 5a: Compare operational layouts of facilities and equipment.

• Objective 5b: Discuss the factors affecting sales mix forecasting.

CAM 322 Culinary Customer Service

Units: 2
Hours: 36 hours LEC
Prerequisite: None.
Transferable: CSU
Catalog Date: June 1, 2020

Culinary customer service is a skills development course to provide entry-level training in front-of-house service principles. The components of professional service styles will serve as the foundations for this course.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• SLO 1: Demonstrate the ability to use professional written and oral communication skills necessary to communicate to a variety of audiences. (P-SLO1)

• SLO 2: Demonstrate the ability to develop, examine, question, and explore perspectives or alternatives to problems within the foodservice industry. (P-SLO5)

• Objective 2a: Analyze the importance of service to the function of profitability of the operation.

• SLO 3: Demonstrate critical thinking skills needed to assess and correct problems within food preparation, production, presentation, and service. (P-SLO6)

• Objective 3b: Understand appropriate table settings for varying methods of service.

CAM 324 Culinary Supervision

Units: 2
Hours: 36 hours LEC
Prerequisite: None.
Transferable: CSU
Catalog Date: June 1, 2020

This course is designed to help supervisors meet the challenges and demands of the hospitality field. The course will focus on the skills necessary to be effective leaders, developing human relations' skills and building on workplace diversity. The course will also cover communicating effectively, and creating a positive work climate. Management responsibilities of planning, organizing, controlling, decision making, problem solving and delegating will be included.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• SLO 1: Demonstrate the ability to use professional written and oral communication skills necessary to communicate to a variety of audiences. (P-SLO1)

• Objective 1a: Appreciate fully the central role of good communication in directing personnel and discuss strategies for overcoming obstacles, including language and cultural barriers.

• Objective 1b: List the essential steps in giving instructions and explain how to carry them out effectively.
Objective 1c: Analyze the culinary labor market and describe how to conduct an employment interview.

Objective 1d: Describe the essential steps in giving instructions and explain how to carry them out effectively.

Objective 1e: Demonstrate the building of a positive work environment in culinary operations.

SLO 2: Practice professional ethics, provide leadership, demonstrate personal and global responsibility and work effectively as a team member. (P-SLO10)

Objective 2a: Explain the importance of planning your own time as a supervisor.

Objective 2b: Describe how to provide constructive criticism.

Objective 2c: List and discuss the four steps of conflict resolution.

Objective 2d: Define three essential elements of successful discipline and explain the importance of each.

Objective 2e: Define the concepts of responsibility, authority, and accountability and explain their relationships and their role in delegation.

Objective 2f: List the major steps in job instruction training and demonstrate how to apply them.

Objective 2g: Define list the purposes, uses, and benefits of performance reviews.

SLO 3: Integrate human, financial and physical resources management into foodservice operations. (P-SLO11)

Objective 3a: Describe a supervisor's obligation and responsibilities to owners, customers, and employees.

CAM 326 Applied Culinary Purchasing

Units: 2
Hours: 36 hours LEC
Prerequisite: CAM 300 with a grade of "C" or better
Transferable: CSU
Catalog Date: June 1, 2020

This course provides a comprehensive view of purchasing activity as well as its relationship to the management of a successful hospitality operation. This course offers practical applications of purchasing principles from the culinary manager's viewpoint. This course focuses on distribution channels, purchasing principles and buying techniques, selection factors, receiving, storing, issuing and inventory control.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO 1: Understand and practice proper sanitation and safety procedures critical to the foodservice industry. (P-SLO4)
- Objective 1a: Identify optimal storage conditions for meat, poultry, seafood, fresh produce, dairy products, eggs, etc.
- SLO 2: Demonstrate the ability to develop, examine, question, and explore perspectives or alternatives to problems within the foodservice industry. (P-SLO5)
- Objective 2a: Differentiate between As Purchased (AP) and Edible portion (EP) cost factors.
- Objective 2b: Summarize the use of perpetual, physical and computerized inventory control methods.
- SLO 3: Demonstrate effective techniques for the selection and procurement of food and non-food items used commonly to the foodservice industry. (P-SLO7)
- Objective 3a: Describe the types of information included on specifications for food products
- SLO 4: Practice professional ethics, provide leadership, demonstrate personal and global responsibility and work effectively as a team member. (P-SLO10)
- Objective 4a: Describe common methods to prevent security problems in the purchasing function.
- SLO 5: Integrate human, financial and physical resources management into foodservice operations. (P-SLO11)
- Objective 5a: Describe common methods for determining optimal inventory level.
- Objective 5b: Recognize common control and security problems in purchasing functions.
CAM 330 Legal Aspects of Culinary Management

This course is an introduction to the legal aspects of culinary operations through an explanation of and applications to legal subjects relevant to culinary operations. Topics include government regulations, patron civil rights, liability for sales of food and alcoholic beverages, as well as liability for patron safety and property, selection and supervision of employees, property rights and forms of business organizations.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO 1: Demonstrate the ability to develop, examine, question, and explore perspectives or alternatives to problems within the foodservice industry. (P-SLO5)
  
  Objective 1a: Explain potential operator liability caused by unsafe conditions.
  
  Objective 1b: Define areas of liability created by sales of foods and beverages and identify necessary action to avoid it.
  
  Objective 1c: Outline tests for the legality, validity and enforceability of contracts.
  
  Objective 1d: Outline types of zoning restrictions that may be imposed by local governments
  
  Objective 1e: Describe the requirements of local non-smoking ordinances
  
- SLO 2: Practice professional ethics, provide leadership, demonstrate personal and global responsibility and work effectively as a team member. (P-SLO10)
  
  Objective 2a: Define "house rules" and provide guidelines for formulating such a rule.
  
  Objective 2b: Explain the legal rights and duties of employers and employees with regard to civil rights laws, wage and hour laws, employee screening and surveillance, safety requirements, and union-management relations.
  
  Objective 2c: List records that employers are required to keep.
  
  Objective 2d: Outline obligations regarding employee wages, taxation, tip reporting and immigration status.
  
- SLO 3: Integrate human, financial and physical resources management into foodservice operations. (P-SLO11)
  
  Objective 3a: Discuss areas where culinary operations may be effected by state and local regulations.
  
  Objective 3b: Analyze case studies to determine potential liability claims and possible defenses.
  
  Objective 3c: Compare and contrast the different forms of business organization available to the culinary business.
  
  Objective 3d: Explain the purpose and types of bankruptcy.

CAM 332 Culinary Financial Management

This course focuses on food and beverage pricing, culinary accounting and finance for culinary operations. The course includes the use of accounting techniques in such areas as analyzing business performance, budgeting, as well as cost and profit planning.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO 1: Demonstrate basic mathematical principles for foodservice record keeping, baking procedures, and recipe conversions. (P-SLO3)
  
  Objective 1a: Calculate the selling price of menu items on the basis of cost and mark-up.

Units: 2
Hours: 36 hours LEC
Prerequisite: None.
Advisory: CAM 300
Transferable: CSU
Catalog Date: June 1, 2020
CAM 334 Culinary Marketing

Units: 2  
Hours: 36 hours LEC  
Prerequisite: None.  
Transferable: CSU  
Catalog Date: June 1, 2020

This course is an introduction to culinary marketing with a profile of management's role in marketing. The course includes information systems and marketing research methods to assist in planning. Hospitality consumers and their behavior are discussed. Other topics include advertising and group sales strategies. The emphasis of the course will be on the design of menus and menu pricing.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO 1: Demonstrate the ability to use professional written and oral communication skills necessary to communicate to a variety of audiences. (P-SLO1)
- Objective 1a: Design menu copy appropriate to a specified concept.
- SLO 2: Demonstrate awareness, understanding, and skills necessary to live and work in a diverse world. (P-SLO2)
- SLO 3: Demonstrate basic mathematical principles for food-service record keeping, baking procedures, and recipe conversions. (P-SLO3)
- Objective 3a: Discuss effective menu pricing tactics
- SLO 4: Demonstrate the ability to develop, examine, question, and explore perspectives or alternatives to problems within the foodservice industry. (P-SLO5)
- Objective 4a: Compare and contrast the effectiveness of various promotional media.
- SLO 5: Demonstrate critical thinking skills needed to assess and correct problems within food preparation, production, presentation, and service. (P-SLO6)
- SLO 6: Practice professional ethics, provide leadership, demonstrate personal and global responsibility and work effectively as a team member. (P-SLO10)
- Objective 6a: Describe the role of management in the marketing plan.
- SLO 7: Integrate human, financial, and physical resources management into foodservice operations. (P-SLO7)

CAM 340 Nutrition for Culinary Professionals

Units: 2  
Hours: 36 hours LEC  
Prerequisite: CAM 300  
Advisory: None.  
Transferable: CAM 300  
Catalog Date: June 1, 2020

This course is designed for students in Culinary Arts Management and focuses on personal nutrition, as well as nutrition in restaurants and foodservices. The course will cover the dietary needs of selected populations and methods used to meet those needs. Emphasis is placed on recipe adaptation and menu planning for more healthful menu offerings in culinary operations. Successful completion of this course meets the certification requirements by the American Culinary Federation.
Student Learning Outcomes

Upon completion of this course, the student will be able to:

- **SLO 1:** Demonstrate the ability to use professional written and oral communication skills necessary to communicate to a variety of audiences. (P-SLO1)
- Objective 1a: Revise recipes to improve nutrients considerations to include lower fat, lower salt, increase complex carbohydrates, fiber and higher vitamin and mineral content.
- Objective 1b: Discuss the methods of communication of nutrient content with the dining public.
- Objective 1c: Design menus that contain tasteful, appropriate, nutritious offerings.
- **SLO 2:** Demonstrate the ability to develop, examine, question, and explore perspectives or alternatives to problems within the foodservice industry. (P-SLO5)
- Objective 2a: Analyze the state of the American diet for nutritional quality.
- Objective 2b: Describe the main changes in eating trends and habits and regional influences on these trends.
- Objective 2c: List and describe some trendy foods that can be used to capitalize on the public’s desire for healthful food alternatives.
- Objective 2d: Correlate trends in American food consumption to disease incidence.
- **SLO 3:** Exhibit a basic understanding of nutrition and the relationship between nutrition and food preparation. (P-SLO8)
- Objective 3a: Describe for the major nutrients: composition, functions, food sources and functional characteristics in cooking.
- Objective 3b: Describe the difference between saturated fat, unsaturated fat and cholesterol.
- Objective 3c: List the major goals and guidelines for improving the American diet.
- Objective 3d: Read and interpret nutritional labels on manufactured foods.
- **SLO 4:** Demonstrate basic knowledge of cooking techniques and procedures. (P-SLO9)
- Objective 4a: List menu alternative appropriate as healthful choices for children, the elderly and athletes.

CAM 495 Independent Studies in Culinary Arts Management

**Units:**
1 - 3

**Hours:**
54 - 162 hours LAB

**Prerequisite:**
None.

**Transferable:**
CSU

**Catalog Date:**
June 1, 2020

An independent studies project involves an individual student or small group of students in study, research, or activities beyond the scope of regularly offered courses. See the current catalog section of “Special Studies” for full details of Independent Studies.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- **SLO #1:** Actively engage in intellectual inquiry beyond that required in order to pass a course of study (College Wide Learning Outcome – Area 4).
- Discuss and outline a proposal of study (that can be accomplished within one semester term) with a supervising instructor qualified within the discipline.
- Design an independent study (to be completed individually or by collaboration of a small group) to foster special knowledge, skills, and experience that are not available in any one regularly scheduled course.
- Use information resources to gather discipline-specific information.
- **SLO #2:** Utilize modes of analysis and critical thinking to apply theoretical perspectives and/or concepts in the major discipline of study to significant problems and/or educational activities (College Wide Learning Outcome – Area 3).
- Analyze and apply the knowledge, skills and experience that are involved in the independent study to theoretical perspectives and/or concepts in the major discipline of study.
- Explain the importance of the major discipline of study in the broader picture of society.
CAM 498 Work Experience in Culinary Arts Management

- **Units:** 1 - 4
- **Hours:** 60 - 300 hours LAB
- **Prerequisite:** CAM 300, 301, 306, and 310 with grades of "C" or better
- **Enrollment Limitation:** Students must be in a paid or unpaid internship, volunteer position or job related to career goals in Culinary Arts Management.
- **Transferable:** CSU
- **General Education:** AA/AS Area III(b)
- **Catalog Date:** June 1, 2020

This course provides students with opportunities to develop marketable skills in preparation for employment in their major field of study or advancement within their career. It is designed for students interested in work experience and/or internships in transfer level degree occupational programs. Course content includes understanding the application of education to the workforce; completion of required forms which document the student’s progress and hours spent at the work site; and developing workplace skills and competencies. Appropriate level learning objectives are established by the student and the employer. During the semester, the student is required to participate in a weekly orientation and 75 hours of related paid work experience, or 60 hours of unpaid work experience for one unit. An additional 75 or 60 hours of related work experience is required for each additional unit. Work Experience may be taken for a total of 16 units when there are new or expanded learning objectives. Only one Work Experience course may be taken per semester.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- **DEMONSTRATE AN UNDERSTANDING AND APPLICATION OF PROFESSIONAL WORKPLACE BEHAVIOR IN A FIELD OF STUDY RELATED ONE’S CAREER. (SLO 1)**
  - Understand the effects time, stress, and organizational management have on performance.
  - Demonstrate an understanding of consistently practicing ethics and confidentiality in a workplace.
  - Examine the career/life planning process and relate its relevancy to the student.
  - Demonstrate an understanding of basic communication tools and their appropriate use.
  - Demonstrate an understanding of workplace etiquette.

- **DESCRIBE THE CAREER/LIFE PLANNING PROCESS AND RELATE ITS RELEVANCY TO ONE’S CAREER. (SLO 2)**
  - Link personal goals to long term achievement.
  - Display an understanding of creating a professional first impression.
  - Understand how networking is a powerful job search tool.
  - Understand necessary elements of a résumé.
  - Understand the importance of interview preparation.
  - Identify how continual learning increases career success.

- **DEMONSTRATE APPLICATION OF INDUSTRY KNOWLEDGE AND THEORETICAL CONCEPTS AS WRITTEN IN LEARNING OBJECTIVES IN PARTNERSHIP WITH THE EMPLOYER WORK SITE SUPERVISOR. (SLO 3)**
Deaf Culture and American Sign Language Studies | Cosumnes River College

CRC offers courses in Deaf Studies designed to introduce students to Deaf Culture and American Sign Language Studies. Students learn basic skills to enable them to communicate with members of the deaf community. Moreover, students learn about deaf culture such as cultural behaviors and values.

Dean

 (916) 691-7740
 CasareA@crc.losrios.edu

Associate Degree

A.A. in Deaf Studies

This degree provides an introductory overview of the Deaf community and American Sign Language in cultural context. Students completing the Deaf Studies A.A. degree will develop an understanding and respect for the Deaf culture which will enable them to collaborate effectively with Deaf people for the empowerment of the Deaf community. The Deaf Studies A.A. provides students with the psychosocial dynamics necessary to work in educational or social service setting or to pursue an advanced degree at a 4-year institution.

Catalog Date: June 1, 2020

Degree Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>DEAF 310</td>
<td>American Sign Language I</td>
<td>4</td>
</tr>
<tr>
<td>DEAF 312</td>
<td>American Sign Language II</td>
<td>4</td>
</tr>
<tr>
<td>DEAF 314</td>
<td>American Sign Language III</td>
<td>4</td>
</tr>
<tr>
<td>DEAF 316</td>
<td>American Sign Language IV</td>
<td>4</td>
</tr>
<tr>
<td>DEAF 351</td>
<td>Introduction to American Deaf Culture</td>
<td>3</td>
</tr>
<tr>
<td>DEAF 352</td>
<td>Introduction to American Deaf Education</td>
<td>3</td>
</tr>
<tr>
<td>DEAF 360</td>
<td>Deaf Art</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>A minimum of 3 units from the following:</td>
<td></td>
</tr>
<tr>
<td>DEAF 311</td>
<td>Fingerspelling, Classifiers and Numbers (3)</td>
<td></td>
</tr>
<tr>
<td>DEAF 354</td>
<td>Creative Signs (3)</td>
<td></td>
</tr>
<tr>
<td>DEAF 380</td>
<td>American Sign Language Literature (3)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total Units:</td>
<td>28</td>
</tr>
</tbody>
</table>
The Deaf Studies Associate in Arts (A.A.) degree may be obtained by completion of 60 transferable, semester units with a minimum 2.0 GPA, including (a) the major or area of emphasis described in the Required Program, and (b) either the Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education-Breadth Requirements.

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- Compare and contrast characteristics that impact a Deaf person’s life in the following areas: the world of work, education, family, language and social development.
- Demonstrate the ability to carry on an American Sign Language conversation consistent with the ability of a 4th semester second language students with a Deaf individual or groups of Deaf people.
- Demonstrate characteristics related to personal growth and adjustment in various populations within and outside of the Deaf community.
- Apply skills in working with various Deaf participants within and outside of the Deaf community.
- Demonstrate skills in working with school-age Deaf children in an educational setting.
- Compare and differentiate the Deaf individual to individuals of diverse populations when comparing human development.
- Demonstrate appropriate cultural interactions within the Deaf community.
- Demonstrate ability to communicate respectfully in a Deaf-culture setting.

Career Information

This degree prepares students for entry-level positions such as paraprofessional services in an individual or group setting, in an educational or social services agency which serves Deaf consumers.

Deaf Culture and American Sign Language Studies (DEAF)

DEAF 300 Introduction to Deaf Culture and ASL Studies Orientation

<table>
<thead>
<tr>
<th>Units</th>
<th>0.5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hours</td>
<td>9 hours LEC</td>
</tr>
<tr>
<td>Prerequisites</td>
<td>None.</td>
</tr>
<tr>
<td>Transferable</td>
<td>CSU</td>
</tr>
<tr>
<td>Catalog Date</td>
<td>June 1, 2020</td>
</tr>
</tbody>
</table>

This course provides an overview of Deaf Culture and American Sign Language (ASL) Studies at Cosumnes River College. Topics include an introduction to the field of Deaf culture and ASL, job opportunities, and the skills needed to be successful in the field. Pass/No Pass only.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO 1: compile a list of regulations, ethics, certification, and educational requirements needed to enter the Deaf culture and ASL Studies field.
- explain the core interpersonal, intrapersonal, and linguistic competencies required.
- choose a sequencing of coursework to follow in the program at Cosumnes River College.
- SLO 2: demonstrate appropriate cultural interaction within the Deaf community.
- demonstrate ability to communicate respectfully in a Deaf culture setting.

DEAF 310 American Sign Language I
This is the first course in a series of four courses in American Sign Language (ASL). The instructional activities are based on an immersion approach, in which the learners develop language competency in source and target language. The emphasis is on non-speech communication. Topics include grammatical features such as adjective descriptors, differentiation between cardinal/ordinal numbers, contrastive structure, temporal aspect markers and temporal sequencing, conversational skills, narrative skills, and discussions with peers. This course was formerly known as SILA 305.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO 1: ASSEMBLE SHORT SENTENCE DIALOGS WHICH DEMONSTRATE RECEPITIVE AND EXPRESSIVE COMPETENCIES OF TARGETED LEXICAL AND SYNTACTICAL FORMS OF AMERICAN SIGN LANGUAGE.
- compare and contrast the characteristics of the Deaf community and the Deaf community dynamic with the hearing community.
- SLO 2: UTILIZE APPROPRIATE VOCABULARY AND COMMUNICATIVE STRATEGIES USING EYE CONTACT, BODY ORIENTATION, AND SOCIAL BEHAVIORS RELATED TO COMMUNICATION INTERACTION.
- demonstrate appropriate cultural interaction within the Deaf community.
- SLO 3: DEMONSTRATE ABILITY TO COMMUNICATE RESPECTFULLY IN A DEAF CULTURE.

DEAF 311 Fingerspelling, Classifiers and Numbers

This course covers the manual alphabet, numbers and classifiers and is designed to augment expressive and receptive fingerspelling, number and classifiers skills introduced in American Sign Language (ASL) courses. The focus is on skills and perceptual strategies used by students. Emphasis is on recognition of fingerspelling in context. Basic knowledge of American Sign Language is required. It enables the ASL students to develop, expand, and reinforce hands-on experiences with ASL using basic or complex fingerspelling, numbers, and classifiers skills.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO 1: UTILIZE EXPRESSIVE AND RECEPITIVE FINGERSPELLING STYLE IN AMERICAN SIGN LANGUAGE.
- utilize expressive finger spelling styles easily understood by members in the deaf community through recognition of stylistic goals.
- SLO 2: DEMONSTRATE AN UNDERSTANDING OF AMERICAN SIGN LANGUAGE SYNTAX AND INCREASE PRODUCTION OF ASL CLASSIFIERS, NUMBERS AND FINGERSPELLING.
- demonstrate improved receptive skills achieved through acquisition of strategies for perceiving and utilizing contextual clues, use of phonic, activation of schemata, recognition of repetitive shapes and movements.
- demonstrate increased awareness of ASL syntax.
- SLO 3: DEVELOP KNOWLEDGE AND SKILLS OF ASL CLASSIFIERS AND NUMBERS.
- demonstrate the various classifiers types and function with regards to use of space.
- identify the appropriate classifiers syntax and incorporate classifiers in a variety of discourse style and formats such as dialogs, presentations and storytelling.
- comprehend the rules and usage of numbers.

DEAF 312 American Sign Language II
This is the second in a series of four courses in American Sign Language (ASL). The emphasis is on nonverbal communication. Course topics will be presented in a culturally rich context, providing students with the opportunity to develop an understanding and appreciation for Deaf culture. Topics include grammatical features such as adjective descriptors, differentiation between cardinal/ordinal numbers, contrastive structure, temporal aspect markers and temporal sequencing, conversational skills, narrative skills, and discussions with peers. This course was formerly known as SILA 306.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO #1: PREPARE COMPLEX DIALOGUES THAT DEMONSTRATE RECEPITIVE AND EXPRESSIVE COMPETENCIES OF TARGETED LEXICAL ITEMS FROM SITUATION FROM SITUATIONS OR NARRATIVES THAT OCCUR IN DAILY LIFE ACTIVITIES.
- formulate targeted syntactical forms in ASL in dialogs.
- SLO #2: DEMONSTRATE AN UNDERSTANDING OF THE SOCIAL CUSTOMS AND CULTURAL INTERACTION OF THE VARIOUS GROUPS WITHIN THE DEAF COMMUNITY.
- analyze social customs and cultural interaction of the various groups within the Deaf community.
- SLO #3: DEMONSTRATE AN UNDERSTANDING AND APPRECIATION OF DEAF CULTURE THROUGH APPROPRIATE INTERACTION WITHIN THE DEAF COMMUNITY.
- demonstrate ability to communicate respectfully in a Deaf-culture setting.
- select appropriate vocabulary and communicative strategies in initiating, conducting, and terminating dialogs.

DEAF 314 American Sign Language III

This course is the third in a series of four courses in American Sign Language. It emphasizes expressive and receptive nonverbal communication skills between signers who have preliminary American Sign Language syntactical and lexical skills. It provides an understanding of deaf cultural processes by identifying behaviors and norms from activities assigned in the class. It also includes dialogs that involve asking, empathizing, negotiating and agreeing or disagreeing. The emphasis is on non-speech communication. This course was formerly known as SILA 315.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO #1: APPRAISE AND DEMONSTRATE RECEPITIVE AND EXPRESSIVE SKILLS OF TARGETED FEATURE GRAMMATICAL FEATURES WHICH INCLUDES THE FOLLOWING AREAS: NUMBERS WHEN EXPRESSING TIMES, MONEY, COUNTING, DATES AND ADDRESSES CONCEPTS; FREQUENCY VERBS WHEN EXPRESSING TIME AND DURATION; LOCATIVE CLASSIFIERS WHEN DESCRIBING BUILDINGS FLOOR PLANS; DESCRIPTIVE CLASSIFIERS WHEN ASKED TO DEFINE AND DESCRIBE FURNITURE, CLOTHING, VARIOUS OBJECTS AND FOOD DISHES.
- compare and contrast social norms of Deaf people to those personal cultural experience in signed narratives.
- SLO #2: ANALYZE LEXICAL AND GRAMMATICAL PATTERNS BY SIGNING SELECTED OR SELF-DEVELOPED NARRATIVES.
- demonstrate ability to communicate respectfully in a Deaf-culture setting.
- SLO #3: DEMONSTRATE APPROPRIATE CULTURAL INTERACTION WITHIN THE DEAF COMMUNITY.

DEAF 316 American Sign Language IV
This course is the fourth in a series of four courses in American Sign Language (ASL). It emphasizes expressive communication skills that involve locating and signing interesting facts, making major life decisions, discussing health conditions, and using money. It incorporates information and activities previously learned about Deaf culture into these narratives. The emphasis is on non-speech communication. This course was formerly known as SILA 316.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO #1: APPRAISE AND DEMONSTRATE RECEPTIVE AND EXPRESSIVE MASTERY OF TARGETED GRAMMATICAL MARKERS WHICH INCLUDE: ELABORATIONS IN NARRATIVES, DIALOGS, UTILIZING SIGNS THAT DESCRIBE SPECIFIC FACTS, GENERALIZATIONS, THEORIES, CONCLUSIONS; DESCRIBING MAJOR LIFE DECISIONS; DISCUSSING HEALTH CONDITIONS AND USING MONEY.
  
- formulate previously learned Deaf cultural experiences into narratives.

- SLO #2: APPLY EXPRESSIVE STRATEGIES IN SIGNING LONGER AND MORE COMPLEX NARRATIVES INCLUDING USE OF CHARACTERIZATION AND NARRATIVE STYLES.
  
- compose a lecture in ASL, incorporating complex ideas about health conditions.

- SLO #3: APPRAISE THE FACTS TO EXPLAIN, REPHRASE, DEMONSTRATE, OR DRAW CONCLUSIONS TO CLEARLY PRESENT FACTUAL INFORMATION.
  
- analyze the effectiveness of ASL performance generated by models, self, and peer by applying contemporary theories of performance assessment and peer review.

- compare and contrast Deaf and hearing cultures.

- demonstrate ability to communicate respectfully in a Deaf-culture setting.

- demonstrate appropriate cultural interaction within the Deaf community.

DEAF 351 Introduction to American Deaf Culture

This course is a survey of four institutions which have critical impact on the psycho-social development of Deaf people: family, education, work, and society. It provides awareness and sensitivity to the unique challenges of deafhood and how they influence personal, social and communication competencies of the Deaf person. Selected visits to community events may be required. This course is formerly known as SILA 330.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO 1: DEFINE CULTURE AND APPLY THE DEFINITION BY USING EXAMPLES OF TYPICAL SOCIAL NORMS OF DEAF PEOPLE.
  
- identify the rules of Social Interaction in the Deaf community.

- SLO 2: DEFINE LANGUAGE AND APPLY THE DEFINITION BY GIVING EXAMPLES BROUGHT OUT FROM EXPERIENCES WITH DEAF PEOPLE.
  
- narrate instances of bias connected to Deaf individuals and groups.

DEAF 352 Introduction to American Deaf Education

This course surveys topics related to educating Deaf children, adults, and individuals with additional disabilities. It also covers teaching methods and philosophies, school placement issues, child development, and methods of addressing developmental and linguistic stages. Selected visits to a residential Deaf school in Fremont and/or a local mainstreaming/Deaf program school may be required. This course was formerly known as SILA 332.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO 1: DISTINGUISH AND DESCRIBE ESSENTIAL COMPONENTS OF PUBLIC LAW UNDER SPECIAL EDUCATION/AMERICA DISABILITY ACT (ADA)
- validate an analysis of a topic from a research paper that relates to education of Deaf people.
- to clarify the difference in between the characteristics of school placement sites for Deaf children and for young deaf adults who transition from a high school education to a post-secondary education.
- SLO 2: DISTINGUISH, ASSESS, AND EVALUATE FAMILY DYNAMICS OF DEAF CHILDREN WITH HEARING OR DEAF FAMILIES.
- list and describe the various hereditary syndromes that occur among Deaf children with additional disability conditions.
- SLO 3: CATEGORIZE AND EVALUATE THE RESEARCH DONE ON THE EFFECTIVENESS OF THE COMMUNICATION SYSTEMS USED BY DEAF CHILDREN IN THE EDUCATIONAL SYSTEM.
- distinguish and assess developmental processes of cognitive theory as presented by Piaget and of the development of life stages as presented by Erikson.
- demonstrate appropriate cultural interaction within the Deaf community.
- demonstrate ability to communicate respectfully in a Deaf culture setting.

DEAF 353 Baby Sign Language

This course focuses on Baby Sign Language vocabulary, alphabet, handshape, movement, palm orientation, structure, and grammar. Students will learn core vocabulary, comprehension, and grammar in ASL to understand its structure. Students will also be introduced to the history of the Deaf community and its culture, as well as be exposed to community resources for the Deaf and Hard of Hearing populations. This course was formerly known as SILA 338.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO 1: LEARN AND DEMONSTRATE MANUAL ALPHABET (ASL).
- Understand fingerspelling at a controlled speed, Learn basic ASL vocabulary.
- SLO 2: DEMONSTRATE AN UNDERSTANDING OF CORRECT PALM ORIENTATION AND SIGN MOVEMENT.
- Understand basic ASL grammar and structure in expressive and receptive skills.
- SLO 3: EXPRESS THE BASIC USE OF ASL VOCABULARY TO COMMUNICATE WITH INFANTS AND CHILDREN.
DEAF 354 Creative Signs

Introduction to the techniques of facial expression, characterization, body movement, and specialization as it relates to American Sign Language. Development of expressive sign language skills through the use of poetry, songs, skits, storytelling, jokes and slang signs.

Upon completion of this course, the student will be able to:

- SLO 1: evaluate and analyze a written paper on a related topic to American Sign Language, as well as the development of expressive sign language skills through the use of poetry, songs, skits, storytelling, jokes and slang signs.
- SLO 2: dramatize facial and body language and individual projects.
- Create imaginative sign interpretations of songs, poems, skits, and stories through class participation and demonstrations.
- SLO 3: select appropriate signs for creative uses in the expression of a poem, song, dialogue or story through classroom activity, discussion, role-play and individual demonstrations.
- Translate and accurately demonstrate the expression of a poem, song, dialogue or story from written English into signed American Sign Language.

DEAF 360 Deaf Art

This course introduces Deaf Arts such as drawings, sculptures, artifacts, painting, printmaking and films. We will examine the materials, methods, and design principles of creating Deaf Arts. Local field trips may be required. This course addresses the need and demand of this instruction for global recognition and its social and cultural affects toward Deaf Arts. It promotes global and cultural understanding to the relationship of Deaf Art and the expression of national, regional, socio-economic class, and gender identity.

Upon completion of this course, the student will be able to:

- SLO 1: Identify various transformations of Deaf Art throughout the 1800's to present day.
- SLO 2: Critique the styles of different Deaf artists and recognize the basic differences in each Deaf artist.
- Develop an understanding and knowledge from the perspective of World Deaf Artist.
- SLO 3: Recognize the historical events that transpired during specific Deaf art forms.
- Explain the diversity of Deaf poets and how their artwork is a reflection of their culture and values.

DEAF 380 American Sign Language Literature
This course introduces American Sign Language (ASL) literature genres such as folklore and folktale, storytelling, visual vernacular, personification, classifier story, poetry, ABC and number stories and non-fiction narrative. Topics include analyzing and applying ASL usage in ASL literature genres.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- SLO 1: analyze and critique various genres within ASL literature.
- demonstrate the various techniques and styles of ASL literary works.
- analyze and perform different genres in ASL literature.
- SLO 2: distinguish different ASL tones of poetic works as produced by Deaf authors.
- comprehend literary analysis, significant linguistic and cultural aspects of ASL narratives.
- SLO 3: evaluate the importance of comprehension within literary works in a respectful mannerism pertaining to Deaf culture.
- demonstrate appropriate cultural interaction within the Deaf community.

**DEAF 400 Deaf Culture and ASL Studies Capstone**

This course applies classroom learning to real-world practice in the Deaf community. It includes development of portfolios and digital portfolios from previous work in DEAF courses. Topics also include resume writing and interview skills.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- SLO 1: demonstrate skills that enhance relationships with other employees, consumers, and the employer.
- prioritize continued professional growth objectives.
- complete employment application procedures such as writing resumes and cover letters and interviewing.
- SLO 2: produce Deaf-culture portfolios and ASL digitals portfolios to show work from previous courses.

**DEAF 495 Independent Study**

An independent studies project involves an individual student or small group of students in study, research, or activities beyond the scope of regularly offered courses. See the current catalog section of "Special Studies" for full details of Independent Studies.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- SLO #1: Actively engage in intellectual inquiry beyond that required in order to pass a course of study (College Wide Learning Outcome – Area 4).
Discuss and outline a proposal of study (that can be accomplished within one semester term) with a supervising instructor qualified within the discipline.

Design an independent study (to be completed individually or by collaboration of a small group) to foster special knowledge, skills, and experience that are not available in any one regularly scheduled course.

Use information resources to gather discipline-specific information.

SLO #2: Utilize modes of analysis and critical thinking to apply theoretical perspectives and/or concepts in the major discipline of study to significant problems and/or educational activities (College Wide Learning Outcome – Area 3).

Analyze and apply the knowledge, skills and experience that are involved in the independent study to theoretical perspectives and/or concepts in the major discipline of study.

Explain the importance of the major discipline of study in the broader picture of society.

SLO #3: Communicate a complex understanding of content matter of the major discipline of study (College Wide Outcome – Area 3).

Demonstrate competence in the skills essential to mastery of the major discipline of study that are necessary to accomplish the independent study.

SLO #4: Identify personal goals and pursue these goals effectively (College Wide Outcome – Area 4).

Utilize skills from the “academic tool kit” including time management, study skills, etc., to accomplish the independent study within one semester term.
Diagnostic Medical Sonography
| Cosumnes River College

The CRC Diagnostic Medical Sonography (DMS) Program includes didactic, laboratory, and practicum components that are structured to facilitate the achievement of educational and career goals. According to the American Registry for Diagnostic Medical Sonographers (ARDMS), sonographers are “highly-skilled professionals who use specialized equipment to create images of structures inside the human body that are used by physicians to make medical diagnoses.”

Organizations such as the American Registry of Diagnostic Medical Sonographers (ARDMS) certify the competency of sonographers through registration.

Dean
Collin Pregliasco

(916) 691-7345
reitzn@crc.losrios.edu

Associate Degree

A.S. in Diagnostic Medical Sonography

The CRC Diagnostic Medical Sonography (DMS) Program includes didactic, laboratory, and practicum components that are structured to facilitate the achievement of educational and career goals. According to the American Registry for Diagnostic Medical Sonographers (ARDMS), sonographers are “highly-skilled professionals who use specialized equipment to create images of structures inside the human body that are used by physicians to make medical diagnoses”. Sonographers have extensive, direct patient contact that may include performing some invasive procedures. They must be able to interact compassionately and effectively with people who range from healthy to critically ill.

Organizations such as the American Registry of Diagnostic Medical Sonographers (ARDMS) certify the competency of sonographers through registration.

Catalog Date: June 1, 2020

Degree Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st Summer Semester:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SONOG 200</td>
<td>Introduction to Sonography</td>
<td>3</td>
</tr>
<tr>
<td>SONOG 202</td>
<td>Sectional Anatomy for Medical Imaging</td>
<td>3</td>
</tr>
<tr>
<td>1st Fall Semester:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SONOG 205</td>
<td>Ultrasound Physics &amp; Instrumentation</td>
<td>3</td>
</tr>
<tr>
<td>SONOG 210</td>
<td>Abdominal Scanning and Pathology</td>
<td>4</td>
</tr>
<tr>
<td>SONOG 240</td>
<td>Superficial &amp; Small Parts Scanning</td>
<td>3</td>
</tr>
<tr>
<td>1st Spring Semester:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SONOG 215</td>
<td>Clinical Experience I</td>
<td>7</td>
</tr>
<tr>
<td>SONOG 220</td>
<td>OB/GYN Scanning &amp; Pathology</td>
<td>4</td>
</tr>
<tr>
<td>2nd Summer Semester:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>COURSE CODE</td>
<td>COURSE TITLE</td>
<td>UNITS</td>
</tr>
<tr>
<td>-------------</td>
<td>--------------------------------------------------</td>
<td>-------</td>
</tr>
<tr>
<td>SONOG 225</td>
<td>Clinical Experience II</td>
<td>7</td>
</tr>
<tr>
<td>SONOG 228</td>
<td>Advanced OB/GYN Pathology</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td><strong>2nd Fall Semester:</strong></td>
<td></td>
</tr>
<tr>
<td>SONOG 230</td>
<td>Vascular Scanning</td>
<td>4</td>
</tr>
<tr>
<td>SONOG 235</td>
<td>Clinical Experience III</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td><strong>2nd Spring Semester:</strong></td>
<td></td>
</tr>
<tr>
<td>SONOG 250</td>
<td>Sonography Interpretation &amp; ARDMS/ARRT Exam Review</td>
<td>2</td>
</tr>
<tr>
<td>SONOG 255</td>
<td>Clinical Experience IV</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td><strong>Total Units:</strong></td>
<td>60</td>
</tr>
</tbody>
</table>

The Diagnostic Medical Sonography Associate in Science (A.S.) degree may be obtained by completion of the required program, plus general education requirements, plus sufficient electives to meet a 60-unit total. See CRC graduation requirements.

**Enrollment Eligibility**

To be eligible for enrollment in the program, the student must meet the following criteria:

- Associate in Science degree, or higher, from a U.S. accredited college;
- a minimum of 800 hours of paid or volunteer patient care experience; hours must be documented within an official volunteer program where they report to a licensed/credentialed health care provider; home health care for a single patient is not acceptable. Applicants will need to document their 800 hours either volunteer, student extern/intern hours, or work hours in direct patient care;
- Complete the application process for enrollment in the DMS program;
- Fulfill all requirements set forth by the CRC Allied Health Practicum Guidelines including but not limited to: background clearance, physical examination, CPR Certification, immunization clearance and drug screening;
- Successfully complete with a B or better all prerequisite courses as outlined below.
  - College-level Intermediate Algebra (or higher math course)
  - Interpersonal Communications (or equivalent communications/speech course)
  - Anatomy & Physiology (one year with lab)
  - Medical Language
  - Human Disease or Pathophysiology
  - Conceptual Physics
- The program prerequisites do not apply to physicians who have an approved foreign transcript evaluation.

**Student Learning Outcomes**

Upon completion of this program, the student will be able to:

- Perform entry-level skills of a diagnostic sonographer in a clinical setting (PSLO #1);
- Successfully complete the American Registry of Diagnostic Medical Sonographers (ARDMS) certification examination (PSLO #2);
- Acknowledge and adhere to the scope of practice of a Diagnostic Medical Sonographer (PSLO #3).

**Career Information**
Career Opportunities: According to the ARDMS, Sonography is a dynamic profession that has grown significantly over the past 25 years. With rapidly developing new technologies and increased use of diagnostic ultrasound procedures, growth is projected to continue in the future with employment opportunities for qualified sonographers in both urban and rural areas nationwide. Sonographers and vascular technologists can choose to work in clinics, hospitals, private-practice physician offices, public-health facilities, laboratories, and other medical settings performing examinations in their areas of specialization. According to the Bureau of Labor Statistics’ Occupational Outlook Website, almost two-thirds of all sonographers are employed by hospitals. The rest work in physicians’ offices, medical and diagnostic laboratories/imaging centers and outpatient care centers. Employment of diagnostic medical sonographers is expected to increase by 29.4 percent, or 1,500 jobs between 2014 and 2024. As ultrasound technology evolves, it will become a more common method used to assist in diagnosing medical conditions, favored over more invasive procedures.

Certificate of Achievement

Diagnostic Medical Sonography Certificate

The CRC Diagnostic Medical Sonography (DMS) Program includes didactic, laboratory, and practicum components that are structured to facilitate the achievement of educational and career goals. According to the American Registry for Diagnostic Medical Sonographers (ARDMS), sonographers are “highly-skilled professionals who use specialized equipment to create images of structures inside the human body that are used by physicians to make medical diagnoses.” Sonographers have extensive, direct patient contact that may include performing some invasive procedures. They must be able to interact compassionately and effectively with people who range from healthy to critically ill.

Students must achieve a "C" or better in all SONOG didactic courses and a "Pass" in all practicum courses to remain in, and progress through, the DMS program. Students who do not achieve these minimum expectations will be dismissed from the program.

Organizations such as the American Registry of Diagnostic Medical Sonographers (ARDMS) certify the competency of sonographers through registration.

Catalog Data: June 1, 2020

Certificate Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>SONOG 200</td>
<td>Introduction to Sonography</td>
<td>3</td>
</tr>
<tr>
<td>SONOG 202</td>
<td>Sectional Anatomy for Medical Imaging</td>
<td>3</td>
</tr>
<tr>
<td>SONOG 205</td>
<td>Ultrasound Physics &amp; Instrumentation</td>
<td>3</td>
</tr>
<tr>
<td>SONOG 210</td>
<td>Abdominal Scanning and Pathology</td>
<td>4</td>
</tr>
<tr>
<td>SONOG 240</td>
<td>Superficial &amp; Small Parts Scanning</td>
<td>3</td>
</tr>
<tr>
<td>SONOG 215</td>
<td>Clinical Experience I</td>
<td>7</td>
</tr>
<tr>
<td>SONOG 220</td>
<td>OB/GYN Scanning &amp; Pathology</td>
<td>4</td>
</tr>
<tr>
<td>SONOG 225</td>
<td>Clinical Experience II</td>
<td>7</td>
</tr>
<tr>
<td>SONOG 228</td>
<td>Advanced OB/GYN Pathology</td>
<td>2</td>
</tr>
<tr>
<td>SONOG 230</td>
<td>Vascular Scanning</td>
<td>4</td>
</tr>
<tr>
<td>SONOG 235</td>
<td>Clinical Experience III</td>
<td>9</td>
</tr>
<tr>
<td>SONOG 250</td>
<td>Sonography Interpretation &amp; ARDMS/ARRT Exam Review</td>
<td>2</td>
</tr>
<tr>
<td>SONOG 255</td>
<td>Clinical Experience IV</td>
<td>9</td>
</tr>
<tr>
<td>Total Units:</td>
<td></td>
<td>60</td>
</tr>
</tbody>
</table>

Enrollment Eligibility

To be eligible for enrollment in the program, the student must meet the following criteria:

- Associate in Science degree, or higher, from a U.S. accredited college;
- a minimum of 800 hours of paid or volunteer patient care experience; hours must be documented within an official volunteer program where they report to a licensed/credentialed health care provider; home health care for a single patient is not acceptable. Applicants will need to document their 800 hours either volunteer, student extern/intern hours, or work hours in direct patient care;
Diagnostic Medical Sonography (SONOG)

SONOG 200 Introduction to Sonography

This course is designed for students in the Diagnostic Medical Sonography (DMS) program. The course will introduce fundamental sonography theory including terminology and equipment. Students will be instructed in sonographer and patient safety, including ergonomics, legal, ethical and regulatory issues. Scope of practice, patient care techniques, assessment and treatment will be introduced. Emphasis will be placed on interaction with diverse patient populations. This course must be taken for a letter grade, and students must achieve a "C" or better to remain in the DMS program.

Upon completion of this course, the student will be able to:

- Complete the application process for enrollment in the DMS program;
- Fulfill all requirements set forth by the CRC Allied Health Practicum Guidelines including but not limited to: background clearance, physical examination, CPR Certification, immunization clearance and drug screening;
- Successfully complete with a B or better all pre-require course as outlined below within the last five (5) years:
  - College-level Intermediate Algebra (or higher math course)
  - Interpersonal Communications (or equivalent communications/speech course)
  - Anatomy & Physiology (one year with lab)
  - Medical Language
  - Human Disease or Pathophysiology
  - Conceptual Physics
- The program prerequisites do not apply to physicians who have an approved foreign transcript evaluation.

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- Perform entry-level skills of a diagnostic sonographer in a clinical setting (PSLO #1);
- Successfully complete the American Registry of Diagnostic Medical Sonographers (ARDMS) certification examination (PSLO #2);
- Acknowledge and adhere to the scope of practice of a diagnostic medical sonographer (PSLO #3).

Career Information

Career Opportunities: According to the ARDMS, Sonography is a dynamic profession that has grown significantly over the past 25 years. With rapidly developing new technologies and increased use of diagnostic ultrasound procedures, growth is projected to continue in the future with employment opportunities for qualified sonographers in both urban and rural areas nationwide. Sonographers and vascular technologists can choose to work in clinics, hospitals, private-practice physician offices, public-health facilities, laboratories, and other medical settings performing examinations in their areas of specialization. According to the Bureau of Labor Statistics’ Occupational Outlook Website, almost two-thirds of all sonographers are employed by hospitals. The rest work in physicians’ offices, medical and diagnostic laboratories/imaging centers and outpatient care centers. Employment of diagnostic medical sonographers is expected to increase by 29.4 percent, or 1,500 jobs between 2014 and 2024. As ultrasound technology evolves, it will become a more common method used to assist in diagnosing medical conditions, favored over more invasive procedures.

Diagnostic Medical Sonography (SONOG)

SONOG 200 Introduction to Sonography

| Units: | 3 |
| Hours: | 54 hours LEC |
| Prerequisite: | None. |
| Corequisite: | SONOG 202 |
| Enrollment Limitation: | This course is only available to students who have been accepted into the most recent cohort and who remain in good standing within the DMS program. Students must take this course for a letter grade, and must earn a grade of "C" or better in this course to remain in the DMS program. |
| Catalog Date: | June 1, 2020 |

This course is designed for students in the Diagnostic Medical Sonography (DMS) program. The course will introduce fundamental sonography theory including terminology and equipment. Students will be instructed in sonographer and patient safety, including ergonomics, legal, ethical and regulatory issues. Scope of practice, patient care techniques, assessment and treatment will be introduced. Emphasis will be placed on interaction with diverse patient populations. This course must be taken for a letter grade, and students must achieve a "C" or better to remain in the DMS program.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- IDENTIFY SAFETY ISSUES INVOLVED IN THE FIELD OF SONOGRAPHY - SLO #1
Demonstrate correct ergonomic techniques while performing various scanning tests.
Discuss legal and bioethical situations inherent in the field of medicine, as well as specific to the sonography occupation.
Relate various techniques to ensure patient safety during scanning tests.
DISCUSS THE FIELD OF SONOGRAPHY INCLUDING THE ROLE OF THE SONOGRAPHER IN THE HEALTHCARE TEAM - SLO #2
Use correct sonography terminology, including spelling and pronunciation.
Relate the relationship between the sonographer and other various healthcare team members e.g. physicians, radiologists and patients.
Determine if the field of sonography is the correct occupational choice.
Identify scope of practice parameters for the sonographer
IDENTIFY BASIC PATIENT CARE TECHNIQUES, INCLUDING SCANNING, ASSESSMENTS AND TREATMENTS - SLO #3
Display professionalism and cultural awareness when working with diverse patient populations.
Choose proper scanning techniques given specific patient parameters.

SONOG 202 Sectional Anatomy for Medical Imaging

**Units:** 3
**Hours:** 54 hours LEC
**Prerequisite:** None.
**Corequisite:** SONOG 200
**Enrollment Limitation:** This course is only available to students who have been accepted into the most recent cohort and who remain in good standing within the DMS program. Students must take this course for a letter grade, and must earn a grade of “C” or better in this course to remain in the DMS program.
**Catalog Date:** June 1, 2020

This is an introductory course in cross-sectional anatomy. Basic principles of human anatomy are presented in cross section and multi-planes and applied to Sonographic images, along with comparison modalities in the diagnostic imaging fields. This course builds upon basic understanding of human anatomy and physiology as it relates specifically to diagnostic imaging in an integrated fashion. This course provides critical cross-sectional analysis of human anatomy in preparation for abdominal, pelvic, vascular and small parts scanning, including sonographic terminology and directional anatomy in the cross-sectional planes. This course is only available to students who have been accepted in to the CRC Diagnostic Medical Sonography program. This course must be taken for a letter grade, and students must achieve a "C" or better to remain in the DMS program.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- SLO 1: EXPLAIN THE BASIC CROSS-SECTIONAL PLANES BY DEFINING AND IDENTIFYING 3D ANATOMY FROM 2D IMAGES, COMPARING STRUCTURES TO MULTIPLE IMAGING MODALITIES
  - demonstrate knowledge of basic directional imaging terminology
  - apply knowledge of a single plane image to describe multiple plane anatomical structures
  - illustrate and identify structures and organs with labels in cross-sectional planes from diagnostic images
  - compare and contrast the differences of the same organ planes on CT, MRI and sonographic images
  - demonstrate spatial relationship skills using drawings to explain relationships to different sonographic planes
- SLO 2: DEMONSTRATE A FUNDAMENTAL UNDERSTANDING OF CROSS-SECTIONAL ANATOMIC PLANES COMPARED TO NORMAL VARIATIONS
  - describe structures in anatomical terms specifically used in medical imaging and diagnostic medical sonography
  - compare and contrast positive and negative uses of anatomical structures demonstrated on CT and MRI vs sonographic images
  - explain the proper protocols and use of sonographic images compared to other imaging modalities
  - assess the impact of anatomical pathologies and how it effects adjacent normal organs
- SLO 3: IDENTIFY ANATOMICAL STRUCTURES WITHIN ORGANS AND IN RELATIONSHIP TO SURROUNDING ORGANS
  - utilize proper sonographic terms to describe cross sectional images
  - demonstrate the ability to verbally explain and critique anatomy on images
• compare CT and MRI images to sonographic images for sectional anatomy of major organs
• integrate in-class experiences to apply knowledge of specific cross sectional images in human anatomy
• SLO 4: DETERMINE GENERAL EFFECT OF LAYERING ANATOMY BASED ON ANATOMICAL OBSERVATIONS
• analyze structural distinctions and apply concepts of oblique images and orthogonal planes
• determine adjacent structures from a single plane and analyze for reconstruction to describe the 3D organ

SONOG 205 Ultrasound Physics & Instrumentation

Units: 3
Hours: 54 hours LEC
Prerequisite: SONOG 202 with a grade of “C” or better
Corequisite: SONOG 210 and 240
Enrollment Limitation: This course is only available to students who have been accepted into the most recent cohort and who remain in good standing within the DMS program. Students must take this course for a letter grade, and must earn a grade of “C” or better in this course to remain in the DMS program.
Catalog Date: June 1, 2020

This course covers the basic principles of diagnostic ultrasound physics and instrumentation. Topics include acoustical physics, Doppler effect, color flow imaging and the effects of ultrasound waves on human tissue. The course will cover transducer designs, quality assurance, bio-effects and imaging artifacts. The fundamentals of instrumentation, equipment design and application will be included. Hands-on instruction may be provided to introduce the student to necessary elementary scanning skills. This course is available to students who have been accepted in to the DMS program. This course must be taken for a letter grade, and students must achieve a “C” or better to remain in the DMS program.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• ASSESS THE EFFECTS OF ULTRASOUND WAVES ON HUMAN TISSUE - SLO #1
  Explain the Doppler Effect and how it is used in the assessment of blood flow velocity in both continuous and pulsed wave Doppler.
  Determine the effects of acoustic waves on tissue and its application to organ structural analysis.

• EVALUATE THE QUALITY OF AN ULTRASOUND SCAN TO ENSURE ACCURATE RESULTS - SLO #2
  Employ quality assurance measures while working with ultrasound equipment to decrease the risk of imaging artifacts.
  Determine how the various transducer designs that are currently available relate to quality assurance.
  Identify processes the sonographer can employ to decrease the biological effects on tissue while performing scans.

• DISCUSS THE FUNDAMENTALS OF ULTRASOUND EQUIPMENT - SLO #3
  Compare and contrast the various sonography equipment designs currently available.
  Demonstrate correct usage of basic sonography instrumentation.
  Assess the various applications of sonography in healthcare.

SONOG 210 Abdominal Scanning and Pathology

Units: 4
Hours: 36 hours LEC; 108 hours LAB
Prerequisite: SONOG 202 with a grade of “C” or better
Corequisite: SONOG 205 and 240
Enrollment Limitation: This course is only available to students who have been accepted into the most recent cohort and who remain in good standing within the DMS program. Students must take this course for a letter grade, and must earn a grade of “C” or better in this course to remain in the DMS program.
Catalog Date: June 1, 2020
This course will provide a study of the clinical applications of abdominal sonography, including positioning and scanning protocol. Anatomical structures will include: abdominal vasculature; liver; gallbladder and biliary system; pancreas; spleen; and kidneys. Specific pathology and clinical symptomatology will be covered as they relate to the sonographic appearance of these structures. Interpretation and critique of normal and abnormal anatomy with correlation of clinical, didactic and image information will be presented. This course is available to students who have been accepted into the DMS program. This course must be taken for a letter grade, and students must achieve a “C” or better to remain in the DMS program.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- EVALUATE ABDOMINAL SCANS IN ORDER TO ASSESS NORMAL AND ABNORMAL STRUCTURES - SLO #1
- Identify relevant abdominal structures as to their shape, location and size on a scan.
- Compare scanned images for normal and abnormal abdominal structures.
- RELATE CLINICAL SYMPTOMATOLOGY TO POTENTIAL ABDOMINAL ABNORMALITIES - SLO #2
- Determine which abdominal structures to scan based on patient symptoms and clinical history.
- Demonstrate correct scanning technique for specific abdominal conditions and ordered tests, including patient positioning.

SONOG 215 Clinical Experience I

Units: 7
Hours: 384 hours LAB
Prerequisite: SONOG 210 with a grade of “C” or better
Corequisite: SONOG 220
Enrollment Limitation: This course is only available to students who have been accepted into the most recent cohort and who remain in good standing within the DMS program. This course is graded “P/NP”, and students must earn a grade of “P” in this course to remain in the DMS program. Enrollment in all clinical experience courses requires all of the following: 1) successful completion of the ARDMS Sonography Principles & Instrumentation (SPI) exam; 2) must have obtained an approved clinical placement assigned by the CRC DMS program coordinator; and 3) must be enrolled in all co-requisite courses.
Catalog Date: June 1, 2020

This course will provide basic instruction and scanning experience in sonography in a hospital or other healthcare setting. The student will learn to demonstrate the ability to perform basic sonographic examinations according to the protocols established by the program and healthcare facility utilizing sonographic equipment. The directed practice experience will also serve to familiarize the student with the hospital setting, sonography department and other related clinical training aspects including Health Insurance Portability and Accountability Act (HIPAA) law. This course is only available to students who currently enrolled in the DMS program and have met the pre-requisites, co-requisites and have met all enrollment limitations. This course is graded as “Pass/No Pass”, and students must achieve a “Pass” to remain in the DMS program.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- APPLY SCANNING THEORY AND PRACTICAL SKILLS IN A HEALTHCARE SETTING - SLO #1
- Perform scans under the supervision of a licensed sonographer in a hospital or other healthcare setting.
- Demonstrate proper patient positioning, moving and lifting techniques with concern for patient safety and modesty during scanning procedures.
- Maintain an ongoing record of cases participated in or observed during clinical rotation.
- DEMONstrate PROPER PROFESSIONAL BEHAVIOR IN THE CLINICAL SETTING - SLO #2
- Relate HIPAA regulations as they relate to sonography.
- Adhere to the Diagnostic Medical Sonographer scope of practice.
- Adhere to the program protocol and hospital policies set forth prior to clinical rotations with respect to professional and ethical behavior.

SONOG 220 OB/GYN Scanning & Pathology
This course will cover the anatomy and pathology related to the sonography of the female reproductive system, pregnant and non-pregnant. It will include an assessment of fetal gestational age, fetal anatomy and pathology, as well as associated maternal conditions throughout all trimesters. Topics of discussion include related clinical symptoms, sonographic appearances, scanning techniques and protocols. This course is available to students who have been accepted into the most recent DMS cohort. This course must be taken for a letter grade, and students must achieve a "C" or better to remain in the DMS program.

Upon completion of this course, the student will be able to:

- **IDENTIFY FEMALE REPRODUCTIVE AND FETAL STRUCTURES ON A SONOGRAPHIC IMAGE - SLO #1**
  - Locate relevant normal and abnormal structures of the female reproductive system in both pregnant and non-pregnant patients, including the breast.
  - Assess fetal gestational age, fetal anatomy, placenta, umbilical cord, and amniotic fluid on a scanned image.

- **DEMONSTRATE CORRECT OB/GYN SCANNING TECHNIQUES - SLO #2**
  - Determine appropriate technique including patient positioning based on maternal and/or fetal conditions, pathological processes and protocols.
  - Compare transabdominal and transvaginal preparation and scanning and determine appropriateness of each.
  - Relate clinical symptomotology to potential OB/GYN abnormalities and choose appropriate scanning technique

### SONOG 225 Clinical Experience II

This course will provide intermediate-level instruction and scanning experience in a hospital or other healthcare setting. The student will be able to demonstrate the ability to perform abdominal, OB/GYN and small parts sonographic examinations of patients according to the protocols established by the program and healthcare facility utilizing sonographic equipment. This course is available to students who have been accepted into the most recent DMS cohort. This course is graded "Pass/No Pass", and students must earn a grade of "P" in this course to remain in the DMS program. Enrollment in all clinical experience courses requires all of the following: 1) successful completion of the ARDMS Sonography Principles & Instrumentation (SPI) exam; 2) must have obtained an approved clinical placement assigned by the CRC DMS program coordinator; and 3) must be enrolled in all co-requisite courses.

Upon completion of this course, the student will be able to:

- **APPLY SONOGRAPHY THEORY AND PRACTICAL SKILLS IN A HEALTHCARE SETTING - SLO #1**
  - Perform intermediate-level scans under the supervision of a licensed sonographer in a hospital or other healthcare setting.
  - Demonstrate proper patient positioning, moving and lifting techniques with concern for patient safety and modesty during scanning procedures.
  - Maintain an ongoing record of cases participated in or observed during clinical rotation.

- **DEMONSTRATE PROPER PROFESSIONAL BEHAVIOR IN THE CLINICAL SETTING - SLO #2**
  - Describe HIPAA regulations as they relate to sonography.
  - Adhere to the Diagnostic Medical Sonographer scope of practice.
• Adhere to the program protocol and hospital policies set forth prior to clinical rotations with respect to professional and ethical behavior.

SONOG 228 Advanced OB/GYN Pathology

Units: 2
Hours: 36 hours LEC
Prerequisite: SONOG 220 with a grade of "C" or better
Enrollment Limitation: This course is only available to students who have been accepted into the most recent cohort and who remain in good standing within the DMS program. Students must take this course for a letter grade, and must earn a grade of "C" or better in this course to remain in the DMS program.
Catalog Date: June 1, 2020

This course builds upon lessons from SONOG 220 covering OB/GYN pathology and maternal-fetal complications. This course covers High Risk Obstetrics in Sonography, Fetal Structural Abnormalities, Genetic Abnormalities and Syndromes. This course will also cover clinical assessments including interventional procedures and post-partum complications as well as pathology involving infertility. Topics of discussion include related clinical symptoms, sonographic appearances, scanning techniques and protocols. This course is available to students who have been accepted in to the most recent DMS cohort. This course must be taken for a letter grade, and students must achieve a "C" or better to remain in the DMS program.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• IDENTIFY ABNORMAL FEMALE REPRODUCTIVE AND FETAL ANOMALIES ON SONOGRAPHIC IMAGES - SLO #1
  - Locate relevant normal structures and identify abnormal structures of the female reproductive system in both pregnant and non-pregnant patients.
  - Assess fetal gestational age to determine abnormal growth patterns including IUGR, fetal anomalies, placental defects and anomalies. Associated umbilical cord, amniotic fluid assessments and biophysical profiles associated with anomalies and sequential amniotic fluid assessment in the high risk pregnancy

• DEMONSTRATE FETAL ANOMALIES AND GYNECOLOGIC DISEASES USING CLINICAL ASSESSMENT TOOLS. SLO #2

• ANALYZE AND SYNTHESIZE MULTIPLE SOURCES OF INFORMATION TO ENSURE ALL REQUIRED IMAGES OF ABNORMALITIES ARE RECORDED AND INCLUDED IN THE TECHNICAL IMPRESSION. SLO#3
  - Determine appropriate technique including patient positioning based on maternal and/or fetal conditions, pathological processes and protocols.
  - Compare transabdominal and transvaginal preparation and scanning and determine appropriateness of each.
  - Relate clinical symptomatology to potential OB/GYN abnormalities and choose appropriate scanning technique making proper adjustments during the examination

SONOG 230 Vascular Scanning

Units: 4
Hours: 36 hours LEC; 108 hours LAB
Prerequisite: SONOG 225 with a grade of "C" or better
Corequisite: SONOG 235
Enrollment Limitation: This course is only available to students who have been accepted into the most recent cohort and who remain in good standing within the DMS program. Students must take this course for a letter grade, and must earn a grade of "C" or better in this course to remain in the DMS program.
Catalog Date: June 1, 2020

This course covers the basic positioning and scanning protocol of the vascular system. Terminology specific to the hemodynamics of the arterial, venous and cerebrovascular applications will be presented. Normal, abnormal and pathologic states of the vascular system, including the carotid and lower extremities, will be included. This course is available to students who have been accepted in to the most recent DMS cohort. This course must be taken for a letter grade, and students must achieve a "C" or better to remain in the DMS program.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• EVALUATE VASCULAR SCANS TO ASSESS NORMAL AND ABNORMAL STRUCTURES AND VASCULAR FLOW - SLO #1
  - Identify relevant vascular structures of the neck, pelvis, abdominal cavity and extremities.
- Compare vascular scanned images for normal and abnormal vascular flow and/or structural abnormalities.

- RELATE SYMPTOMATOLOGY TO POTENTIAL ABNORMALITIES AND/OR PATHOLOGY OF THE VASCULAR SYSTEM - SLO #2

- Demonstrate correct non-invasive vascular scanning technique, including patient positioning.

- Demonstrate knowledge of signals produced by arterial blood flow in both visual and auditory presentation.

- Determine the specific vascular area and/or structures to scan based on patient clinical history.

**SONOG 235 Clinical Experience III**

| Units: | 9 |
| Hours: | 512 hours LAB |
| Prerequisite: | SONOG 228 with a grade of “C” or better |
| Corequisite: | SONOG 230 |
| Enrollment Limitation: | This course is only available to students who have been accepted into the most recent cohort and who remain in good standing within the DMS program. This course is graded “P/NP”, and students must earn a grade of “P” in this course to remain in the DMS program. Enrollment in all clinical experience courses requires all of the following: 1) successful completion of the ARDMS Sonography Principles & Instrumentation (SPI) exam; 2) must have obtained an approved clinical placement assigned by the CRC DMS program coordinator; and 3) must be enrolled in all co-requisite courses. |
| Catalog Date: | June 1, 2020 |

This course will provide intermediate/advanced-level instruction, supervision and scanning experience in a hospital or other healthcare setting. The student will be able to demonstrate the ability to perform abdominal, OB/GYN, small parts and/or vascular sonographic examinations of patients according to the protocols established by the program and healthcare facility utilizing sonographic equipment. This course is available to students who have been accepted in to the most recent DMS cohort. This course is graded “Pass/No Pass”, and students must achieve a “Pass” to remain in the DMS program.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- APPLY SCANNING THEORY AND PRACTICAL SKILLS IN A HEALTHCARE SETTING - SLO #1

- Perform abdominal, OB/GYN, vascular, superficial and/or small parts scans under the supervision of a licensed sonographer in a hospital or other healthcare setting.

- Demonstrate proper patient positioning, moving and lifting techniques with concern for patient safety and modesty during scanning procedures.

- Maintain an ongoing record of cases participated in or observed during clinical rotations.

- DEMONSTRATE PROPER PROFESSIONAL BEHAVIOR IN THE CLINICAL SETTING - SLO #2

- Relate HIPAA regulations as they relate to scanning.

- Adhere to the Diagnostic Medical Sonographer scope of practice.

- Adhere to the program protocols and hospital policies set forth prior to clinical rotations with respect to professional and ethical behavior.

**SONOG 240 Superficial & Small Parts Scanning**

| Units: | 3 |
| Hours: | 36 hours LEC; 54 hours LAB |
| Prerequisite: | SONOG 202 with a grade of “C” or better |
| Corequisite: | SONOG 210 |
| Enrollment Limitation: | This course is only available to students who have been accepted into the most recent cohort and who remain in good standing within the DMS program. Students must take this course for a letter grade, and must earn a grade of “C” or better in this course to remain in the DMS program. |
| Catalog Date: | June 1, 2020 |

This course covers the basic positioning and scanning of pediatric, small part and superficial structures; related anatomy and pathology; clinical symptomatology and how they relate to the sonographic appearance. Interpretation of normal and abnormal anatomy with correlation of clinical information will also be presented. This course is available to students who have been accepted in to the most recent DMS cohort. This course must be taken for a letter grade, and students must achieve a “C” or better to remain in the DMS program.
Upon completion of this course, the student will be able to:

- EVALUATE SUPERFICIAL STRUCTURE SCANS IN ORDER TO ASSESS NORMAL AND ABNORMAL ANATOMY - SLO #1
  
  Identify relevant superficial and small part structures as to their shape, location and size to include the extremities, digits, testes, thyroid and neck.

- Compare scanned images for normal and abnormal superficial and small part structures

- RELATE CLINICAL SYMPTOMATOLOGY TO POTENTIAL ABNORMALITIES AND/OR PATHOLOGY - SLO #2
  
  Demonstrate correct scanning technique of superficial or small part structures, including patient positioning.

- Determine the specific structure or area to scan based on patient symptoms and clinical history.

- EVALUATE PEDIATRIC SCANS TO ASSESS NORMAL AND ABNORMAL ANATOMY - SLO #3
  
  Demonstrate correct scanning technique of pediatric patients, including positioning.

- Determine the specific structure or area to scan based on patient symptoms and clinical history.

- Compare scanned images for normal and abnormal pediatric structures

**SONOG 250 Sonography Interpretation & ARDMS/ARRT Exam Review**

- **Units:** 2
- **Hours:** 18 hours LEC; 54 hours LAB
- **Prerequisite:** SONOG 235 with a grade of "C" or better
- **Enrollment Limitation:** This course is only available to students who have been accepted into the most recent cohort and who remain in good standing within the DMS program. Students must take this course for a letter grade, and must earn a grade of "C" or better in this course to remain in the DMS program.
- **Catalog Date:** June 1, 2020

This course will cover advanced interpretation and critique of abdominal, OB/GYN, vascular, superficial and small parts sonographs. This course serves as a continuation of previous, basic knowledge within the Diagnostic Medical Sonography program. This course will also provide students with guidance to assist them in their independent study and preparation for the ARDMS and AART examinations. This course is available to students who have been accepted into the most recent DMS cohort. This course must be taken for a letter grade, and students must achieve a "C" or better to remain in the DMS program.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- CRITIQUE AND INTERPRET NORMAL AND ABNORMAL SONOGRAPHIC IMAGES - SLO #1
  
  Analyze scanned images to interpret results as either normal or abnormal, to include the following areas: abdominopelvic cavity, OB/GYN, vascular, superficial and small parts structures.

- Critique scanned images for quality and accuracy based on patient clinical history.

**SONOG 255 Clinical Experience IV**

- **Units:** 9
- **Hours:** 512 hours LAB
- **Prerequisite:** SONOG 235 with a grade of "C" or better
- **Corequisite:** SONOG 250
- **Enrollment Limitation:** This course is only available to students who have been accepted into the most recent cohort and who remain in good standing within the DMS program. This course is graded "P/NP", and students must earn a grade of "P" in this course to remain in the DMS program. Enrollment in all clinical experience courses requires all of the following: 1) successful completion of the ARDMS Sonography Principles & Instrumentation (SPI) exam; 2) must have obtained an approved clinical placement assigned by the CRC DMS program coordinator; and 3) must be enrolled in all co-requisite courses.
- **Catalog Date:** June 1, 2020
This course is the final directed practice study course in the Diagnostic Medical Sonography program. The course incorporates all areas of study including the abdomen, OB/GYN, vascular, superficial and small parts scanning. The student will be able to perform advanced sonographic examinations in a healthcare facility according to the protocols and criteria established by the CRC DMS program. Students will complete all final program competency evaluations and demonstrate the ability to perform all required examinations, including the ability to scan independently, under the direction of the assigned primary clinical site preceptor(s). This course is graded “Pass/No Pass”, and students must achieve a “Pass” to remain in the DMS program.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- **APPLY PREVIOUSLY LEARNED MATERIAL IN THE PERFORMANCE OF PATIENT ULTRASOUND EXAMINATIONS - SLO #1**
  - Utilize content knowledge and practical skills learned from previous sonography courses.
  - Perform advanced sonographic examinations in the following areas: abdominopelvic, vascular, OB/GYN, superficial and small parts.

- **DEMONSTRATE PROPER PROFESSIONAL BEHAVIOR IN THE CLINICAL SETTING - SLO #2**
  - Adhere to the Diagnostic Medical Sonographer scope of practice.
  - Adhere to the CRC DMS program protocol and clinical facility policy set forth prior to clinical rotations.
Digital Media | Cosumnes River College

This two-year instructional program is designed to provide skills for industry and for degree or transfer. This option can lead to entry-level jobs in television, Cable TV, business or industrial video and graphics, animation, or digital media for broadcast, CD/DVD production and the Internet.

Dean

 (916) 691-7170
 BedforB@crc.losrios.edu

Associate Degree

A.A. in Digital Media

This two-year instructional program is designed to provide skills for industry and for degree or transfer. This option can lead to entry-level jobs in television, Cable TV, business or industrial video and graphics, animation, or digital media for broadcast, CD/DVD production and the Internet.

Highlights include:
* Practical experience working with contemporary computer software
* State of the art computer lab for graphics and nonlinear editing, including Final Cut Pro Studio, Photoshop, Illustrator, and After Effects
* Internship opportunities working with local television stations, independent film companies and post-production editing facilities

Note to Transfer Students:
If you are interested in transferring to a four-year college or university to pursue a bachelor's degree in this major, it is critical that you meet with a CRC counselor to select and plan the courses for your major. Schools vary widely in terms of the required preparation. The courses that CRC requires for an Associate's degree in this major may be different from the requirements needed for the Bachelor's degree.

Catalog Date: June 1, 2020

Degree Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>RTVF 300</td>
<td>Mass Media and Society</td>
<td>3</td>
</tr>
<tr>
<td>RTVF 302</td>
<td>Introduction to Digital Design &amp; Storytelling</td>
<td>3</td>
</tr>
<tr>
<td>RTVF 304</td>
<td>Introduction to Multimedia</td>
<td>3</td>
</tr>
<tr>
<td>RTVF 319</td>
<td>Beginning Audio Production</td>
<td>3</td>
</tr>
<tr>
<td>RTVF 330</td>
<td>Beginning Single Camera Production</td>
<td>3</td>
</tr>
<tr>
<td>RTVF 360</td>
<td>Introduction to Motion Graphics: Adobe After Effects</td>
<td>3</td>
</tr>
<tr>
<td>RTVF 362</td>
<td>Digital Non-Linear Video Editing</td>
<td>3</td>
</tr>
<tr>
<td>RTVF 368</td>
<td>Scriptwriting for Film, Video &amp; Multimedia</td>
<td>3</td>
</tr>
<tr>
<td>PHOTO 302</td>
<td>Beginning Digital Photography</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>A minimum of 3 units from the following:</td>
<td>3</td>
</tr>
<tr>
<td>RTVF 354</td>
<td>Audio Editing for Film &amp; Video Post Production (3)</td>
<td>3</td>
</tr>
<tr>
<td>COURSE CODE</td>
<td>COURSE TITLE</td>
<td>UNITS</td>
</tr>
<tr>
<td>-------------</td>
<td>------------------------------------------------------------------------------</td>
<td>-------</td>
</tr>
<tr>
<td>RTVF 361</td>
<td>Intermediate Motion Graphics: Adobe After Effects (3)</td>
<td></td>
</tr>
<tr>
<td>RTVF 365</td>
<td>Intermediate Film &amp; Video Editing (3)</td>
<td></td>
</tr>
<tr>
<td>RTVF 370</td>
<td>Broadcast Writing &amp; Announcing (3)</td>
<td></td>
</tr>
<tr>
<td>RTVF 371</td>
<td>Hollywood TV and Film Studios: A Behind the Scenes Experience (1)</td>
<td></td>
</tr>
<tr>
<td>RTVF 498</td>
<td>Work Experience in Radio, Television and Film (1 - 4)</td>
<td></td>
</tr>
<tr>
<td>Total Units</td>
<td></td>
<td>30</td>
</tr>
</tbody>
</table>

The Digital Media Associate in Arts (A.A.) degree may be obtained by completion of the required program, plus general education requirements, plus sufficient electives to meet a 60-unit total. See CRC graduation requirements.

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- Write in clear, concise English. (PSLO-1)
- Create traditional media, print and digital media projects that demonstrate effective use of established design principles for typography, color, images, animation, sound and video (PSLO-2)
- Demonstrate a conceptual foundation in new media technology. (PSLO-3)
- Articulate and apply the basic principles and processes used in traditional and digital graphic and multimedia design. (PSLO-4)
- Demonstrate a conceptual foundation in the ethics of new media technology. (PSLO-5)
- Examine and critique media products utilizing general information and concepts in new media. (PSLO-6)

Career Information

Career Options: Nonlinear Video Editor, DVD Author, Computer Graphic Artist, Animation Artist, Producer/Director for Broadcast, Personal or Corporate Video and the Internet. Some career options may require more than two years of college study. Classes beyond the associate degree may be required to fulfill some career options or for preparation for transfer to a university program.

Certificate of Achievement

Digital Media Certificate

This instructional program is designed to provide skills for industry. This option can lead to entry-level jobs in television, Cable TV, business or industrial video and graphics, animation, or digital media for broadcast, CD/DVD production and the Internet.

Highlights include:
* Practical experience working with contemporary computer software
* State of the art computer lab for graphics and nonlinear editing, including Photoshop, Illustrator, After Effects, Final Cut Pro, Lightwave 3D
* Internship opportunities working with local television stations, independent film companies and post-production editing facilities

Catalog Date: June 1, 2020

Certificate Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>RTVF 302</td>
<td>Introduction to Digital Design &amp; Storytelling</td>
<td>3</td>
</tr>
<tr>
<td>RTVF 319</td>
<td>Beginning Audio Production</td>
<td>3</td>
</tr>
<tr>
<td>RTVF 330</td>
<td>Beginning Single Camera Production</td>
<td>3</td>
</tr>
<tr>
<td>RTVF 360</td>
<td>Introduction to Motion Graphics: Adobe After Effects</td>
<td>3</td>
</tr>
<tr>
<td>COURSE CODE</td>
<td>COURSE TITLE</td>
<td>UNITS</td>
</tr>
<tr>
<td>-------------</td>
<td>------------------------------------------------------</td>
<td>-------</td>
</tr>
<tr>
<td>RTVF 362</td>
<td>Digital Non-Linear Video Editing</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>A minimum of 3 units from the following:</td>
<td>3</td>
</tr>
<tr>
<td>RTVF 304</td>
<td>Introduction to Multimedia (3)</td>
<td></td>
</tr>
<tr>
<td>RTVF 306</td>
<td>Introduction to Media Aesthetics and Cinematic Arts (3)</td>
<td></td>
</tr>
<tr>
<td>RTVF 312</td>
<td>Beginning Radio Production (3)</td>
<td></td>
</tr>
<tr>
<td>RTVF 354</td>
<td>Audio Editing for Film &amp; Video Post Production (3)</td>
<td></td>
</tr>
<tr>
<td>RTVF 361</td>
<td>Intermediate Motion Graphics: Adobe After Effects (3)</td>
<td></td>
</tr>
<tr>
<td>RTVF 365</td>
<td>Intermediate Film &amp; Video Editing (3)</td>
<td></td>
</tr>
<tr>
<td>RTVF 368</td>
<td>Scriptwriting for Film, Video &amp; Multimedia (3)</td>
<td></td>
</tr>
<tr>
<td>Total Units:</td>
<td></td>
<td>18</td>
</tr>
</tbody>
</table>

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- Create digital media projects that incorporate art theory, digital design and development, digital audio and non-linear digital video. (PSLO-1)
- Examine and critique media products utilizing general information and concepts in new media. (PSLO-2)
- Demonstrate a conceptual foundation in the ethics of new media technology. (PSLO-3)
- Demonstrate skills required for a vast array of digital media careers including web design and development, multimedia production, digital video production and corporate communications. (PSLO-4)

Career Information

Career Options: Nonlinear Video Editor, Computer Graphic Artist, Animation Artist, Personal or Corporate Video Producer/Director.

Some career options may require more than two years of college study. Classes beyond the associate degree may be required to fulfill some career options or for preparation for transfer to a university program.
Early Childhood Education
| Cosumnes River College

The Early Childhood Education A.A. degrees and certificates offer an interactive approach to acquiring the knowledge, skills, and dispositions necessary to work with young children, birth to 12 years old. Students are guided by experienced and qualified faculty in an in-depth study of the theories, principles and practices of early childhood, and child development.

The Early Childhood Education department strives to bring innovative research-based, current information and knowledge to students. Reflective practices and opportunities to practice critical thinking skills are woven into all coursework. Emphasis is placed on developing professional and ethical dispositions that foster positive relationships among children, families, and colleagues. Additionally, students are immersed in practices inclusive of all children; including children who are culturally and linguistically diverse and children with special needs.

The Early Childhood Education department believes in the importance of promoting an engaging, intellectually challenging, and creative learning environment. The Early Childhood Education's philosophy is sustained through the Early Childhood Education Pathways to Success program. This program promotes a student centered, strength-based approach to foster the professional disposition to be a successful student and lifelong learner.

The Early Childhood Education Program is aligned to the Child Development and Early Childhood Education majors offered by several California State Universities and the Curriculum Alignment Project (CAP) which align early childhood programs across California Community Colleges. Coursework fulfills the California Commission on Teacher Credentialing (CCTC) fulfill requirements leading to Child Development Permits and early childhood units needed to work as a Transitional Kindergarten Teacher.

Dean
 (916) 691-7142
 WilliaL3@crc.losrios.edu (mailto:WilliaL3@crc.losrios.edu)

Associate Degrees for Transfer

A.S.-T. in Early Childhood Education for Transfer

The Associate in Arts in Early Childhood Education (ECE) for Transfer Degree (AS-T) provides a clearly articulated curricular pathway for students who wish to pursue a degree option in the California State University (CSU) system. The degree is designed to serve the diverse needs of students interested in the breadth and depth of the field of early childhood education. Additionally, this degree exposes students to the core principles and practices of the field in order to build a foundation for their future personal, academic, or vocational paths.

The Associate in Science in ECE for Transfer Degree provides students with a major that fulfills the general requirements of the California State University for transfer. Upon successful completion of the degree requirements, students will be guaranteed admission to the CSU system with junior status and will not have to repeat lower division coursework. Students are encouraged to meet with a counselor to develop their educational plans as degree options and general education requirements vary for each university.

The Associate in Science in Early Childhood Education (ECE) for Transfer Degree may be obtained by the completion of 60 transferable, semester units with a minimum of a 2.0 GPA, including (a) the major or area of emphasis described in the Required Program outlined below (earning a C or better in these courses), and (b) the Intersegmental General Education Transfer Curriculum (IGETC). The ECE courses required in this program are part of the CA Curriculum Alignment Project.

Catalog Date: June 1, 2020

Degree Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECE 312</td>
<td>Child Development</td>
<td>3</td>
</tr>
<tr>
<td>ECE 314</td>
<td>The Child, the Family and the Community</td>
<td>3</td>
</tr>
<tr>
<td>COURSE CODE</td>
<td>COURSE TITLE</td>
<td>UNITS</td>
</tr>
<tr>
<td>-------------</td>
<td>-----------------------------------------------------------------------------</td>
<td>-------</td>
</tr>
<tr>
<td>ECE 300</td>
<td>Introduction to Principles and Practices in Early Childhood Education</td>
<td>3</td>
</tr>
<tr>
<td>ECE 320</td>
<td>Curriculum and Interactions in Early Childhood Education</td>
<td>4</td>
</tr>
<tr>
<td>ECE 321</td>
<td>Advanced Practicum in Early Childhood Education</td>
<td>4</td>
</tr>
<tr>
<td>ECE 326</td>
<td>Making Learning Visible Through Observation and Documentation</td>
<td>3</td>
</tr>
<tr>
<td>ECE 415</td>
<td>Children's Health, Safety and Nutrition</td>
<td>3</td>
</tr>
<tr>
<td>ECE 430</td>
<td>Culture and Diversity in Early Childhood Education</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Total Units:</strong></td>
<td><strong>26</strong></td>
</tr>
</tbody>
</table>

The Associate in Science in Early Childhood Education for Transfer (AS-T) degree may be obtained by completion of 60 transferable, semester units with a minimum 2.0 GPA, including (a) the major or area of emphasis described in the Required Program, and (b) either the Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education-Breadth Requirements.

**Student Learning Outcomes**

Upon completion of this program, the student will be able to:

- Synthesize child development research with principles and practices for early childhood teaching to create early learning environments that are respectful, supportive, and challenging for all children, from infancy through adolescence. (PSLO 1)
- Design inclusive, culturally and linguistically appropriate learning environments, based on child development, child observations, family information and knowledge of culturally diverse child rearing practices. (PSLO 2)
- Incorporate strategies for building respectful, reciprocal family and community relationships in order to support families with their children's development and learning. (PSLO 3)
- Assess children's learning through observation, documentation, and interpretation, using results to guide curriculum and teaching strategies. (PSLO 4)
- Recommend developmentally appropriate and culturally relevant approaches to teaching and learning that include respectful, supportive relationships with children and families, and curriculum that support foundational skills and concepts in language, math, science, art, and social relationships. (PSLO 5)
- Demonstrate practices that maintain standards of health, nutrition, and safety in-group care early childhood settings. (PSLO 6)
- Apply ethical standards of behavior accepted by the profession of early childhood education. (PSLO 7)
- Appraise knowledge of public policy and legislative issues concerning children and their families. (PSLO 8)

**Career Information**

The Associate in Science in Early Childhood Education transfer degree was designed to facilitate students' successful transfer to certain California State University (CSU) campuses that prepares them for advanced study in a variety of baccalaureate degree programs including teaching, child development specialist, program director, and child life specialist. With a baccalaureate degree in ECE/Child Development, students are eligible for the master teacher and site supervisor levels of the CA child development permit, using the alternative qualifications category. Students who are planning to obtain an associate degree and not continue to a baccalaureate program are advised to complete the Early Childhood Education AA degree rather than this AS-T. The AA degree provides a comprehensive foundation for in-depth early childhood teacher preparation necessary for those seeking employment after completion of the degree. NOTE TO TRANSFER STUDENTS: The Associate in Science in Early Childhood Education for Transfer program is designed for students who plan to transfer to a campus of the California State University (CSU). Other than the required core, the courses you choose to complete this degree will depend to some extent on the selected CSU for transfer. In addition, some CSU-GE Breadth or IGETC requirements can also be completed using courses required for this associate degree for transfer major (known as "double-counting"). Meeting with a counselor to determine the most appropriate course choices will facilitate efficient completion of your transfer requirements. For students wishing to transfer to other universities (UC System, private, or out-of-state), the Associate Degree for Transfer may not provide adequate preparation for upper-division transfer admissions; it is critical that you meet with a CRC counselor to select and plan the courses for the major, as programs vary widely in terms of the required preparation.

**Associate Degrees**

A.A. in Early Childhood Education, Site Supervisor
Administration of early care and education programs is the main focus of this degree. Topics include administration, supervision and coordination of staff in early childhood settings. Additionally, it provides the educational coursework that serves as the core curriculum for the early childhood education field. Along with documented experience, this certificate leads to the Site Supervisor Permit issued by the California Commission on Teacher Credentialing and is required of those individuals supervising a publicly funded early childhood education site.

**Catalog Date:** June 1, 2020

### Degree Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECE 300</td>
<td>Introduction to Principles and Practices in Early Childhood Education</td>
<td>3</td>
</tr>
<tr>
<td>ECE 312</td>
<td>Child Development (3)</td>
<td>3</td>
</tr>
<tr>
<td>ECE 314</td>
<td>The Child, the Family and the Community (3)</td>
<td>3</td>
</tr>
<tr>
<td>ECE 326</td>
<td>Making Learning Visible Through Observation and Documentation</td>
<td>3</td>
</tr>
<tr>
<td>ECE 404</td>
<td>Children with Special Needs</td>
<td>3</td>
</tr>
</tbody>
</table>

A minimum of 3 units from the following:

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECE 322</td>
<td>Promoting Children's Social Competence (3)</td>
<td></td>
</tr>
<tr>
<td>ECE 342</td>
<td>Constructive Math and Science in Early Childhood Education (3)</td>
<td></td>
</tr>
<tr>
<td>ECE 343</td>
<td>Language and Literacy Development in Early Childhood (3)</td>
<td></td>
</tr>
<tr>
<td>ECE 365</td>
<td>Creative Projects and Experiences for Young Children (3)</td>
<td></td>
</tr>
</tbody>
</table>

A minimum of 3 units from the following:

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECE 330</td>
<td>Infant and Toddler Development (3)</td>
<td></td>
</tr>
<tr>
<td>ECE 331</td>
<td>Care and Education of Infants and Toddlers (3)</td>
<td></td>
</tr>
<tr>
<td>ECE 402</td>
<td>Infants with Atypical Development (3)</td>
<td></td>
</tr>
<tr>
<td>ECE 320</td>
<td>Curriculum and Interactions in Early Childhood Education</td>
<td></td>
</tr>
<tr>
<td>ECE 430</td>
<td>Culture and Diversity in Early Childhood Education</td>
<td></td>
</tr>
<tr>
<td>ECE 420</td>
<td>Administration I: Programs in Early Childhood Education</td>
<td></td>
</tr>
<tr>
<td>ECE 321</td>
<td>Advanced Practicum in Early Childhood Education</td>
<td></td>
</tr>
<tr>
<td>ECE 415</td>
<td>Children's Health, Safety and Nutrition</td>
<td></td>
</tr>
<tr>
<td>ECE 422</td>
<td>Administration II: Personnel and Leadership in Early Childhood Education</td>
<td></td>
</tr>
<tr>
<td>ECE 424</td>
<td>Adult Supervision: Mentoring in a Collaborative Learning Setting</td>
<td></td>
</tr>
</tbody>
</table>

**Total Units:** 43

The Early Childhood Education, Site Supervisor Associate in Arts (A.A.) degree may be obtained by completion of the required program, plus general education requirements, plus sufficient electives to meet a 60-unit total. See CRC graduation requirements.

### Student Learning Outcomes

Upon completion of this program, the student will be able to:
- PSLO 1: (Development and Learning) Analyze and synthesize research and theories to support development and learning. Evaluate and implement developmentally appropriate and culturally relevant approaches to teaching and learning which support the whole child including foundational skills and concepts in language and literacy, math, science, art, health and wellness, and social relationships.

- PSLO 2: (Equity and Cultural Sustainability) Construct knowledge based on the principles of anti-bias education in order to design environments that promote justice, equity and inclusion for all children, families, and communities.

- PSLO 3: (Professionalism) Develop competencies, professional skills, and plans for professional growth. Integrate reflective practices to support professional growth as an Early Childhood professional. Understand and integrate the NAEYC Code of Ethics to support children, families, and other educators.

- PSLO 4: (Observation, Documentation and Assessment) Utilize authentic assessment strategies based on observation, reflection, documentation, and interpretation of children's development to inform teaching practices.

- PSLO 5: (Family Engagement) Incorporate strategies for building respectful and reciprocal relationships with families, children and the community in order to support children's development and learning. Develop knowledge and skills to provide a responsive curriculum and learning environment that reflects the children and the families in the program.

- PSLO 6: (Leadership) Understanding and commitment to leadership development that empowers, encourages, cultivates, and supports self and others to become agents of change and advocate for high-quality early care and education experiences for all children, support for families, and professional stature of educators.

Career Information

Upon completion of this certificate, the student exceeds the minimum requirements to work as a director/site supervisor in a privately funded early care and education program. With documented experience supervising staff, the student also meets the requirements to work as a director/site supervisor in a publicly funded early care and education program.

A.A. in Early Childhood Education

This program provides a comprehensive foundation for in-depth early childhood teacher preparation both through strong general education and principles and practices in child development and in early childhood curriculum and pedagogy. Topics include an introduction to the profession, observation techniques, age-appropriate curriculum, the child in the context of family and culture, and health and safety practices for early childhood educators.

Note to Transfer Students:

If you are interested in transferring to a four-year college or university to pursue a Bachelor’s degree in this major, it is critical that you meet with a CRC counselor to select and plan the courses for your major. Schools vary widely in terms of the required preparation. The courses that CRC requires for an Associate’s degree in this major may be different from the requirements needed for the Bachelor’s degree.

Catalog Date: June 1, 2020

Degree Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECE 300</td>
<td>Introduction to Principles and Practices in Early Childhood Education</td>
<td>3</td>
</tr>
<tr>
<td>ECE 312</td>
<td>Child Development (3)</td>
<td>3</td>
</tr>
<tr>
<td>ECE 314</td>
<td>The Child, the Family and the Community (3)</td>
<td>3</td>
</tr>
<tr>
<td>ECE 326</td>
<td>Making Learning Visible Through Observation and Documentation</td>
<td>3</td>
</tr>
<tr>
<td>ECE 404</td>
<td>Children with Special Needs</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>A minimum of 9 units from the following:</td>
<td></td>
</tr>
<tr>
<td>ECE 322</td>
<td>Promoting Children's Social Competence (3)</td>
<td></td>
</tr>
<tr>
<td>ECE 342</td>
<td>Constructive Math and Science in Early Childhood Education (3)</td>
<td></td>
</tr>
<tr>
<td>ECE 343</td>
<td>Language and Literacy Development in Early Childhood (3)</td>
<td></td>
</tr>
<tr>
<td>ECE 365</td>
<td>Creative Projects and Experiences for Young Children (3)</td>
<td></td>
</tr>
</tbody>
</table>
The Early Childhood Education Associate in Arts (A.A.) degree may be obtained by completion of the required program, plus general education requirements, plus sufficient electives to meet a 60-unit total. See CRC graduation requirements.

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- PSLO 1: (Development and Learning) Analyze and synthesize research and theories to support development and learning. Evaluate and implement developmentally appropriate and culturally relevant approaches to teaching and learning which support the whole child including foundational skills and concepts in language and literacy, math, science, art, health and wellness, and social relationships.

- PSLO 2: (Equity and Cultural Sustainability) Construct knowledge based on the principles of anti-bias education in order to design environments that promote justice, equity and inclusion for all children, families, and communities.

- PSLO 3: (Professionalism) Develop competencies, professional skills, and plans for professional growth. Integrate reflective practices to support professional growth as an Early Childhood professional. Understand and integrate the NAEYC Code of Ethics to support children, families, and other educators.

- PSLO 4: (Observation, Documentation and Assessment) Utilize authentic assessment strategies based on observation, reflection, documentation, and interpretation of children's development to inform teaching practices.

- PSLO 5: (Family Engagement) Incorporate strategies for building respectful and reciprocal relationships with families, children and the community in order to support children's development and learning. Develop knowledge and skills to provide a responsive curriculum and learning environment that reflects the children and the families in the program.

- PSLO 6: (Leadership) Understanding and commitment to leadership development that empowers, encourages, cultivates, and supports self and others to become agents of change and advocate for high-quality early care and education experiences for all children, support for families, and professional stature of educators.

Career Information

Upon completion of the A.A. degree, a student possesses the course work required to work as a teacher in both private and public early care and education settings, serving infants through preschool-age children. Additionally, the individual can work as a teacher in before-and-after school programs, serving school-age children.

Certificates of Achievement

Early Childhood Education - Master Teacher Certificate

This certificate meets the requirements for teaching in a publicly funded early care and education program. It requires an additional 6 units of specialized study beyond the teacher level certificate, allowing the student to select a particular focus of study (i.e., infant/toddler; culture and diversity; health and nutrition; children's literature; and art or music for young children). Applicants must verify required experience teaching children and supervising staff to be recommended to the California Commission on Teacher Credentialing for issuance of the Master Teacher Child Development Permit.
Certificate Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECE 300</td>
<td>Introduction to Principles and Practices in Early Childhood Education</td>
<td>3</td>
</tr>
<tr>
<td>ECE 312</td>
<td>Child Development (3)</td>
<td>3</td>
</tr>
<tr>
<td>ECE 314</td>
<td>The Child, the Family and the Community (3)</td>
<td>3</td>
</tr>
<tr>
<td>ECE 326</td>
<td>Making Learning Visible Through Observation and Documentation</td>
<td>3</td>
</tr>
<tr>
<td>ECE 404</td>
<td>Children with Special Needs (3)</td>
<td>3</td>
</tr>
<tr>
<td>ECE 320</td>
<td>Curriculum and Interactions in Early Childhood Education</td>
<td>4</td>
</tr>
<tr>
<td>ECE 430</td>
<td>Culture and Diversity in Early Childhood Education</td>
<td>3</td>
</tr>
<tr>
<td>ECE 321</td>
<td>Advanced Practicum in Early Childhood Education</td>
<td>4</td>
</tr>
<tr>
<td>ECE 415</td>
<td>Children's Health, Safety and Nutrition</td>
<td>3</td>
</tr>
<tr>
<td>ECE 424</td>
<td>Adult Supervision: Mentoring in a Collaborative Learning Setting</td>
<td>2</td>
</tr>
</tbody>
</table>

A minimum of 16 units from the following:

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGWR 300</td>
<td>College Composition (3)</td>
<td></td>
</tr>
<tr>
<td>MATH 300</td>
<td>Introduction to Mathematical Ideas (3)</td>
<td></td>
</tr>
<tr>
<td>FCS 324</td>
<td>Human Development: A Life Span (3)</td>
<td></td>
</tr>
<tr>
<td>or PSYC 371</td>
<td>Life Span Developmental Psychology (3)</td>
<td></td>
</tr>
<tr>
<td>PHIL 310</td>
<td>Introduction to Ethics (3)</td>
<td></td>
</tr>
<tr>
<td>or HUM 300</td>
<td>Classical Humanities (3)</td>
<td></td>
</tr>
<tr>
<td>or PHOTO 420</td>
<td>History of Photography (3)</td>
<td></td>
</tr>
<tr>
<td>VIET 401</td>
<td>Elementary Vietnamese (4)</td>
<td></td>
</tr>
<tr>
<td>or SPAN 401</td>
<td>Elementary Spanish (4)</td>
<td></td>
</tr>
<tr>
<td>or DEAF 310</td>
<td>American Sign Language I (4)</td>
<td></td>
</tr>
</tbody>
</table>

Students must complete 16 units in general education categories to be eligible for the Child Development Permit (Master Teacher Level) through California Commission on Teacher Credentialing. At least one course in each of the following GE areas must be completed: English, Math/Science, Social Science, Humanities/Fine Arts.

Students will select a Master Teacher "Specialization" consisting of six (6) units of focused content (see below). See ECE Department for information on experience requirement for the Child Development Permits.

Subtotal Units: 47

Curriculum, Specialization Option

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECE 342</td>
<td>Constructive Math and Science in Early Childhood Education (3)</td>
<td>6</td>
</tr>
<tr>
<td>COURSE CODE</td>
<td>COURSE TITLE</td>
<td>UNITS</td>
</tr>
<tr>
<td>-------------</td>
<td>---------------------------------------------------------------</td>
<td>-------</td>
</tr>
<tr>
<td>ECE 343</td>
<td>Language and Literacy Development in Early Childhood (3)</td>
<td></td>
</tr>
<tr>
<td>ECE 365</td>
<td>Creative Projects and Experiences for Young Children (3)</td>
<td></td>
</tr>
<tr>
<td>ECE 322</td>
<td>Promoting Children's Social Competence (3)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Curriculum, Specialization Option Units:</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>Total Units:</td>
<td>53</td>
</tr>
</tbody>
</table>

Infant and Toddler Care, Specialization Option

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>A minimum of 6 units from the following:</td>
<td>6</td>
</tr>
<tr>
<td>ECE 331</td>
<td>Care and Education of Infants and Toddlers (3)</td>
<td></td>
</tr>
<tr>
<td>ECE 330</td>
<td>Infant and Toddler Development (3)</td>
<td></td>
</tr>
<tr>
<td>ECE 402</td>
<td>Infants with Atypical Development (3)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Infant and Toddler Care, Specialization Option Units:</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>Total Units:</td>
<td>53</td>
</tr>
</tbody>
</table>

School-Age Care, Specialization Option

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECE 356</td>
<td>Programs for the School-Age Child</td>
<td>3</td>
</tr>
<tr>
<td>ECE 350</td>
<td>Introduction to Elementary Teaching with Field Experience</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>School-Age Care, Specialization Option Units:</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>Total Units:</td>
<td>53</td>
</tr>
</tbody>
</table>

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- **PSLO 1:** (Development and Learning) Analyze and synthesize research and theories to support development and learning. Evaluate and implement developmentally appropriate and culturally relevant approaches to teaching and learning which support the whole child including foundational skills and concepts in language and literacy, math, science, art, health and wellness, and social relationships.

- **PSLO 2:** (Equity and Cultural Sustainability) Construct knowledge based on the principles of anti-bias education in order to design environments that promote justice, equity and inclusion for all children, families, and communities.

- **PSLO 3:** (Professionalism) Develop competencies, professional skills, and plans for professional growth. Integrate reflective practices to support professional growth as an Early Childhood professional. Understand and integrate the NAEYC Code of Ethics to support children, families, and other educators.

- **PSLO 4:** (Observation, Documentation and Assessment) Utilize authentic assessment strategies based on observation, reflection, documentation, and interpretation of children's development to inform teaching practices.
- PSLO 5: (Family Engagement) Incorporate strategies for building respectful and reciprocal relationships with families, children and the community in order to support children's development and learning. Develop knowledge and skills to provide a responsive curriculum and learning environment that reflects the children and the families in the program.

- PSLO 6: (Leadership) Understanding and commitment to leadership development that empowers, encourages, cultivates, and supports self and others to become agents of change and advocate for high-quality early care and education experiences for all children, support for families, and professional stature of educators.

Career Information

This certificate qualifies students to be a master teacher or a supervising teacher in early care and education programs. Upon completion of this certificate and with documented related experience, the individual is eligible to be a lead teacher and/or mentor teacher in both publicly and privately funded programs serving young children and their families. Some career options may require more than two years of college study. Meet with a counselor and an ECE faculty to determine these options.

Early Childhood Education - Teacher Certificate

This certificate provides a foundation for in-depth early childhood teacher preparation both through general education and through introductory studies in child development and in early childhood curriculum and pedagogy. Additionally, it covers culture and diversity issues in early childhood and health and safety practices. Students must verify required teaching experience to be recommended to the Commission on Teacher Credentialing for issuance of the Teacher Child Development Permit.

Catalog Date: June 1, 2020

Certificate Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECE 300</td>
<td>Introduction to Principles and Practices in Early Childhood Education</td>
<td>3</td>
</tr>
<tr>
<td>ECE 312</td>
<td>Child Development (3)</td>
<td>3</td>
</tr>
<tr>
<td>ECE 314</td>
<td>The Child, the Family and the Community (3)</td>
<td>3</td>
</tr>
<tr>
<td>ECE 326</td>
<td>Making Learning Visible Through Observation and Documentation</td>
<td>3</td>
</tr>
<tr>
<td>ECE 320</td>
<td>Curriculum and Interactions in Early Childhood Education</td>
<td>4</td>
</tr>
<tr>
<td>ECE 430</td>
<td>Culture and Diversity in Early Childhood Education</td>
<td>3</td>
</tr>
<tr>
<td>ECE 321</td>
<td>Advanced Practicum in Early Childhood Education</td>
<td>4</td>
</tr>
<tr>
<td>ECE 415</td>
<td>Children's Health, Safety and Nutrition</td>
<td>3</td>
</tr>
<tr>
<td>ECE 330</td>
<td>Infant and Toddler Development (3)</td>
<td>3</td>
</tr>
<tr>
<td>or ECE 331</td>
<td>Care and Education of Infants and Toddlers (3)</td>
<td></td>
</tr>
<tr>
<td>or ECE 356</td>
<td>Programs for the School-Age Child (3)</td>
<td></td>
</tr>
<tr>
<td>or ECE 402</td>
<td>Infants with Atypical Development (3)</td>
<td></td>
</tr>
<tr>
<td>A minimum of 16 units from the following:</td>
<td>16</td>
<td></td>
</tr>
<tr>
<td>ENGWR 300</td>
<td>College Composition (3)</td>
<td></td>
</tr>
<tr>
<td>MATH 300</td>
<td>Introduction to Mathematical Ideas (3)</td>
<td></td>
</tr>
<tr>
<td>FCS 324</td>
<td>Human Development: A Life Span (3)</td>
<td></td>
</tr>
<tr>
<td>or PSYC 371</td>
<td>Life Span Developmental Psychology (3)</td>
<td></td>
</tr>
<tr>
<td>PHIL 310</td>
<td>Introduction to Ethics (3)</td>
<td></td>
</tr>
<tr>
<td>or HUM 300</td>
<td>Classical Humanities (3)</td>
<td></td>
</tr>
<tr>
<td>or PHOTO 420</td>
<td>History of Photography (3)</td>
<td></td>
</tr>
<tr>
<td>VIET 401</td>
<td>Elementary Vietnamese (4)</td>
<td></td>
</tr>
</tbody>
</table>
Students must complete 16 units in general education categories to be eligible for the Child Development Permit (Teacher Level) through California Commission on Teacher Credentialing. At least one course in each of the following GE areas must be completed: English, Math/Science, Social Science, Humanities/Fine Arts.

See ECE Department for information on experience requirement for the Child Development Permits.

Total Units: 45

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- PSLO 1: (Development and Learning) Analyze and synthesize research and theories to support development and learning. Evaluate and implement developmentally appropriate and culturally relevant approaches to teaching and learning which support the whole child including foundational skills and concepts in language and literacy, math, science, art, health and wellness, and social relationships.

- PSLO 2: (Equity and Cultural Sustainability) Construct knowledge based on the principles of anti-bias education in order to design environments that promote justice, equity and inclusion for all children, families, and communities.

- PSLO 3: (Professionalism) Develop competencies, professional skills, and plans for professional growth. Integrate reflective practices to support professional growth as an Early Childhood professional. Understand and integrate the NAEYC Code of Ethics to support children, families, and other educators.

- PSLO 4: (Observation, Documentation and Assessment) Utilize authentic assessment strategies based on observation, reflection, documentation, and interpretation of children's development to inform teaching practices.

- PSLO 5: (Family Engagement) Incorporate strategies for building respectful and reciprocal relationships with families, children and the community in order to support children's development and learning. Develop knowledge and skills to provide a responsive curriculum and learning environment that reflects the children and the families in the program.

Career Information

Upon completion of this certificate and with appropriate documented experience, the student meets the requirement for employment as a teacher in publicly funded early care and education programs, serving infants through preschool-age children. The student also meets the requirements to work as a teacher in a privately funded early care and education program, as well as in a before-and-after school-age program.

Early Childhood Education, Associate Teacher Certificate

Upon completion of one of the following certificates, and with appropriate documented experience, the student meets the minimum requirements for employment in a privately funded child care program or family day care program. Certificates are designed to meet varying employment levels and focused training with infants and school-age children. These requirements are outlined in Title 22 (Department of Social Services) regulations for child care licensing.

To be eligible for the Child Development Permit (Associate Teacher) students must also complete experience requirements for the particular permit for which they are applying. See ECE Department for further information.

Catalog Date: June 1, 2020

Certificate Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECE 300</td>
<td>Introduction to Principles and Practices in Early Childhood Education</td>
<td>3</td>
</tr>
<tr>
<td>ECE 312</td>
<td>Child Development (3)</td>
<td>3</td>
</tr>
</tbody>
</table>
Student Learning Outcomes

Upon completion of this program, the student will be able to:

- PSLO 1: (Development and Learning) Analyze and synthesize research and theories to support development and learning. Evaluate and implement developmentally appropriate and culturally relevant approaches to teaching and learning which support the whole child including foundational skills and concepts in language and literacy, math, science, art, health and wellness, and social relationships.

- PSLO 3: (Professionalism) Develop competencies, professional skills, and plans for professional growth. Integrate reflective practices to support professional growth as an Early Childhood professional. Understanding of and integration of the NAEYC Code of Ethics to support children, families, and other educators.

- PSLO 4: (Observation, Documentation and Assessment) Utilize authentic assessment strategies based on observation, reflection, documentation, and interpretation of children's development to inform teaching practices.

- PSLO 5: (Family Engagement) Incorporate strategies for building respectful and reciprocal relationships with families, children and the community in order to support children's development and learning. Develop knowledge and skills to provide a responsive curriculum and learning environment that reflects the children and the families in the program.

Career Information

This certificate allows the student to work as a teacher in a private early care and education (Title 22) program, serving infants/toddlers, preschool-age children, and school-age children in before-and-after school programs. With the Associate Teacher Child Development Permit, an individual can work as an assistant or associate teacher in a publicly funded (Title 5) early care and education program.

Early Childhood Education, Infant Specialist Certificate

This certificate provides the educational coursework that serves as the core curriculum for the early childhood education field. Topics include an introduction to the profession, observation techniques, and age-appropriate care and education. Additionally, it focuses on infant development and the care of education of infants/toddlers in group settings. The Infant Specialist Certificate is designed to prepare students to work with children ages 0-3 in a variety of early care and education settings. Completion of the Certificate fulfills the child development coursework requirement, combined with experience, for the California Child Development Permit at the Teacher level. Students meet the minimum requirements for employment in an infant care program.

Catalog Date: June 1, 2020

Certificate Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECE 300</td>
<td>Introduction to Principles and Practices in Early Childhood Education</td>
<td>3</td>
</tr>
<tr>
<td>ECE 312</td>
<td>Child Development (3)</td>
<td>3</td>
</tr>
<tr>
<td>ECE 314</td>
<td>The Child, the Family and the Community (3)</td>
<td>3</td>
</tr>
<tr>
<td>ECE 330</td>
<td>Infant and Toddler Development</td>
<td>3</td>
</tr>
<tr>
<td>ECE 326</td>
<td>Making Learning Visible Through Observation and Documentation</td>
<td>3</td>
</tr>
<tr>
<td>ECE 331</td>
<td>Care and Education of Infants and Toddlers</td>
<td>3</td>
</tr>
<tr>
<td>ECE 320</td>
<td>Curriculum and Interactions in Early Childhood Education</td>
<td>4</td>
</tr>
</tbody>
</table>
Student Learning Outcomes

Upon completion of this program, the student will be able to:

- **PSLO 1: (Development and Learning)** Analyze and synthesize research and theories to support development and learning. Evaluate and implement developmentally appropriate and culturally relevant approaches to teaching and learning which support the whole child including foundational skills and concepts in language and literacy, math, science, art, health and wellness, and social relationships.

- **PSLO 2: (Professionalism)** Develop competencies, professional skills, and plans for professional growth. Integrate reflective practices to support professional growth as an Early Childhood professional. Understand and integrate the NAEYC Code of Ethics to support children, families, and other educators.

- **PSLO 3: (Observation, Documentation and Assessment)** Utilize authentic assessment strategies based on observation, reflection, documentation, and interpretation of children’s development to inform teaching practices.

- **PSLO 4: (Family Engagement)** Incorporate strategies for building respectful and reciprocal relationships with families, children and the community in order to support children's development and learning. Develop knowledge and skills to provide a responsive curriculum and learning environment that reflects the children and the families in the program.

Career Information

Upon completion of this certificate and with appropriate documented experience, the student meets the minimum requirements for employment in an infant care program. Additionally, upon completion of one of the following certificates, and with appropriate documented experience, the student meets the minimum requirements for employment in a privately funded child care program or family day care program.

**Early Childhood Education, School Age Child Care and Education Certificate**

Upon completion of one of the following certificates, and with appropriate documented experience, the student meets the minimum requirements for employment in a privately funded child care program or family day care program. Certificates are designed to meet varying employment levels and focused training with infants and school-age children. These requirements are outlined in Title 22 (Department of Social Services) regulations for child care licensing.

**Catalog Date:** June 1, 2020

Certificate Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECE 300</td>
<td>Introduction to Principles and Practices in Early Childhood Education</td>
<td>3</td>
</tr>
<tr>
<td>ECE 312</td>
<td>Child Development (3)</td>
<td>3</td>
</tr>
<tr>
<td>ECE 314</td>
<td>The Child, the Family and the Community (3)</td>
<td>3</td>
</tr>
<tr>
<td>ECE 326</td>
<td>Making Learning Visible Through Observation and Documentation</td>
<td>3</td>
</tr>
<tr>
<td>ECE 404</td>
<td>Children with Special Needs</td>
<td>3</td>
</tr>
<tr>
<td>ECE 320</td>
<td>Curriculum and Interactions in Early Childhood Education</td>
<td>4</td>
</tr>
<tr>
<td>ECE 356</td>
<td>Programs for the School-Age Child (3)</td>
<td>3</td>
</tr>
<tr>
<td>ECE 321</td>
<td>Advanced Practicum in Early Childhood Education</td>
<td>4</td>
</tr>
</tbody>
</table>

Total Units: 26
Student Learning Outcomes

Upon completion of this program, the student will be able to:

- PSLO 1: (Development and Learning) Analyze and synthesize research and theories to support development and learning. Evaluate and implement developmentally appropriate and culturally relevant approaches to teaching and learning which support the whole child including foundational skills and concepts in language and literacy, math, science, art, health and wellness, and social relationships.

- PSLO 2: (Professionalism) Develop competencies, professional skills, and plans for professional growth. Integrate reflective practices to support professional growth as an Early Childhood professional. Understand and integrate the NAEYC Code of Ethics to support children, families, and other educators.

- PSLO 3: (Observation, Documentation and Assessment) Utilize authentic assessment strategies based on observation, reflection, documentation, and interpretation of children’s development to inform teaching practices.

- PSLO 4: (Family Engagement) Incorporate strategies for building respectful and reciprocal relationships with families, children and the community in order to support children’s development and learning. Develop knowledge and skills to provide a responsive curriculum and learning environment that reflects the children and the families in the program.

Career Information

Upon completion of this certificate and with appropriate documented experience, the student exceeds the minimum requirements for employment as a teacher in privately funded before-and-after school child care programs. These requirements are outlined in Title 22 (Department of Social Services) regulations for child care licensing.

Early Childhood Education (ECE)

ECE 295 Independent Studies in Early Childhood Education

Units: 1 - 3
Hours: 54 - 162 hours LAB
Prerequisite: None.
Catalog Date: June 1, 2020

An independent studies project involves an individual student or small group of students in study, research, or activities beyond the scope of regularly offered courses. See the current catalog section of “Special Studies” for full details of Independent Studies.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO #1: Actively engage in intellectual inquiry beyond that required in order to pass a course of study (College Wide Learning Outcome – Area 4).

- Discuss and outline a proposal of study (that can be accomplished within one semester term) with a supervising instructor qualified within the discipline.

- Design an independent study (to be completed individually or by collaboration of a small group) to foster special knowledge, skills, and experience that are not available in any one regularly scheduled course.

- Use information resources to gather discipline-specific information.

- SLO #2: Utilize modes of analysis and critical thinking to apply theoretical perspectives and/or concepts in the major discipline of study to significant problems and/or educational activities (College Wide Learning Outcome – Area 3).

- Analyze and apply the knowledge, skills and experience that are involved in the independent study to theoretical perspectives and/or concepts in the major discipline of study.

- Explain the importance of the major discipline of study in the broader picture of society.

- SLO #3: Communicate a complex understanding of content matter of the major discipline of study (College Wide Outcome – Area 3).

- Demonstrate competence in the skills essential to mastery of the major discipline of study that are necessary to accomplish the independent study.

- SLO #4: Identify personal goals and pursue these goals effectively (College Wide Outcome – Area 4).
Utilize skills from the "academic tool kit" including time management, study skills, etc., to accomplish the independent study within one semester term.

ECE 300 Introduction to Principles and Practices in Early Childhood Education

| Units: | 3 |
| Hours: | 54 hours LEC |
| Prerequisite: | None. |
| Transferable: | CSU |
| C-ID: | C-ID ECE 120 |
| Catalog Date: | June 1, 2020 |

This course is an introduction to early childhood education, including an overview of the history of the field, evolution of professional practices and ethics, educational principles that support child development from birth through the school-age years, and teaching practices based on observation, documentation, and interpretation of children’s behavior.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO #1: Differentiate between philosophies of early childhood education in regards to assumptions about how young children learn and how early childhood teachers should teach.
- Identify and compare effective policies, practices and environments in early care and education
- List different program types, delivery systems, and licensing and regulation structures in early childhood settings.
- Demonstrate awareness of developmental ages and stages and how they impact their teaching.
- Define developmentally, culturally and linguistically appropriate practice.
- Describe the characteristics of effective relationships and interactions between early childhood professionals, children, families, and colleagues and examine the importance of collaboration.
- SLO #2: Relate current perspectives on childhood, the care of children, and early childhood education to historical and cultural contexts.
- Compare and contrast theoretical and historical perspectives
- Identify the historical roots of early childhood education.
- SLO #3: Define and identify the role of observation, documentation, and interpretation of children's play as a tool for planning curriculum for young children and assessing their learning.
- Describe the relationship of observation, planning, implementation, and assessment in effective programming.
- Validate the importance of documentation of children's work in progress as an important tool in the learning process for children, teachers, and parents.
- Utilize observation and documentation to design play-based environments.
- SLO #4: Identify career paths, certification options, professional associations, and dispositions for working in the early childhood profession.
- Explain early care and education as a profession, including ethics and professional organizations.
- Recognize the importance of advocacy and legislative issues impacting the early care and education field.
- List different licensing and professional requirements as required by Title 22, Title 5 and the Child Development Permit.
- SLO #5: Describe principles and practices that guide teaching when working with young children, to include the development of play-based learning environments, routines that involve children in applying emerging skills, and strategies that support young children's social competence.
- Examine the value of play as a vehicle for developing skills, knowledge, dispositions and strengthening relationships amongst young children.
- Identify ways of using play-based curriculum as a vehicle for developing skills, dispositions and knowledge.
- Compare and contrast principles of positive guidance strategies.
- Identify practices promoting positive guidance, communication and problem solving skills.
Describe adaptations needed to support children with diverse abilities.
Define the importance of establishing an anti-bias environment to support all children.

ECE 304 Family to Family: Introduction to Family Child Care

- **Units:** 1
- **Hours:** 18 hours LEC
- **Prerequisite:** None.
- **Transferable:** CSU
- **Catalog Date:** June 1, 2020

This course is an orientation to Family Child Care including local regulations, health and safety, curriculum, behavior management, and business requirements of in-home child care services.

**Student Learning Outcomes**
Upon completion of this course, the student will be able to:

- identify the components of a successful and developmentally appropriate, licensed Family Child Care Facility.
- develop criteria for implementing components of a quality family child care.
- assess (through observation) that criteria are being met.

ECE 307 Introduction to Bilingual Education

- **Units:** 3
- **Hours:** 54 hours LEC
- **Prerequisite:** None.
- **Catalog Date:** June 1, 2020

This course is an introduction to the study of the education of English Learners in California and the United States. It includes the history, relevant legislation, first and second language acquisition theories, practices and strategies for the development of English proficiency. The course involves observations and tutoring of English Language Learners using materials and strategies responsive to the students’ primary language and assessed levels of English proficiency.

**Student Learning Outcomes**
Upon completion of this course, the student will be able to:

- **SLO#1** Identify and explain the historical, political, and legal development of bilingual education in the United States.
- **SLO#2** Analyze federal and state mandates and their impact on current principles and practices that impact bilingual education.
- **SLO#3** Research existing mandates for English Learners such as California’s Proposition 227 and Proposition 58 and their impact on current practices and provisions for bilingual education.
- **SLO#4** Identify and critique different program models of bilingual education instruction and their relationship to state English Language Development and English Language Arts content standards and framework.
- **SLO#5** Analyze elements of public school curriculum and instruction that affect the achievement of English Language Learners.
- **SLO#6** Design strategies that build on the strengths of Second Language Learners’ first language, family culture, background, and experiences.
- **SLO#7** Promote student academic language growth through the development of inclusive practices.
- **SLO#8** Identify the assessment measures for English Learners.
- **SLO#9** Review the purposes, content, and uses of the California English Language Development Standards and English Learner Proficiency Assessment for California (ELPAC).
- **SLO#10** Appraise the attitudes of policymakers, educators, and the public towards bilingual education.
- **SLO#11** Examine personal biases and attitudes toward the implementation of bilingual education and second language learners.
- **SLO#12** Evaluate and implement curriculum and instructional practices to support Dual Language Learners.
Recommend environmental supports and instructional practices to promote home language retention.

Evaluate materials to support Dual Language Learners including, but not limited to, the Preschool Language Learner Guide, Preschool Learning Foundations and Framework.

**ECE 312 Child Development**

**Units:** 3  
**Hours:** 54 hours LEC  
**Prerequisite:** None.  
**Advisory:** ENGWR 101 or 103; or ESLL 320, ESLR 320, and ESLW 320.  
**Transferable:** CSU; UC  
**General Education:** AA/AS Area III(b); CSU Area D; CSU Area E1; IGETC Area 4  
**C-ID:** C-ID CDEV 100  
**Catalog Date:** June 1, 2020

This course examines the major physical, psychosocial, and cognitive/language developmental milestones for children, both typical and atypical, from conception to adolescence. There will be an emphasis on interactions between maturation processes and environmental factors. While studying developmental theory and investigative research methodologies, students will observe children, evaluate individual differences and analyze characteristics of development at various stages.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- **SLO #1:** Analyze major developmental milestones for children from conception through adolescence in the areas of physical, psychosocial, cognitive and language development using research based methodologies.
- **SLO #2:** Differentiate the developmental tasks in each of the ages and stages of development.
- **SLO #3:** Distinguish the characteristics of typical and atypical behavior of children.
- **SLO #4:** Examine major educational theories to each stage of development.
- **SLO #5:** Compare and contrast various factors that influence the growth and development of children.
- **SLO #6:** Evaluate the needs of children of all ages under varying conditions and how to provide for these needs.
- **SLO #7:** Identify the responsibilities of parenthood.
- **SLO #8:** Examine ways in which developmental domains are continuous, sequential and interrelated.
- **SLO #9:** Investigate and explain sources of developmental change and reasons for disturbances in the developmental process.
- **SLO #10:** Apply developmental theory to the analysis of child observation, surveys, and/or interviews using investigative research methodologies.
- **SLO #11:** Demonstrate objective techniques and skills when observing, interviewing, describing and evaluating behavior in children of all ages, cultures and backgrounds and her/his environment.
- **SLO #12:** Examine and explain how bias influences the research process.
- **SLO #13:** Differentiate characteristics of typical and atypical development at various stages.
- **SLO #14:** Identify and describe risk factors that impact families and child at each major developmental stage
- **SLO #15:** Examine and evaluate the importance of the early years and the effects of interaction between the individual and her/his environment.
- **SLO #16:** Review the importance of inclusive programs to support children with atypical development.
- **SLO #17:** Investigate and explain the process of bilingual development in children at various stages.
- **SLO #18:** Evaluate the role of the family in facilitating children’s development.
- **SLO #19:** Validate the role of play and its relationship to development at various stages.
- **SLO #20:** Analyze the importance of the early years and the interaction between maturational processes and social/environmental factors and the effects on various areas of development.
- **SLO #21:** Demonstrate knowledge of current research findings as they apply to child development.
Examine and evaluate the importance of the early years and the effects of interaction between the individual and her/his environment.

ECE 314 The Child, the Family and the Community

This course is a historical and current examination of the developing child in a societal context focusing on the interrelationship of family, school and community. The process of socialization and identity development will be highlighted, showing the importance of respectful, reciprocal relationships that support and empower families.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- **SLO#1** Analyze theories of socialization that address the interrelationship of child, family and community.
- **SLO#2** Demonstrate the principles of child development within the context of a system influenced by numerous factors of socialization.
- **SLO#3** Discuss theories about the role of the family, school and community in the process of socialization.
- **SLO#4** Compare and contrast diverse family structures, parenting styles, culture, traditions and values and their impact upon children and youth.
- **SLO#5** Evaluate how educational, political and socioeconomic factors directly impact the lives of children and families.
- **SLO#6** Examine the impact of change and transitions upon children and family dynamics.
- **SLO#7** Investigate the political system and child advocacy and its effects on children and families.
- **SLO#8** Examine the role of child care and schooling in the socialization of children.
- **SLO#9** Synthesize and analyze research regarding social issues, changes and transitions that affect families, schools and communities.
- **SLO#10** Describe the patterns and configurations of socialization factors that are needed to explain the variance in developmental paths and outcomes of children.
- **SLO#11** Apply socialization theory in early care and education environments.
- **SLO#12** Critique strategies that support families through respectful, reciprocal relationships to involve families in their children's development and learning.
- **SLO#13** Define and examine a variety of contemporary issues that influence family functioning and develop appropriate strategies to support families dealing with stress.
- **SLO#14** Interpret the impact of socioeconomic factors on children and families, including but not limited to the following areas: work, childcare and education, single parenting, health, poverty and children with special needs.
- **SLO#15** Investigate and explain the effects of age, gender, diverse abilities, language and culture, racial identity and ethnicity, socioeconomic status, institutions, the media, and public policy on children and families.
- **SLO#16** Assess community support services and agencies that are available to community and families.
- **SLO#17** Demonstrate the ability to identify and analyze risk factor/or problems and support families in finding appropriate community resources.
- **SLO#18** Demonstrate knowledge of legal requirements and ethical responsibilities of professionals working with all children and families.
- **SLO#19** Investigate advocacy strategies to influence public policy on behalf of children and families.
- **SLO#20** Identify stereotypes and assumptions that affect attitudes and actions within the family, the culture and the professional community.
- **SLO#21** Analyze one's own values, goals and sense of identity as it relates to family history and life experiences, assess how this impacts relationships with children and families.
Explore one’s own family history and examine how it affects our relationships with children and families.

Investigate personal biases that can affect their work with children and families.

**ECE 320 Curriculum and Interactions in Early Childhood Education**

**Units:** 4  
**Hours:** 36 hours LEC; 108 hours LAB  
**Prerequisites:** ECE 300 and 312 with grades of “C” or better  
**Corequisites:** ECE 326  
**Enrollment Limitation:** Under California law (Title 22) any persons working directly with children must provide proof of current Tuberculosis clearance and provide any required proof of immunizations (currently: measles, pertussis, and influenza/influenza waiver).  
**Transferable:** CSU  
**C-ID:** C-ID ECE 130  
**Catalog Date:** June 1, 2020

This course provides supervised experience working with children in an early childhood setting. Topics include principles of curriculum development, classroom design, and child guidance, with the opportunity to apply these key teaching principles in practical situations. This course is approved as the required programs and curriculum core course specified in Title 22 of the Health and Safety Code of the Department of Social Services, Community Care Licensing Division and Title 5 Department of Education regulations. Before beginning lab assignments, students must show proof of TB clearance and documentation of all required vaccinations. (C-ID ECE 130)

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- **SLO #1:** Apply developmentally appropriate principles and practices to support young children's optimal development and learning within healthy, safe, respectful, supportive, and challenging learning environments.

- Explain verbally and in writing the sequence of play as central to development and learning for young children.

- Define, explain and apply constructivist theory in curriculum planning for young children.

- Identify key ways in which the environment functions as an essential component of curriculum and as the “third teacher” in an early childhood classroom.

- **SLO #2:** Evaluate one's own teaching experiences to guide and inform practice.

- Identify the key roles of the teacher in the cycle of observation, documentation, child guidance, designing play-based learning environments and activities.

- Evaluate teacher behaviors for best practices reflecting current research and the impact it has on children's learning and development.

- **SLO #3:** Design, develop, and evaluate play-based learning environments for young children, routines that involve young children in applying emerging ideas and skills, and developmentally-appropriate and inclusive learning activities for young children.

- Organize environments rich in possibilities and provocations that invite the children to undertake extended exploration and problem solving.

- Design environments which support and enrich children's learning through in-depth, short-term and long-term project work.

- **SLO #4:** Plan, implement, and evaluate experiences that support young children in building a foundation for language and literacy, math and science, social sciences, and the arts.

- Apply understanding of children's learning and development to design and evaluate age appropriate foundational curriculum in areas such as: language and literacy, physical/motor mastery, creativity and the arts, mathematics, and science.

- Develop curriculum and environments that support children who are English language learners.

- Demonstrate in curriculum plans the progression from “simple to complex” and “concrete to abstract” and explain how these concepts are essential for all children's learning.

- **SLO #5:** Demonstrate communication and guidance strategies that support the development of young children's social competence.

- Recognize individual differences and diversity in child development and the implications for child behaviors and guidance.

- Validate how the social environment affects the development of children, and reflect about ways to strengthen children and families.
Infer and redirect children's intentions and provide positive ways to express their feelings and ideas.

Understand respectful and reciprocal relationships with families, including how to support families whose home language is other than English and/or whose children have special needs.

ECE 321 Advanced Practicum in Early Childhood Education

Units: 4
Hours: 36 hours LEC; 108 hours LAB
Prerequisite: ECE 300, 312, 320, and 326 with grades of "C" or better
Enrollment Limitation: Under California law (Title 22) any persons working directly with children must provide proof of current Tuberculosis clearance and provide any required proof of immunizations (currently: measles, pertussis, and influenza/influenza waiver).
Transferable: CSU
C-ID: C-ID ECE 210
Catalog Date: June 1, 2020

The advanced practicum course provides supervised experience for students as teachers in an early childhood education program and is aimed at building leadership in the areas of developing environments for learning, child observation and assessment, documentation of children's work, guiding behavior, group management, collaborative teaching, supporting relationships with families, and effective preparation and implementation of curriculum. In an early childhood setting and under the guidance of a mentor teacher, students will build on introductory experiences offered in Introduction to Curriculum. Students will be assigned to the campus child development centers or centers with approved mentor teachers for the supervised laboratory experience. Lecture and laboratory components provide opportunities to plan, provision, and supervise the overall learning setting. Course work is aimed at mastering classroom leadership in the areas of child observation, documentation of children's work, child assessment, guidance of behavior, group management, collaborative teaching and effective oversight of long-term study projects. Before beginning lab assignments, students must show proof of TB clearance and documentation of all required vaccinations.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO# 1: Appraise philosophies, principles, and practices of early childhood education that are formulated from research-based theories of how young children learn within a social and cultural context.
- Apply knowledge and understanding of development to create healthy, respectful, supportive, and stimulating learning environments for all children; apply understanding of the multiple influences on developmental learning.
- Apply the NAEYC code of ethical conduct into practices.
- SLO# 2: Design, arrange, observe, and evaluate classroom environments wherein children construct knowledge within a context of play.
- Analyze classroom space in terms of its effect on the behavior and interactions of children and teachers.
- Design aesthetic environments that respect the child and their learning.
- Integrate the vision of a child as a competent learner in the designing the classroom environment and interactions.
- SLO# 3: Evaluate communication systems within a classroom to involve families in the process of curriculum and program design.
- Assess personal experiences to inform and guide future teaching and collaborative practices.
- Apply principles of observation and documentation to communicate regularly with colleagues and children's families in order to plan curriculum that meets developmental needs, builds on current knowledge and research about culturally-respectful and inclusive environments.
- Analyze and utilize the documentation of children's work in progress as an important tool in the learning process for children, teachers, and parents.
- SLO# 4: Plan, implement, observe, and evaluate the overall and ongoing curriculum and learning encounters, verifying opportunities to apply emerging skills in the areas of language and literacy; math and science; the arts; physical development; and social sciences.
- Plan, present and evaluate a variety of developmentally, culturally and linguistically appropriate, play-based curricula and environments that integrate children's developing learning competencies and skills.
- Present concepts and hypotheses in multiple forms such as print, art, construction, drama, music, puppetry, and shadow play.
- Respond to the emerging interests and developmental inclinations of children.
• SLO# 5: Demonstrate the use of observation, documentation, and interpretation for curriculum planning, assessment of children's learning, and advocacy in regards to making visible children's learning.

• Integrate and display documentations of the children's work.

• Design activities offered over time that give children opportunities to construct cognitive connections and thereby build knowledge.

• Evaluate the importance of risk-taking to cognitive, physical and social development.

• Reflect on teaching experiences in order to guide and inform practice.

ECE 322 Promoting Children's Social Competence

This course focuses on early childhood guidance and discipline through examination of theories, research and practical application for teachers in early childhood classrooms and families. The course includes strategies for understanding and responding to children's behavior in ways that are congruent with the core values of early childhood education. Concepts of guidance relating to typical and atypical development, culture, and environment will be presented. Developmental stages of children's behavior, positive guidance strategies and teaching social-emotional skills are included.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• SLO 1: Integrate research based knowledge of child development theories and practices to support social-emotional development of young children.

• Research factors in at-risk environments that affect the healthy social development of young children.

• Identify elements of children's and adult's development, culture, dispositions or experiences.

• Evaluate issues that influence social and emotional interactions and behavior.

• SLO 2: Analyze children's social-emotional development as the foundation for all later learning.

• Review practices that emphasize positive emotional growth and support the early identification of emotional and behavioral difficulties.

• Explore practices that identify the underlying need behind each individual behavior.

• Analyze the connection between responsive relationships with adults and children as the basis for healthy emotional development and learning.

• Incorporate reflective practices as the organizational and responsive model to support the healthy social-emotional development of children.

• SLO 3: Acquire knowledge of the importance of verbal and non-verbal communication and the impact on social-emotional development.

• Describe the channels of verbal and non-verbal communication.

• Investigate the different ways in which children use both verbal and non-verbal communication.

• Evaluate the ways in which non-verbal and verbal behaviors communicate messages about relationships between adults and children.

• SLO 4: Recognize and model the ethical principles and educational values that are the foundation for early childhood education.

• Assess the difference between simple decision-making and ethical judgments.

• Compare and contrast how program goals, strategies and standards relate to ethical judgment.

• Outline the skills, knowledge and dispositions related to the ethical code of conduct, day-to-day decision making and children's behavior.

• Choose and practice elements of personal development that support early childhood educational professionals' ability to implement and model respectful relationships with co-workers, families, and children.

• SLO 5: Analyze the role of the teacher in the healthy emotional development of young children.
• Investigate a constructivist approach to foster moral classrooms that support the moral development of young children.
• Implementing strategies that foster social-moral atmosphere in the classroom that promote intellectual, moral, emotional and personality development
• Propose how to use time, space, ritual and routines, and the physical play-based environment that foster positive social interactions and preserves the identity of children
• Identify teaching and parenting practices that foster social-emotional skills and positive self-esteem
• SLO 6: Develop a plan to support children when they face stressful situations
• Construct an understanding of educational practices that support children's and adult's socio-emotional development, emotional regulation, social knowledge, moral development and social understanding.
• Apply knowledge of brain research theory when designing practices that support children social-emotional development
• Incorporate strategies for helping children cope more effectively when they are under stress
• Propose communication strategies with families who are facing stressful situations.
• Develop clear rationale for choosing guidance strategies based on best practices that support individual children
• SLO 7: Confirm the importance and nature of play in the social-emotional development of young children
• Analyze the relationship of play to other aspects of development
• Review the developmental trends in various types of play
• Evaluate how play contributes to each of the elements of social-emotional and moral development
• Appraise the role of the adult in facilitating play-based environments that promote moral development.

ECE 326 Making Learning Visible Through Observation and Documentation

Units: 3
Hours: 54 hours LEC
Prerequisite: ECE 312 with a grade of "C" or better
Transferable: CSU
C-ID: C-ID ECE 200
Catalog Date: June 1, 2020

This course applies critical and reflective thinking to observation and assessment of young children's development. It also prepares teachers of young children to use observation, documentation, and interpretation strategies to improve program quality in early childhood settings. Multiple forms of child assessment and early childhood program assessment are explored.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• SLO #1: Appraise the purpose, value, and use of formal and informal assessments, including ethical and legal concerns.
• Generate and analyze portfolios of observations of young children's growth and development, and use the information with children and families.
• Analyze documentation to design and assemble environments that support children's learning.
• Demonstrate and preserve children's ideas, thoughts, feelings, and reports to stimulate their memories of significant experiences, thereby further enhancing their learning related to the topics investigated.
• Incorporate knowledge of the legal and ethical responsibilities, including confidentiality related to assessment in early childhood education.
• Evaluate and identify logistical challenges, biases and preconceptions about assessing children.
• SLO #2: Assess the strengths and limitations of common assessment tools with respect to children's diverse cultures, home languages, and developmental capabilities.
• Utilize observation and documentation to assess children's interest, strengths and skills. Consider the effect of social context, child's state of health and well-being, primary language, ability and environment on assessment tools.
• Implement planning and evaluation that can be done by the team of adults who work with the children.
• Examine children's collaborative work on a daily basis and discuss with them their ideas and the possibilities of new options for the following days.

• Analyze and implement decisions made on the basis of what individual or groups of children have found interesting, stimulating, puzzling, or challenging.

• Develop the ability to support and optimize the children's thinking by providing them with tools and materials that encourages them to express their ideas.

• Implement, plan and evaluate what can be done by the team of adults who work with the children.

• SLO #3: Recommend changes to play environments, guidance strategies, curriculum activities, and care routines based on systematically recorded observational data that documents children's actions, ideas, and feelings.

• Utilize documentation and assessment tools (DRDP) to inform parents and policy makers of "best practices" in early childhood education.

• Design opportunities to support parents to reexamine their assumptions about their parenting roles and their views about the experience their children are living, and take a new and more inquisitive approach toward the whole school experience.

• Discover different opportunities for parental involvement: listening to children's intentions, helping them find the materials they need, making suggestions, helping children write their ideas, offering assistance in finding and reading books, and measuring or counting things in the context of the project.

• Research and apply observation tools (e.g., ECERS-R and ELLCO) and documentation to support play-based learning environments.

• Generate provocations in the environment to support children’s inquiry strategies.

• SLO #4: Implement assessment within play-based environments, curriculum, and care routines designed to support all children, regardless of developmental capabilities.

• Demonstrate how children learn when involved with materials that are concrete and relevant to them.

• SLO #5: Integrate observed documentation of children's ideas, feelings, and actions to engage children's families and others as active partners in developing early childhood curriculum and programs.

• Appraise teacher's role in the development of plans generated by children's ideas.

• Evaluate the documented steps taken by children during their investigations and representational work.

• Uncover the uniqueness of each child's construction of his or her experience, and the ways group efforts contribute to their learning.

• Analyze and adjust teaching strategies, and ideas for new strategies, while deepening teachers' awareness of each child's progress.

• Formulate informed decisions about appropriate ways to support each child's development and learning.

• SLO #6: Develop photo documents that help others see and value how young children learn within quality early childhood settings.

• Categorize and design documentation displays highlighting the children's work and learning process.

• Integrate the Reggio Emilia's philosophy, theory and practices when documenting children's learning.

• Arrange careful and attractive documentary displays, which convey to children that their efforts, intentions, and ideas are taken seriously.

• Analyze first-hand observations of children's work in a wide variety of media to provide evidence of their learning.

---

ECE 330 Infant and Toddler Development

**Units:** 3  
**Hours:** 54 hours LEC  
**Prerequisites:** None.  
**Transferable:** CSU  
**Catalog Date:** June 1, 2020

This course covers infant development from conception through three years of age. Students will apply current research to the preparation for conception, birth, and raising children in the first three years of life. Students will learn strategies for caring for infants at each developmental stage. This course is for parents or professionals working with infants in health fields, education, or social services.

**Student Learning Outcomes**
Upon completion of this course, the student will be able to:

- SLO #1: Analyze early growth and development from conception to thirty-six months.
- Assess current research regarding all developmental domains: physical, cognitive, social/emotional, and language.
- Differentiate the developmental tasks in each of the developmental domains.
- Examine the research regarding positive attention, approval, and attunement as the foundation of secure attachment.
- SLO #2: Differentiate the characteristics of typical and atypical development.
- Identify and describe the risk factors that can potentially impact families and affect infant growth.
- Examine access to early intervention and the types of observation tools that can assess potential developmental delays.
- SLO #3: Assess respectful care-giving strategies that respond to cultural diversity and support justice, equality and inclusion.
- Formulate guidance strategies to support the healthy self-identity of infants.
- Distinguish variations in temperament and their significance to parents and caregivers.

**ECE 331 Care and Education of Infants and Toddlers**

This course applies current research in infant development to the teaching and care of infants in group settings. Early childhood education principles and practices are emphasized in the application of care and education of infants from birth to three years of age. Students will learn strategies for designing, implementing, and evaluating group care programs for infants and toddlers.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- SLO #1: Demonstrate an understanding of essential policies and practices of quality infant and toddler programs.
- Support context for learning including environments, care, experiences, conversations, and interactions.
- SLO #2: Analyze strategies to promote healthy and respectful relationships in the care and education of infants and toddlers.
- Caregiving routines and guidance strategies.
- SLO #3: Evaluate infant and toddler curriculum and environments based on observation, documentation, and reflection.
- Understand how curriculum is used for planning, family engagement, and advocacy for children with atypical development.

**ECE 342 Constructive Math and Science in Early Childhood Education**

The course is an introduction to the constructivist approach to teaching pre-math and science in early childhood education. The content and teaching techniques support the perspective that children construct knowledge through a dynamic, interactive process that facilitates their development of working theories relating to math and science.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- SLO#1: Examine how young children learn mathematics and science concepts based on the knowledge of relevant research and child development.
describe the constructivist and inquiry-based approaches to teaching in early childhood education.

analyze key math and science concepts children are building in early childhood

critique the important concepts in children’s construction of knowledge in math and science while comparing inquiry based learning to product-driven repetition and drill practice.

SLO#2: Evaluate curriculum in math and science for young children using an constructivist/inquiry-based approach.

integrate knowledge of the constructivist/inquiry-based approach to design curriculum that is culturally respectful and inclusive as well as considerate of children's prior experiences gaining knowledge about the world.

design and implement curriculum in math and science using the constructivist/inquiry-based approach.

SLO#3: Assess effective approaches to teaching and math and science in early childhood education.

demonstrate teaching techniques that encourage and support children in actively developing understandings of the processes involved in mathematical and scientific knowledge.

compare effective, appropriate, and intentional teaching techniques for supporting, scaffolding, documenting, and assessing young children's mathematical and scientific learning.

SLO#4: Analyze important elements of the learning environment for young children to learn math and science concepts.

design math-rich and science-rich learning explorations to provide meaningful opportunities for children to apply and master inquiry-based skills and concepts.

ECE 343 Language and Literacy Development in Early Childhood

This course will prepare current or future early childhood educators and caregivers to understand and enhance the emergent literacy experiences of young children. The knowledge of developmentally appropriate literacy practices will improve the early childhood educators' abilities to prepare children from birth to age 5 for reading and writing in the primary grades.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO # 1: Describe developmental patterns in early literacy learning and research-based teaching practices that help children build a foundation for rich vocabularies and language fluency for reading and writing.
- Compare and contrast literacy, emergent literacy and early literacy.
- Evaluate ways of assessing children's language development and literacy learning.
- Review current research pertaining to the acquisition of language and pre-literacy skills in young children.
- Describe ways of involving families in their young children's emerging literacy skills.
- SLO # 2: Analyze the developmental continuum of reading and writing and use it in determining developmentally appropriate practices for literacy in early childhood.
- Design and define developmentally appropriate goals and expectations for young children's achievement in reading and in writing.
- Incorporate developmentally appropriate teaching practices that support children's language and literacy knowledge from birth through age five.
- Examine and assess the teacher's role in promoting language and literacy development in young children.
- Evaluate and demonstrate strategies of collaboration with children's families to implement projects that support children's literacy experiences both at school and at home.
- Distinguish quality print-rich environments in which children can work and play.
- Apply principles of development in designing and implementing activities and curricula that promote language and literacy development.
• Compare and contrast opportunities for children to use language and literacy for authentic purposes in school, home and the community.

• SLO # 3: Analyze strategies for adapting emergent literacy practices for individual and cultural differences, including second language learners.

• Assess and propose literature and other learning materials for diverse learners, as well as cultural and linguistic variations among children.

• Articulate the components of developmentally appropriate literacy events inclusive of children with special needs and diverse backgrounds.

• Design adaptations to the environment and experiences to support diverse learners.

• SLO# 4: Use authentic forms of assessment to identify progress in language and literacy skill.

• Examine different assessment methodologies to evaluate the development of pre-literacy and language skills.

• Critically reflect on best practices and current research in promoting language and literacy development in children.

• Evaluate and define program policies (program funding, staffing ratios, curricular resources and assessment) that support early childhood language and literacy teaching and learning.

ECE 350 Introduction to Elementary Teaching with Field Experience

Units: 3
Hours: 36 hours LEC; 54 hours LAB
Prerequisite: None.
Enrollment Limitation: Under California laws (Title 22 and Title 5) any persons working directly with children have to give proof of current Tuberculosis clearance.
Advisory: ECE 312
Transferable: CSU
General Education: AA/AS Area III(b)
C-ID: C-ID EDUC 200
Catalog Date: June 1, 2020

This course introduces students to the concepts and issues related to teaching diverse learners in today's contemporary schools, Kindergarten through grade 12 (K-12). Course content includes teaching as a profession and career, historical and philosophical foundations of the American education system, contemporary educational issues, California's content standards and frameworks, and teacher performance standards, as well as observation skills, communication skills, diversity and social issues. In addition to class time, the course requires a minimum of 45 scheduled hours of structured fieldwork in public elementary school classrooms that represent California's diverse student population, and includes cooperation with campus-approved certificated classroom teachers. Students' fieldwork experiences will integrate and apply the course content. Before beginning field placement, students must show proof of TB clearance.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• SLO#1: Examine the process of becoming an elementary school teacher.

• define the role and function of the teacher in the public school setting.

• identify academic requirements and experiences needed to obtain a teaching credential.

• evaluate the attitudes, actions and behaviors of the effective professional educator.

• SLO#2: Compare and contrast the various educational philosophies and theoretical frameworks related to human learning.

• apply theories related to child development and learning in a field placement setting.

• investigate a personal view of teaching as a career in terms of educational philosophy and pedagogy.

• SLO#3: Examine and assess issues concerning student diversity, societal change and the challenges they present.

• apply principles that underlie effective relationships with other teachers, students, and families.

• examine communication strategies for inclusive teaching practices and classroom management skills.

• SLO#4: Formulate objective, descriptive and interpretive observation skills.

• demonstrate basic observation methods to assess learning.
assess one's own teaching experience through observation and reflection.

- SLO#5: Apply knowledge of observation and learning theory through planning, teaching and interaction with elementary school students.
- design and implement basic lesson plans in content areas.
- prepare a service learning project.

ECE 356 Programs for the School-Age Child

| Units: | 3 |
| Hours: | 54 hours LEC |
| Prerequisite: | None. |
| Advisory: | ECE 312 with a grade of "C" or better |
| Transferable: | CSU |
| Catalog Date: | June 1, 2020 |

This program will present the fundamentals of planning, implementing and evaluating programs for before- and after-school care of school-age children (K-6). Course emphasis is on developmental levels, age-appropriate activities and day-to-day program operation. A field trip may be utilized to enhance classroom instruction.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO #1: Appraise the quality of school-age programs
- define the elements of a quality school-age program
- choose and use reliable assessment tools to assess and evaluate a variety of environments for school-age child care
- evaluate the implications of state regulations for program functioning
- analyze budgets and staffing patterns for use in before and after school child care
- SLO #2: Design activities for school-age programs
- plan, implement and evaluate age-appropriate activities for school-age programs
- develop schedules, routines, and activities for school-age child care, and employ non-bias attitudes to meet the needs of different ages, gender, and abilities
- SLO #3: Characterize school-age children as active learners
- apply an understanding of the characteristics of school-age children to conducting programs and activities
- analyze active learning techniques appropriate for school-age children
- identify the differences in programs for children of preschool-age from those of school-age

ECE 361 Introducing Young Children to Visual Arts

| Units: | 3 |
| Hours: | 54 hours LEC |
| Prerequisite: | None. |
| Catalog Date: | June 1, 2020 |

This course prepares teachers in early childhood education with strategies for introducing young children to the media and tools of drawing, painting, sculpting, and other visual arts commonly used by young children to represent and understand the world around them. The focus is on observing children's natural ways of exploring each medium and learning strategies to facilitate and document children's emerging skills and relationship with each medium. Included are strategies for designing early childhood environments that promote children's exploration of visual arts.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO #1 Define creativity and identify educational practices and procedures which encourage creativity in children
ECE 365 Creative Projects and Experiences for Young Children

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Transferable: CSU
Catalog Date: June 1, 2020

This course prepares teachers in early childhood education with strategies for promoting children's creativity through experiential projects and experiences. The focus will be on observing children's natural ways of exploring their environment and on the learning strategies needed to facilitate and document children's learning and emerging skills. Students will evaluate and design creative early childhood environments which promote a project approach and a Reggio Emilia perspective.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO # 1 Define and apply the Reggio Emilia approach to education.
- Create the conditions for learning that are necessary to enhance and facilitate children's construction of his or her own powers of thinking through the synthesis of all the expressive, communicative and cognitive languages.
- Evaluate early childhood classroom environments for their capacity to promote young children's comfort and competence in using expressive media to represent impressions, feelings, and experiences.

- Evaluate and observe the developmental progression of children's exploration and use of the tools and media of drawing, painting, sculpting, and construction and their connection to creativity with children.
- Explore the role of the educator as a designer of visual and performing arts curriculum and pedagogy.
- Create the conditions for learning that are necessary to enhance and facilitate children's construction of his or her own powers of thinking through ideas, interest, and hypothesis.
- SLO #2 Demonstrate the attributes, selection, and use of expressive media and tools commonly used with young children.
- Design encounters with expressive art media and tools that present challenges and problems appropriate to children's developmental interests and abilities for each phase of development from infancy through eight years of age.
- Validate representational work as a way of promoting children's growth and development.
- Integrate the graphic arts as tools for cognitive, linguistic, and social development.
- Promote presentation of concepts and hypotheses in multiple forms of representation -- print, art, construction, drama, music, puppetry, and shadow play -- as they are viewed as essential to children's understanding of an experience.
- SLO #3 Review the California Preschool Foundations in the Visual and Performing Arts, and the California Visual and Performing Art Frameworks (K-12)
- Plan, implement and evaluate art education for children in the lower elementary grades (K-3)
- Design creative explorations that support children noticing, responding to, and engaging in visual arts.
- Create interest areas within an early childhood classroom that provide developmentally appropriate media, tools, and settings for young children's independent exploration and use of a variety of expressive media.
- Plan, demonstrate and evaluate creative learning environment and experiences appropriate to children
- SLO #4 Evaluate classroom environments for their capacity to promote young children's comfort and competence in using expressive media to represent impressions, feelings, and experiences.
- Organize materials to help children make thoughtful decisions about the media.
- Support children to see the connections in learning and experiences.
- Design aesthetic environments that inspire children's understanding of the visual arts and promote art appreciation.
- SLO #5 Design documentation that supports reflective examination among teachers, families, and children of the aesthetic and cognitive dimensions of children's work.
- Summarize anecdotal observations of children's encounters with the tools and media of expressive art and make visible children's learning through developmental portfolios and displays.
- Design spaces to incorporate the documentation of children's work, plans, collections, and on-going projects.
Define creativity and identify educational practices and procedures which encourage creativity in children.

Plan, demonstrate, and evaluate creative learning environment and experiences appropriate to children with diverse cultural, physical, social, emotional and cognitive needs.

SLO # 2 Utilize documentation as an important tool in the Reggio Emilia approach.

Collect anecdotal observations of children's encounters with projects and make visible children's learning through developmental portfolios and displays.

Design documentation that supports reflective examination among teachers, families, and children of the aesthetic and cognitive dimensions creativity in children's work.

SLO # 3 Validate representational work as a way of promoting children's growth and development.

Understand Howard Gardner's theory of Multiple Intelligence.

Integrate the graphic arts as tools for cognitive, linguistic, and social development.

Promote presentation of concepts and hypotheses in multiple forms of representation -- print, art, construction, drama, music, puppetry, and shadow play -- as they are viewed as essential to children's understanding of an experience.

SLO # 4 Research the Project Approach, as, in-depth studies of concepts, ideas, and interests which arise within the group and which enhance children's learning.

Record and analyze children's conversations and and emergent interest an support further exploration of the topics.

Understand that team planning is an essential component of the emergent curriculum.

Value Collaborative group work, both large and small, as a way to advance cognitive development.

Formulate Hypothesis about the possible directions of a project, the materials needed, and possible parent and/or community support and involvement.

SLO # 5 Create aesthetic environments to promote learning.

Design spaces to incorporate the documentation of children's work, plants, collections and on-going projects.

Organize space for small and large group projects and small intimate spaces for one, two or three children.

Organize the classroom and materials to be aesthetically pleasing.

SLO # 6 Explore the role of the teacher as researcher and learner.

Co-explore the learning experience with the children.

Define the teacher's role as they help children make decisions about the direction of study, the ways in which the group will research the topic, the representational medium that will demonstrate and showcase the topic and the selection of materials needed to represent the work.

Provoke ideas, problem solving, and conflict management.

Support children to see the connections in learning and experiences.

Support children express their knowledge through representational work.

Foster the connection between home, school and community.

Organize materials to help children make thoughtful decisions about the media Support children to see the connections in learning and experiences.

---

**ECE 402 Infants with Atypical Development**

**Units:** 3

**Hours:** 54 hours LEC

**Prerequisite:** ECE 312 with a grade of "C" or better

**Transferable:** CSU

**Catalog Date:** June 1, 2020

This course will examine the developmental characteristics, assessment techniques, methods of intervention, natural environments, community and family resources, and current issues of the atypical infant from birth through age three. Students will understand and practice the early intervention techniques the very young children with special needs and disabilities require in the developmental areas of sensory stimulation and integration, gross and fine motor control, cognitive, language, social and self-help skills. The course will explore the community services and agencies that offer family support as well as the laws related to the atypical infant/toddler. Career and vocational opportunities in the fields related to special needs infant/toddlers and the various roles of the multi-disciplinary teams that develop the Individualized Family Service Plan (IFSP) will be examined.
Student Learning Outcomes

Upon completion of this course, the student will be able to:

- **SLO #1:** Access and apply current research knowledge related to how infants develop.
- **SLO #2:** Identify conditions which cause birth defects and other developmental disabilities.
- **SLO #3:** Compare and contrast the unique strengths and needs of infants/toddlers with both atypical and typical development in all of the developmental domains: physical, cognitive, social-emotional, and communication skills.
- **SLO #4:** Evaluate the various techniques and instruments used to assess the physical, cognitive, social-emotional, and communication abilities of infant/toddlers with atypical development.
- **SLO #5:** Assess and practice the multi-disciplinary team process utilized in the development of an IFSP (Individualized Family Service Plan), (birth - 3 years).
- **SLO #6:** Articulate the legislation and due process rights that applies to children from birth to three years old with special needs and to their families.
- **SLO #7:** Differentiate and recommend effective public and private program options and community resources available to support infant/toddlers with atypical development and their families.
- **SLO #8:** Formulate an understanding, respect and sensitivity of the diversity in human characteristics that a child with special needs brings to different families.
- **SLO #9:** Support the development of families' self-advocacy and empowerment
- **SLO #10:** Analyze learning environments that allow infants with atypical development to discover and create through active exploration.
- **SLO #11:** Plan and implement activities that are supportive of natural environments, behavior management techniques and instructional strategies to meet the goals and objectives of the IFSP in an inclusive early childhood setting.
- **SLO #12:** Identify career and vocational opportunities in early intervention programs.
- **SLO #13:** Review the education and competency skills required of those who work with infants and toddlers with atypical development.

---

**ECE 404 Children with Special Needs**

**Units:** 3  
**Hours:** 54 hours LEC  
**Prerequisite:** ECE 312 with a grade of "C" or better  
**Transferable:** CSU  
**Catalog Date:** June 1, 2020

This course is designed to provide a broad overview of the characteristics, assessment techniques, methods of intervention, natural environments, community and family resources, and current issues of children from birth to adolescence with diverse abilities and disabilities. The focus is to increase the awareness and understanding of individual needs and strengths in an early childhood and after-school setting. Focus on full inclusion as a support to development will be emphasized. Observations in public and private children's centers, schools and agencies are required.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- **SLO#1:** Appraise the self-identity of children with diverse abilities.
- **SLO#2:** Identify and develop respect for and sensitivity to the diversity in human characteristics and impact of a child with special needs on different families
- **SLO#3:** Generate ideas to create a full inclusion play based environment where the self-identity and learning of children is supported.
- **SLO#4:** Explore strategies to increase the interaction between children with diverse abilities and children who are typically developing.
- **SLO# 2:** Appraise the development of children who are differently-able on all the domains; physical, cognitive, social-emotional, and communication development.
- **SLO# 5:** List and categorize areas of special needs such as speech, hearing, reflexes, reactions, cognition, socio-emotional abilities and physical handicapping conditions.
- **SLO# 6:** Compare and contrast the developmental milestones of children with atypical and typical development.
Apply the accommodations, adaptations, and modifications made to assist the development of children with diverse abilities.

Research, discuss, and debate the practice of inclusion.

SLO# 3: Evaluate the various techniques and instruments used to assess the physical, cognitive, social-emotional, and communication abilities of young children with special needs.

Evaluate an Individualized Educational Plan (IEP) and an Individualized Family Service Plan (IFSP) and the legal and operational requirements.

Apply techniques of observation and documentation to assess developmental progress.

Analyze the multi-disciplinary team process utilized in the development of an Individualized Family Service Plan (IFSP), birth - 3 years and Individualized Education Plan (IEP), 3 - 21 years.

SLO# 4: Evaluate the impact of a child with diverse abilities has on the family.

Describe the grief process families frequently experience with the birth of a child with special needs.

Identify community resources available to support families and caregivers of children who are differently-abled.

Develop support strategies for siblings of children with diverse abilities.

SLO# 5: Evaluate the importance of designing inclusive play based learning environments.

Apply techniques of observation and documentation to assist with the planning for children's activities.

Analyze the role of the teacher in full inclusion environments.

Investigate adaptive strategies, curriculum, tools and equipment.

Explain the code of ethics and rules for confidentiality when working with children with special needs and their families.

Explain the importance of working collaboratively as part of a multi-disciplinary team.

SLO# 6: Synthesize and discuss the history and current trends within the professional literature relevant to the identification and treatment of "special needs" in children with implications in educational practices.

Describe and discuss various definitions of "special needs" in children relative to educational laws, policies, and programs.

Describe and discuss the practical implications of various factors that place children "at risk" for dysfunction as well as those factors connected with "resilience."

Describe and discuss some of the legal, moral, ethical and value-based dimensions of various assessment and intervention strategies involving labeling and treating "special needs" in children.

Describe and discuss various points of view about defining children's special needs within the context of traumatized, vulnerable and oppressed populations, including children with limited legal recourse; persons of various disabilities and health conditions; racial, cultural, socio-economic, language dominance, and sexual preference differences.

ECE 415 Children's Health, Safety and Nutrition

| Units: | 3 |
| Hours: | 54 hours LEC |
| Prerequisite: | None. |
| Transferable: | CSU |
| General Education: | AA/AS Area III(b) |
| C-ID: | C-ID ECE 220 |
| Catalog Date: | June 1, 2020 |

The key components that ensure the health, safety, and nutrition of both children and staff will be identified along with the importance of collaboration with families and health professionals. Students will be introduced to early childhood curriculum, regulations, standards, policies and procedures related to child health, safety and nutrition. Course emphasis is placed on integrating and maintaining the optimal health, safety, and nutritional concepts in everyday planning and program development for all children, including injury prevention, accident reporting, infectious diseases control, sanitation and emergency procedures and evacuation.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO# 1: Assess strategies to maximize the mental and physical health of children and adults in programs for all young children in accordance with culturally, linguistically and developmentally sound practices.
- Demonstrate effective strategies for evaluating health and safety policies and procedures.
- Compare and contrast various health assessment tools and policies.
- Assess strategies to maximize the mental, physical and emotional health in programs for all children in accordance with culturally, linguistically and developmentally sound practice.
- Design and develop developmentally appropriate, culturally and linguistically sound health and safety curriculum to be introduced to children and their families.
- SLO #2: Identify health, safety and environmental risks in children's programs.
- Differentiate symptoms of common communicable diseases and other health conditions that affect children.
- Apply sanitation universal practices in order to prevent the spread of communicable diseases.
- Assess strategies to maximize the mental, physical and emotional health in programs for all children in accordance with culturally, linguistically and developmentally sound practice.
- SLO #3: Analyze the nutritional needs of children at various ages and evaluate the relationship between healthy development and nutrition.
- Differentiate the nutritional needs of various ages of children and plan economical and nutritional meals and snacks which meet current state and federal guidelines.
- Examine nutrition and health practices and different perspectives in culturally-diverse environments.
- Evaluate current nutrition and health hazards in the food supply and explain the control of foodborne illness.
- SLO #4: Recommend regulations, standards policies and procedures related to health, safety and nutrition in support of young children, families and teachers in the program.
- Investigate laws, regulations, standards, policies and procedures supporting health, safety and nutrition in children's programs and families. (e.g. Title 22, Title 5, Fire Code)
- Create emergency response procedures utilizing the provisions required by federal and state laws.
- Demonstrate skill in maintaining standards of health and safety which protect the child from injury.
- Describe the inter-relationships of health, safety and nutrition as conditions affecting children's health.
- SLO #5: Infer aspects of quality in programs for young children as related to health, safety and nutrition.
- Research current issues related to children and their families.
- Evaluate the teacher's role and responsibilities to model, health safety and nutrition appropriate for children and families.
- Formulate various methods of collaboration with teachers and families to promote health, safety and nutrition in settings for children.
- Identify characteristics of abuse and neglect and demonstrate knowledge of mandated child abuse reporting procedures.

**ECE 420 Administration I: Programs in Early Childhood Education**

**Units:** 3

**Hours:** 54 hours LEC

**Prerequisite:** ECE 300 and 312 with grades of "C" or better

**Advisory:** ECE 320 with a grade of "C" or better

**Transferable:** CSU

**Catalog Date:** June 1, 2020

This is an introductory course in the elements of program planning, budgeting, supervision and personnel administration for public and private centers and schools serving young children.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- SLO #1: Recognize, identify, and appraise the components and measures of quality early care and education programs.
- reference and assess the legal requirements of child care centers according to the California Regulations for Title 22 and Title 5 Programs.
- examine and plan schedules, routines, and enrollment procedures to meet the needs of children and families.
• Review federal and state quality improvement mandates.

• SLO #2: Distinguish basic operational principles of administration in developing and planning a center facility.

• apply basic operational principles of administration in program planning, budgeting, equipping and staffing to meet the nutritional, health, and safety standards for children and families.

• identify required components of record keeping for enrollment and personnel documentation.

• describe the legal requirements and responsibilities of administering an early care and education program.

• summarize essential practices for collaboration with staff, families, and community.

• SLO #3 demonstrate effective practices for managing and leading staff and administering early care and education programs.

• implement ongoing professional development plans based on evaluation of staff and administrator needs.

• formulate strategies for compensation and professional growth opportunities in programs.

• SLO #4 Evaluate strategies to create a diverse and inclusive environment.

• articulate the importance of professional integrity and confidentiality.

• Implement the NAEYC code of ethical conduct to create culturally responsive early care and education environments.

ECE 422 Administration II: Personnel and Leadership in Early Childhood Education

| Units: | 3 |
| Hours: | 54 hours LEC |
| Prerequisite: | ECE 300 and 312 with grades of "C" or better |
| Advisory: | ECE 320 with a grade of "C" or better |
| Transferable: | CSU |
| Catalog Date: | June 1, 2020 |

This is an advanced course in administration and coordination of multi-faceted Child Development Programs. The emphasis of the course will be on publicly funded programs and personnel management. This course meets the requirements of the Education Code under Title 5, and the Commission on Teacher Credentialing.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• SLO #1: Recognize, identify, and appraise the components and measures of quality child care programs.

• examine and apply the legal regulations and requirements of publicly funded child care programs under Title 5 of the Education Code.

• analyze and synthesize management issues in relation to budgets, working with boards and supervising agencies, grant proposal writing and developing business plans.

• SLO #2: Develop and demonstrate communication and collaboration skills with colleagues, children, families, and communities of diverse backgrounds.

• describe and analyze current leadership issues in child development program administration.

• SLO #3: Create policies and practices that recognize the importance of the family in the education of young children.

• appraise and evaluate the role of administrator and the interaction with staff, families, volunteers and community.

• identify potential issues and establish procedures involving the interrelationships of families, staff, agencies, and administration.

ECE 424 Adult Supervision: Mentoring in a Collaborative Learning Setting

| Units: | 2 |
| Hours: | 36 hours LEC |
| Prerequisite: | ECE 320 with a grade of "C" or better |
| Transferable: | CSU |
| Catalog Date: | June 1, 2020 |
This course is a study of the methods and principles of collaborative learning, with emphasis on supervising adults working in early care and education centers. Special attention is placed on the role of a mentor as a reflective practitioner who is open to professional development and who has a keen understanding of classroom practice that is effective and supports individual strengths for children, families and colleagues. This course satisfies the adult supervision requirement for receiving a supervising teacher permit from the California Commission on Teacher Credentialing.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO# 1: Analyze the role and responsibilities of a mentor in an early childhood setting.
- Differentiate between the roles of adult supervision and mentoring.
- Investigate the importance of utilizing multiple learning styles when mentoring others.
- Analyze the developmental stages and learning strategies of teachers and supervisors.
- Develop reflective strategies to enhance their own practices and communication with mentees.
- SLO# 2: Recommend respectful interactions among all learners: children, staff and parents.
- Provide appropriate models, guidance and evaluation for a teaching team, children and families.
- Articulate and apply ethical principles to resolve complex issues.
- Demonstrate for the members of a teaching team how to develop and maintain a safe and developmentally appropriate learning environment for young children.
- Use evidence-based practice to plan and implement collaborative relationships amongst children, families and staff.
- Utilize effective communication strategies to motivate staff, families and children.
- SLO# 3 Analyze the role of a mentor in leadership and advocacy in the field of early childhood education.
- Develop and apply advocacy strategies that facilitate positive outcomes.
- Demonstrate knowledge of the legislative process and laws impacting the early care and education field.
- Exhibit a commitment to professional development and leadership skills.

ECE 430 Culture and Diversity in Early Childhood Education

<table>
<thead>
<tr>
<th>Units: 3</th>
<th>Hours: 54 hours LEC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prerequisite: None.</td>
<td>Transferable: CSU</td>
</tr>
<tr>
<td>General Education: AA/AS Area III(b); AA/AS Area VI</td>
<td>C-ID: C-ID ECE 230</td>
</tr>
<tr>
<td>Catalog Date: June 1, 2020</td>
<td></td>
</tr>
</tbody>
</table>

This course covers culturally responsive care and education in early childhood settings. It includes the study of socio-cultural, and political issues as they vary across the diverse cultures represented in the classroom and how they impact a child's development. Included are strategies for helping children negotiate and resolve conflicts caused by cultural differences, with a focus on using an anti-bias approach in the classroom. The contribution of historically underrepresented groups to society will be addressed with the intention of promoting the concepts of equality, justice and inclusion for all aspects of human diversity (culture, race, ethnicity, gender, sexual orientation, ability, and age). Teaching strategies which prevent and eliminate the development of prejudice and racism in growing children will be covered.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO # 1: Compare and contrast theories and identify ways in which cultural and family patterns affect children’s behavior and identity.
- Distinguish stereotypic and biased classroom materials and environments.
- Describe various techniques teachers can use when responding to children developing discriminatory behaviors.
- Define and assess the impacts of factors such as language, ethnicity, religion, immigration, and economic class in the personal history of the student and the subsequent impact on teaching young children and families.
SLO # 2: Analyze various aspects of children's experience as members of families targeted by social bias considering the significant role of education in reinforcing or contradicting such experiences.

Assess his/her own cultural background and upbringing and identify how this experience impacts personal perceptions of others.

Defend the anti-bias perspective in their everyday interactions with children and families.

Analyze their own biases and how to avoid transmitting them to children.

SLO # 3: Compose rationale and goals for a multicultural, anti-bias early childhood program.

Distinguish stereotypical and biased classroom materials and environments.

Apply a variety of strategies for creating partnerships with parents through building mutual, collaborative relationships, and to challenge bias and injustice in the lives of their children.

Create environments that promote justice, equality and inclusion.

Create opportunities for children to become advocates and active participants in their communities.

SLO# 4: Evaluate the Anti-Bias theoretical framework and how it affects children's growth and development.

Assess how children develop an awareness of differences and how prejudice is formed in the early years.

Identify ways in which cultural and family patterns affect children's behavior and learning.

Evaluate inclusive classroom environments, materials and approaches that are developmentally, culturally and linguistically appropriate to specific groups of children.

SLO# 5: Distinguish stereotypical and biased classroom materials and environments.

Build environments that illustrate an Anti-Bias perspective through celebrating diversity; age, culture, gender, ability, sexual orientation, religion, race and ethnicity.

SLO# 6: Examine how children develop an awareness of differences and how prejudice may be formed during the early years.

Assess how children develop an awareness of differences and how prejudice is formed in the early years.

Integrate the nature and processes of systemic and internalized privilege and oppression and their impacts on children's identity development and learning.

Identify and assess the overt and covert ways in which stereotypes and prejudice are learned.

Explore the unique and overlapping issues in racism, sexism, classism, heterosexism, ableism, and ethnocentrism as they relate to children and to early childhood settings.

Explore and define issues of cultural identity including factors such as language, ethnicity, religion, immigration, and economic class - in relationship to children, families, and early childhood settings.

Demonstrate strategies for helping children negotiate and resolve conflicts caused by cultural, class and gender differences, with a focus on using anti-bias approaches in the classroom.

Construct multicultural curriculum which promotes understanding of diversity and elimination of stereotypical themes.

**ECE 494 Topics in Early Childhood Education**

<table>
<thead>
<tr>
<th>Units:</th>
<th>0.5 - 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hours:</td>
<td>9 hours LEC</td>
</tr>
<tr>
<td>Prerequisite:</td>
<td>None.</td>
</tr>
<tr>
<td>Enrollment Limitation:</td>
<td>Students must verify paid registration to the conference.</td>
</tr>
<tr>
<td>Transferable:</td>
<td>CSU</td>
</tr>
<tr>
<td>Catalog Date:</td>
<td>June 1, 2020</td>
</tr>
</tbody>
</table>

Designed to give students an opportunity to study topics in Early Childhood Education which are not included in current course offerings. Topics may include, but are not limited to: Management of Family Day Care Homes; Guidance of the Special Child in Everyday Living; Behavior and Discipline; Children in Crisis; The Single Parent Family; and Cross-Cultural Experiences with Children and Families.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- SLO #1: Assess childhood as a unique and valuable stage of the human life cycle
- compile information to base work with children on knowledge of child development
- evaluate the support for the close ties between the child and the family
- recognize that children are best understood in the context of family, culture and society
- defend the dignity, worth and uniqueness of each individual (child, family member and colleague)
- apply information to help children and adults achieve their full potential in the context of relationships that are based on trust, respect and positive regard
- implement new creative strategies and resources into their teaching in early childhood programs

ECE 495 Independent Studies in Early Childhood Education

<table>
<thead>
<tr>
<th>Units:</th>
<th>1 - 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hours:</td>
<td>54 - 162 hours LAB</td>
</tr>
<tr>
<td>Prerequisite:</td>
<td>None.</td>
</tr>
<tr>
<td>Transferable</td>
<td>CSU</td>
</tr>
<tr>
<td>Catalog Date</td>
<td>June 1, 2020</td>
</tr>
</tbody>
</table>

An independent studies project involves an individual student or small group of students in study, research, or activities beyond the scope of regularly offered courses. See the current catalog section of “Special Studies” for full details of Independent Studies.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO #1: Actively engage in intellectual inquiry beyond that required in order to pass a course of study (College Wide Learning Outcome – Area 4).
- Discuss and outline a proposal of study (that can be accomplished within one semester term) with a supervising instructor qualified within the discipline.
- Design an independent study (to be completed individually or by collaboration of a small group) to foster special knowledge, skills, and experience that are not available in any one regularly scheduled course.
- Use information resources to gather discipline-specific information.
- SLO #2: Utilize modes of analysis and critical thinking to apply theoretical perspectives and/or concepts in the major discipline of study to significant problems and/or educational activities (College Wide Learning Outcome – Area 3).
- Analyze and apply the knowledge, skills and experience that are involved in the independent study to theoretical perspectives and/or concepts in the major discipline of study.
- Explain the importance of the major discipline of study in the broader picture of society.
- SLO #3: Communicate a complex understanding of content matter of the major discipline of study (College Wide Outcome – Area 3).
- Demonstrate competence in the skills essential to mastery of the major discipline of study that are necessary to accomplish the independent study.
- SLO #4: Identify personal goals and pursue these goals effectively (College Wide Outcome – Area 4).
- Utilize skills from the “academic tool kit” including time management, study skills, etc., to accomplish the independent study within one semester term.

ECE 498 Work Experience in Early Childhood Education

<table>
<thead>
<tr>
<th>Units:</th>
<th>1 - 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hours:</td>
<td>60 - 300 hours LAB</td>
</tr>
<tr>
<td>Prerequisite:</td>
<td>None.</td>
</tr>
<tr>
<td>Enrollment Limitation:</td>
<td>Students must be in a paid or unpaid internship, volunteer position or job related to career goals in Early Childhood Education.</td>
</tr>
<tr>
<td>Transferable</td>
<td>CSU</td>
</tr>
<tr>
<td>General Education</td>
<td>AA/AS Area III(b)</td>
</tr>
<tr>
<td>Catalog Date</td>
<td>June 1, 2020</td>
</tr>
</tbody>
</table>
This course provides students with opportunities to develop marketable skills in preparation for employment in their major field of study or advancement within their career. It is designed for students interested in work experience and/or internships in transfer level degree occupational programs. Course content includes understanding the application of education to the workforce; completion of required forms which document the student’s progress and hours spent at the work site; and developing workplace skills and competencies. Appropriate level learning objectives are established by the student and the employer. During the semester, the student is required to participate in a weekly orientation and 75 hours of related paid work experience, or 60 hours of unpaid work experience for one unit. An additional 75 or 60 hours of related work experience is required for each additional unit. Work Experience may be taken for a total of 16 units when there are new or expanded learning objectives. Only one Work Experience course may be taken per semester.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- **DEMONSTRATE AN UNDERSTANDING AND APPLICATION OF PROFESSIONAL WORKPLACE BEHAVIOR IN A FIELD OF STUDY RELATED TO ONE’S CAREER**.(SLO 1)
  - Understand the effects time, stress, and organizational management have on performance.
  - Demonstrate an understanding of consistently practicing ethics and confidentiality in a workplace.
  - Examine the career/life planning process and relate its relevancy to the student.
  - Demonstrate an understanding of basic communication tools and their appropriate use.
  - Demonstrate an understanding of workplace etiquette.
- **DESCRIBE THE CAREER/LIFE PLANNING PROCESS AND RELATE ITS RELEVANCY TO ONE’S CAREER**.(SLO 2)
  - Link personal goals to long term achievement.
  - Display an understanding of creating a professional first impression.
  - Understand how networking is a powerful job search tool.
  - Understand necessary elements of a résumé.
  - Understand the importance of interview preparation.
  - Identify how continual learning increases career success.
- **DEMONSTRATE APPLICATION OF INDUSTRY KNOWLEDGE AND THEORETICAL CONCEPTS AS WRITTEN IN LEARNING OBJECTIVES IN PARTNERSHIP WITH THE EMPLOYER WORK SITE SUPERVISOR**.(SLO 3)
Economics | Cosumnes River College

Economic studies analyze how people and societies produce various commodities and distribute them for consumption, now or in the future. CRC’s economics offerings include the study of the American economic system, using techniques for the analysis of contemporary economic problems. There is an emphasis on developing the ability to exercise sound judgment in evaluating public policy issues.

Dean

 (916) 691-7427

PowellJ@crc.losrios.edu

Associate Degree for Transfer

A.A.-T. in Economics

The Associate in Arts degree in Economics for Transfer provides students with a major that fulfills the general requirements of the California State University for transfer. Students with this degree will receive priority admission with junior status to the California State University system. The Associate in Arts degree in Economics for Transfer (AA-T) may be obtained by the completion of 60 transferable, semester units with a minimum 2.0 GPA, including (a) the major or area of emphasis described in the Required Program outlined below (earning a C or better in these courses) and (b) either the Inter-segmental General Education Transfer Curriculum (IGETC) or the California State University General Education Breadth Requirements.

Catalog Date: June 1, 2020

Degree Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Core:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ECON 302</td>
<td>Principles of Macroeconomics</td>
<td>3</td>
</tr>
<tr>
<td>ECON 304</td>
<td>Principles of Microeconomics</td>
<td>3</td>
</tr>
<tr>
<td>ECON 310</td>
<td>Statistics for Business and Economics (3)</td>
<td>3 - 4</td>
</tr>
<tr>
<td>or PSYC 330</td>
<td>Introductory Statistics for the Behavioral Sciences (3)</td>
<td></td>
</tr>
<tr>
<td>or STAT 300</td>
<td>Introduction to Probability and Statistics (4)</td>
<td></td>
</tr>
<tr>
<td>MATH 341</td>
<td>Calculus for Business and Economics (4)</td>
<td>4 - 5</td>
</tr>
<tr>
<td>or MATH 400</td>
<td>Calculus I (5)</td>
<td></td>
</tr>
</tbody>
</table>

**List A Select one course from the following (3-5 units):**

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT 301</td>
<td>Financial Accounting (4)</td>
<td>3 - 5</td>
</tr>
<tr>
<td>or ACCT 311</td>
<td>Managerial Accounting (4)</td>
<td></td>
</tr>
<tr>
<td>or MATH 401</td>
<td>Calculus II (5)</td>
<td></td>
</tr>
<tr>
<td>or CISC 310</td>
<td>Introduction to Computer Information Science (3)</td>
<td></td>
</tr>
</tbody>
</table>

**List B Select one course from the following (3 units):**

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECON 306</td>
<td>Environmental Economics (3)</td>
<td>3</td>
</tr>
</tbody>
</table>

1. These courses are selected from the list following the core requirements.
**Student Learning Outcomes**

Upon completion of this program, the student will be able to:

- **PSLO 1**: Describe and apply basic economic principles and concepts to economic issues. This includes the ability to: • Analyze graphical and numerical representations of resource allocation in the presence of scarcity. • Analyze graphical and numerical representations of a microeconomic and macroeconomic equilibrium using the tools of supply and demand and aggregate supply and aggregate demand analysis.

- **PSLO 2**: Demonstrate the use of numerical methods to quantify common terms used in economics. This includes an ability to: • Calculate GDP and economic growth rates. • Calculate unemployment rates. • Calculate inflation rates using a price index. • Calculate profits, total cost, variable cost, and fixed cost.

- **PSLO 3**: Demonstrate the ability to think critically and analyze solutions to major economic questions. This includes an ability to: • Analyze the strengths and weaknesses of major macroeconomic policy tools including fiscal and monetary policy. Evaluation of Monetary and Fiscal Policy will focus on the impact on unemployment, GDP, and inflation. • Comparing perfectly competitive markets and imperfectly competitive markets and their effect on profits, prices, and quantities produced. •

- **PSLO 4**: Discuss the global nature of economic issues. This includes an ability to: • Describe the common features of international trade as it is related to GDP. • Analyze different international trade theories and their implications for specialization.

**Economics (ECON)**

**ECON 100 Introduction to Economics**

| Units: | 3 |
| Hours: | 54 hours LEC |
| Prerequisites: | None. |
| General Education: | AA/AS Area V(b) |
| Catalog Date: | June 1, 2020 |

This course introduces the purpose, terminology, and basic concepts of economic theory. It examines the fundamental economic problem of scarcity and describes how our society is organized to deal with scarcity. It considers some of the problems (unemployment, inflation, national debt, poverty, crime, pollution, etc.) that economic theory may help explain.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- **SLO 1**: Understand basic terminology used in Economics. This includes:


- **SLO 2**: Understand basic Economic Models and how they are used to analyze the allocation of scarce resources. This includes:

- investigating the allocation of scarce resources using several Economic models. Examples include the Production Possibilities Curve, the market mechanism using Supply and Demand, Aggregate Demand and Aggregate Supply, Perfectly Competitive Markets and Imperfect Competition.

- **SLO 3**: Demonstrate a basic understanding of a global economy. This includes:

- defining common terms and models used in economics to discuss a global economy. Examples: Net Exports, Specialization, NAFTA, International Trade, Exchange Rates, Comparative Advantage, Absolute Advantage, Tariffs, and Quotas.
ECON 300 Survey of Economics

This course introduces the purpose, terminology, and basic concepts of economic theory. It examines the fundamental economic problem of scarcity and describes how our society is organized to deal with scarcity. It considers some of the problems our economy faces (unemployment, pollution, taxes, inflation, national debt, poverty, crime, international trade, etc.) and how economic theory can be used to investigate these pressing issues.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO 1: Demonstrate an understanding of basic terminology used in Economics.
- identifying common terms and definitions used in economics (Ceteris Paribus, Opportunity Cost, Scarcity, Recession, Law of Supply, Law of Demand, Marginal Cost, GDP, Inflation, and the Federal Reserve...).
- SLO 2: Identify basic Economic Models and how they are used to analyze the allocation of scarce resources.
- investigating the allocation of scarce resources using several Economic models. Examples include the Production Possibilities Curve, the Market Mechanism using Supply and Demand, Aggregate Demand and Aggregate Supply, Perfectly Competitive Markets and Imperfect Competition.
- SLO 3: Demonstrate a basic understanding of a global economy.
- defining common terms and models used in economics to discuss a global economy. Examples: Net Exports, Specialization, NAFTA, International Trade, Exchange Rates, Comparative Advantage, Absolute Advantage, Tariffs, and Quotas.

ECON 302 Principles of Macroeconomics

This course is a graphical and functional analysis of the economy as a whole. It focuses on the economy's well-being, problems, and possible solutions. Major topics include: basic economic analysis, demand, supply, and equilibrium in a market; macroeconomic sectors, goals, and problems (unemployment, inflation, business cycle, and government budget deficit); the economy's output, income, and price level; aggregate demand, aggregate supply, and equilibrium; and macroeconomic policies (fiscal and monetary). Time permitting, related topics such as international trade, international finance, and economic growth may also be discussed. Course work includes doing arithmetic problems, solving algebraic equations, and graphing straight and curvilinear lines.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO 1: Describe and apply basic economic principles and concepts to macroeconomic issues. This includes the ability to:
  - Analyze graphical and numerical representations of resource allocation in the presence of scarcity.
  - Analyze graphical and numerical representations of a macroeconomic equilibrium using the tools of aggregate supply and aggregate demand analysis.
- SLO 2: Demonstrate the use of numerical methods to quantify common terms used in macroeconomics. This includes an ability to:
  - Calculate GDP and economic growth rates.
  - Calculate unemployment rates.
**ECON 304 Principles of Microeconomics**

**Units:** 3  
**Hours:** 54 hours LEC  
**Prerequisite:** MATH 100; or MATH 102; or one year of High School Elementary Algebra with a grade of C or better; or equivalent skills as determined through the assessment process.  
**Advisory:** MATH 120 or MATH 125 with a grade of "C" or better; or one full year of High School Algebra II with grades of "C" or better in each semester; or equivalent skills demonstrated through the assessment process.  
**Transferable:** CSU; UC  
**General Education:** AA/AS Area V(b); CSU Area D2; IGETC Area 4B  
**C-ID:** C-ID ECON 201  
**Catalog Date:** June 1, 2020

This course is a graphical and functional analysis of the units (sectors) making up the economy. The focus is on the sectors' choices and interactions, microeconomic goals (efficiency and equity), problems, and solutions. Major topics include basic principles of economics; basic economic analyses; demand, supply, and equilibrium in a market; markets and applications; costs and production; product and resources markets; and microeconomic problems (externalities, public goods, and income inequality). Time permitting, related topics such as international trade and health economics may also be discussed. Course work includes doing arithmetic problems, solving algebraic equations, and graphing straight and curvilinear lines.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- SLO 1: Describe and apply basic economic principles and concepts to microeconomic issues. This includes the ability to:
  - Analyze graphical and numerical representations of a microeconomic equilibrium using the tools of supply and demand analysis.
  - Analyze the effect on quantity demanded and quantity supplied when prices are above or below the equilibrium price.
- SLO 2: Demonstrate the ability to think critically and analyze the allocation of scarce resources using different market structures. This includes an ability to:
  - Illustrate how prices and production levels (output) are determined in different markets including monopoly and perfectly competitive markets.
  - Illustrate how prices, consumption and production levels (output) are affected by externalities.
- SLO 3: Demonstrate comprehension in analyzing consumer behavior. This includes an ability to:
  - Analyze the effects of a price or income change on consumer demand and quantity demanded using graphical representations and measures of elasticity.
- SLO 4: Evaluate the behavior of a firm. This includes an ability to:
  - Calculate various measures of cost including fixed cost, variable cost, total cost, average cost and marginal cost.
  - Graph various measures of cost including fixed cost, variable cost, total cost, average cost and marginal cost.
  - Compare and contrast the level of profit for a firm in the short run and in the long run.

**ECON 306 Environmental Economics**
This course focuses on the application of economic principles to help understand and manage the relationship between humans and the environment. The central theme is that there are competing demands for our limited natural resources, including the waste assimilation capacity of the environment, necessitating that difficult choices be made regarding how those resources are used. The course illustrates how resources are allocated in a market economy, potential problems from a social perspective with that allocation, and alternative solutions for reallocating resources to achieve more socially desirable outcomes. Issues such as efficiency and externality, benefit-cost analysis, and alternative policy instruments for pollution control are examined. Topics related to global warming, California water resources, and other current environmental policy issues will be discussed as time permits.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- Describe and apply basic economic principles and concepts to environmental issues (SLO-1). This includes the ability to:
  - Analyze graphical and numerical representations of a market equilibrium using the tools of supply and demand analysis.
  - Analyze resource allocation in the context of environmental externalities compared to a market solution (SLO-2). This includes the ability to:
    - Compare the quantity produced and the market price that prevails when externalities are included in the analysis with that of those that are observed in standard supply and demand analysis.
  - Analyze resource allocation in an intertemporal context (SLO-3). This includes the ability to:
    - Describe how resource allocation is affected by time.
    - Describe how the discount rate effects resource allocation between two time periods in a two period model with finite resources.
  - Evaluate alternative policy instruments used to correct for market failure (SLO-4). This includes the ability to:
    - Analyze the use of taxes, marketable permits, technological standards and pollution limits, including uniform and non-uniform standards on the incentives of a firm.
    - Analyze the effects of taxes, marketable permits, technological standards and pollution limits, including uniform and non-uniform standards on the quantity produced.
  - Discuss the global nature of environmental issues (SLO-5). This includes an ability to:
    - Describe the nature of divergent pollution issues in terms of their effects at local, state, regional and global levels.

---

**ECON 310 Statistics for Business and Economics**

This course focuses on statistical concepts commonly used in economics, business and other behavioral sciences. It covers the collection, organization, presentation, analysis, and interpretation of numerical data. Major topics include organizing and describing data using graphs, tables, and charts; calculating and interpreting descriptive statistics including measures of central tendency and measures of dispersion; probability and sampling distributions; statistical inference; correlation and linear regression; analysis of variance, chi-square and t-tests. Computer software and/or hand calculations will be used in this course to calculate, organize and display statistical information. Results generated either by hand calculation, the use of computer software, articles or textbook examples will be used to analyze and interpret statistical findings.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:
• SLO1: Define common statistical terms.

• SLO2: Organize and display data. This includes the ability to:
  - Identify methods used to collect and generate data and identify advantages and disadvantages of each. Construct tables, frequency distributions, pie charts, and plot histogram, stem and leaf plots, boxplots, and scatterplots. Identifying different scales of measurement including Nominal, Ordinal, Interval, and Ratio.

• SLO3: Calculate and analyze descriptive statistics. This includes the ability to:
  - Identify and calculate means, standard deviation, percent, probabilities, and values using tables, formulas, and technologies for discrete and continuous random variables including binomial and normal distributions. Calculate point estimates for the mean, standard deviation and proportion for finite and infinite sampling distributions.

• SLO4: Conduct and interpret hypotheses tests. This includes the ability to:
  - Tests for a one population proportion, tests for a one population mean, tests for a one population variance/standard deviation, tests for two population means, tests for two population proportions, and tests for regression. Distinguish differences between type I and type II errors. Construct and interpret confidence intervals. Determine and interpret levels of statistical significance including p-values. Interpret statistics used in linear regression and ANOVA analysis for estimation and inference.

• SLO5: Identifying Basic Relationships of Probability. This includes the ability to:
  - Identify counting rules. Distinguish between complements, unions, intersections, mutually exclusive events and Bayes Theorem. Identify discrete, continuous and binomial probability distributions.

• SLO6: Use appropriate statistical techniques to analyze and interpret applications based on data from disciplines including business, social sciences, psychology, life science, health science, and education.

---

**ECON 320 Concepts in Personal Finance**

**Same As:** BUS 320
**Units:** 3
**Hours:** 54 hours LEC
**Prerequisite:** None.
**Advisory:** BUS 105
**Transferable:** CSU
**General Education:** AA/AS Area V(b)
**Catalog Date:** June 1, 2020

This course is designed to assist individuals in analyzing their financial affairs. Elements and conceptual basis of financial planning, analysis, and decision making in areas of budgeting, taxes, borrowing, money management, insurance, investments, and retirement will be examined.

This course is the same as BUS 320, and only one may be taken for credit.

**ECON 495 Independent Studies in Economics**

**Upon completion of this course, the student will be able to:**

• SLO #1: DEMONSTRATE COMPREHENSION IN ECONOMIC PRINCIPLES AND PLANNING, AS INDICATED BY COURSE OUTCOMES OF THE SUBJECT AREA.
  - Apply economic principles and concepts of individual economic planning.

• SLO #2: DEMONSTRATE THE ABILITY TO THINK CRITICALLY AND ANALYZE PROBLEMS.
  - Analyze the changing economic environment.

• SLO #3: DEMONSTRATE THE ABILITY TO THINK CRITICALLY AND ANALYZE PROBLEMS.
  - Analyze the conceptual basis of various economic tools available to the individual as well as the terminology used in their development and implementation.

• SLO #4: DEMONSTRATE THE ABILITY TO THINK CRITICALLY AND ANALYZE PROBLEMS.
  - Evaluate economic needs and goals and design financial models to achieve them.
An independent studies project involves an individual student or small group of students in study, research, or activities beyond the scope of regularly offered courses. See the current catalog section of "Special Studies" for full details of Independent Studies.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO #1: Actively engage in intellectual inquiry beyond that required in order to pass a course of study (College Wide Learning Outcome – Area 4).
- Discuss and outline a proposal of study (that can be accomplished within one semester term) with a supervising instructor qualified within the discipline.
- Design an independent study (to be completed individually or by collaboration of a small group) to foster special knowledge, skills, and experience that are not available in any one regularly scheduled course.
- Use information resources to gather discipline-specific information.
- SLO #2: Utilize modes of analysis and critical thinking to apply theoretical perspectives and/or concepts in the major discipline of study to significant problems and/or educational activities (College Wide Learning Outcome – Area 3).
- Analyze and apply the knowledge, skills and experience that are involved in the independent study to theoretical perspectives and/or concepts in the major discipline of study.
- Explain the importance of the major discipline of study in the broader picture of society.
- SLO #3: Communicate a complex understanding of content matter of the major discipline of study (College Wide Outcome – Area 3).
- Demonstrate competence in the skills essential to mastery of the major discipline of study that are necessary to accomplish the independent study.
- SLO #4: Identify personal goals and pursue these goals effectively (College Wide Outcome – Area 4).
- Utilize skills from the “academic tool kit” including time management, study skills, etc., to accomplish the independent study within one semester term.
Education/Teaching  
| Cosumnes River College

This major provides students with principles, practices, and competencies related to teaching California’s K-12 youth. Students are immersed in practices inclusive of all children, including children who are culturally and linguistically diverse and children with special needs. Students will gain practical fieldwork experience working with and/or observing children at their site placements within Elk Grove Unified School District.

This major is especially designed for students who plan to transfer into California State University, Sacramento’s Teacher Preparation Program, providing the lower division coursework necessary to gain admission to the university and the Elementary Teacher Credential Program. Students planning to transfer in this major should consult with a counselor as requirements vary among transfer universities.

Dean

Department Chairs  Jeannette Mulhern

(916) 691-7142

WilliaL3@crc.losrios.edu

Associate Degrees for Transfer

A.A.-T. in Elementary Teacher Education for Transfer

The Associate in Arts in Elementary Teacher Education for Transfer Degree (AA-T) is designed to provide a seamless transfer pathway for students interested in pursuing at least one Elementary Teacher Education degree option in the California State University (CSU) system. The degree is comprised of lower division coursework typically required by CSU institutions. Students must complete the core curriculum and electives to meet a total of 60 transferable units, which includes the CSU General Education Breadth or the Intersegmental General Education Transfer Curriculum (IGETC) pattern. Upon successful completion of the degree requirements, students will be guaranteed admission to the CSU system with junior status and will not have to repeat lower division coursework. Students are encouraged to meet with a counselor to develop their educational plans as degree options and general education requirements vary for each university.

Catalog Date: June 1, 2020

Degree Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECE 350</td>
<td>Introduction to Elementary Teaching with Field Experience</td>
<td>3</td>
</tr>
<tr>
<td>GEOL 305</td>
<td>Earth Science</td>
<td>3</td>
</tr>
<tr>
<td>GEOL 306</td>
<td>Earth Science Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>COMM 301</td>
<td>Introduction to Public Speaking</td>
<td>3</td>
</tr>
<tr>
<td>ENGWR 300</td>
<td>College Composition</td>
<td>3</td>
</tr>
<tr>
<td>MATH 310</td>
<td>Mathematical Discovery</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 307</td>
<td>Biology of Organisms (4)</td>
<td>4</td>
</tr>
<tr>
<td>or BIOL 310</td>
<td>General Biology (4)</td>
<td></td>
</tr>
<tr>
<td>HIST 307</td>
<td>History of World Civilizations to 1500</td>
<td>3</td>
</tr>
<tr>
<td>ENGWR 301</td>
<td>College Composition and Literature</td>
<td>3</td>
</tr>
<tr>
<td>COURSE CODE</td>
<td>COURSE TITLE</td>
<td>UNITS</td>
</tr>
<tr>
<td>-------------</td>
<td>--------------------------------------------------</td>
<td>-------</td>
</tr>
<tr>
<td>GEOG 320</td>
<td>World Regional Geography</td>
<td>3</td>
</tr>
<tr>
<td>POLS 301</td>
<td>Introduction to Government: United States (3)</td>
<td>3</td>
</tr>
<tr>
<td>ECE 312</td>
<td>Child Development</td>
<td>3</td>
</tr>
<tr>
<td>PHYS 310</td>
<td>Conceptual Physics (3)</td>
<td>3</td>
</tr>
<tr>
<td>COMM 311</td>
<td>Argumentation and Debate (3)</td>
<td>3</td>
</tr>
<tr>
<td>or COMM 315</td>
<td>Persuasion (3)</td>
<td></td>
</tr>
<tr>
<td>or ENGWR 302</td>
<td>Advanced Composition and Critical Thinking (3)</td>
<td></td>
</tr>
<tr>
<td>ARTH 300</td>
<td>Introduction to Art (3)</td>
<td>3</td>
</tr>
<tr>
<td>or MUFHL 300</td>
<td>Introduction to Music (3)</td>
<td></td>
</tr>
<tr>
<td>or TA 300</td>
<td>Introduction to the Theatre (3)</td>
<td></td>
</tr>
</tbody>
</table>

Total Units: 44

The Associate in Arts in Elementary Teacher Education for Transfer (AA-T) degree may be obtained by completion of 60 transferable, semester units with a minimum 2.0 GPA, including (a) the major or area of emphasis described in the Required Program, and (b) either the Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education-Breadth Requirements.

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- Apply knowledge and skills gained in various disciplines to ensure transfer to a CSU campus in preparation for successful completion of upper division coursework after transfer (PSLO #1)
- Use the scientific methods of inquiry, data collection, quantitative reasoning, and basic mathematical concepts to analyze information in appropriate disciplines
- Apply analytical reading and writing, research, and critical thinking essential for completing of assigned tasks
- Describe the nature of American government and compare and contrast local, state and national political institutions
- Write and speak effectively, demonstrating the ability to evaluate audience and appeal to it persuasively
- Apply knowledge of world history and cultures to identify the values of a culture and work with others of a diverse culture
- Compare and contrast various forms and styles of music, artworks, and theatrical performances
- Evaluate attitudes, actions, and behaviors indicative of a professional educator (PSLO #2)
- Apply knowledge of developmental theories to assess teaching practices and learning conditions in children and classroom situations. (PSLO #3)

Career Information

The AA-T in Elementary Teacher Education provides students with the foundational knowledge necessary for transfer to a Bachelor of Arts (BA) degree program, especially at a campus of the California State University (CSU) system. Career opportunities for students who have earned BA degrees in Elementary Teacher Education include but are not limited to: Teacher, primary grades; Teacher, intermediate grades; Teacher, private school; Instructional Assistant. Many careers require additional training beyond the Bachelor Degree. NOTE TO TRANSFER STUDENTS: The Associate Degree for Transfer program is designed for students who plan to transfer to a campus of the California State University (CSU). Other than the required core, the courses you choose to complete this degree will depend to some extent on the selected CSU for transfer. In addition, some CSU-GE Breadth or IGETC requirements can also be completed using courses required for this associate degree for transfer major (known as “double-counting”). Meeting with a counselor to determine the most appropriate course choices will facilitate efficient completion of your transfer requirements. For students wishing to transfer to other universities (UC System, private, or out-of-state), the Associate Degree for Transfer may not provide adequate preparation for upper-division transfer admissions; it is critical that you meet with a CRC counselor to select and plan the courses for the major, as programs vary widely in terms of the required preparation.

Associate Degrees
A.A. in Liberal Studies for Elementary Education

This major is designed for students who wish to be teachers in public and private elementary schools. Further education at the university level will be required to fulfill all requirements for a teaching credential authorizing service in California public schools.

Note to Transfer Students:
If you are interested in transferring to a four-year college or university to pursue a bachelor's degree in this major, it is critical that you meet with a CRC counselor to select and plan the courses for your major. Schools vary widely in terms of the required preparation. The courses that CRC requires for an Associate’s degree in this major may be different from the requirements needed for the Bachelor’s degree.

Catalog Date: June 1, 2020

Degree Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGWR 300</td>
<td>College Composition</td>
<td>3</td>
</tr>
<tr>
<td>COMM 361</td>
<td>The Communication Experience</td>
<td>3</td>
</tr>
<tr>
<td>ENGED 305</td>
<td>Structure of English</td>
<td>3</td>
</tr>
<tr>
<td>ENGWR 302</td>
<td>Advanced Composition and Critical Thinking</td>
<td>3</td>
</tr>
<tr>
<td>MATH 310</td>
<td>Mathematical Discovery</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 307</td>
<td>Biology of Organisms (4)</td>
<td>4</td>
</tr>
<tr>
<td>or BIOL 310</td>
<td>General Biology (4)</td>
<td></td>
</tr>
<tr>
<td>GEOL 305</td>
<td>Earth Science</td>
<td>3</td>
</tr>
<tr>
<td>GEOL 306</td>
<td>Earth Science Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>ECON 302</td>
<td>Principles of Macroeconomics</td>
<td>3</td>
</tr>
<tr>
<td>POLS 301</td>
<td>Introduction to Government: United States</td>
<td>3</td>
</tr>
<tr>
<td>HIST 307</td>
<td>History of World Civilizations to 1500</td>
<td>3</td>
</tr>
<tr>
<td>HIST 308</td>
<td>History of World Civilizations, 1500 to Present</td>
<td>3</td>
</tr>
<tr>
<td>ENGED 320</td>
<td>Service Learning: Tutoring Elementary Students in Reading</td>
<td>3</td>
</tr>
<tr>
<td>ECE 350</td>
<td>Introduction to Elementary Teaching with Field Experience</td>
<td>3</td>
</tr>
<tr>
<td>ART 430</td>
<td>Art and Children</td>
<td>3</td>
</tr>
<tr>
<td>ECE 312</td>
<td>Child Development (3)</td>
<td>3</td>
</tr>
<tr>
<td>SOC 321</td>
<td>Race, Ethnicity and Inequality in the United States (3)</td>
<td>3</td>
</tr>
<tr>
<td>or COMM 325</td>
<td>Intercultural Communication (3)</td>
<td></td>
</tr>
<tr>
<td>or ENGLT 336</td>
<td>Race and Ethnicity in Contemporary American Literature (3)</td>
<td></td>
</tr>
<tr>
<td>Total Units:</td>
<td></td>
<td>50</td>
</tr>
</tbody>
</table>

1The program requirements listed here for CSUS apply to students completing this course sequence by Fall 2007. Students should contact a counselor about the new program requirements which were effective with the Fall 2004-05 catalog.

The Liberal Studies for Elementary Education Associate in Arts (A.A.) degree may be obtained by completion of the required program, plus general education requirements, plus sufficient electives to meet a 60-unit total. See CRC graduation requirements.

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- Apply knowledge, skills and abilities towards successful completion of coursework at transfer institutions.
- Apply knowledge of child development theories to assess the characteristics of teaching practices and learning conditions.
Career Information

Teacher, primary grades; Teacher, intermediate grades; Instructional Assistant Classes beyond the associate degree may be required to fulfill some career options or for preparation for transfer to a university program.
Emergency Medical Technology
| Cosumnes River College

Cosumnes River College's Emergency Medical Technology course (EMT 100) is designed to provide the student with the skills and knowledge to apply for certification as an Emergency Medical Technician (EMT) in the State of California. EMT certification is the first step to starting a career working on an ambulance. EMT certification is also a pre-employment requirement for most professional fire departments.

Dean

Collin Pregliasco

(916) 691-7261

PregliC@crc.losrios.edu

Certificate of Achievement

Emergency Medical Technician Certificate

EMTs (previously called EMT-I or Basic) are the backbone of the Emergency Medical Services (EMS) system throughout the nation, helping to reduce injury severity and death at the scene of an accident or sudden illness and during transportation to a medical facility.

Students seeking to become a state certified EMT should take the EMT 100 course. The EMT 100 course fulfills the requirements for State EMT certification (NREMT) testing.

Cosumnes River College's Emergency Medical Technology course (EMT 100) is designed to provide the student with the skills and knowledge to apply for certification as an Emergency Medical Technician and is approved by the Sacramento County Health Department, Division of Emergency Medical Services, and the certifying agency for Sacramento County. EMT 100 course completion is mandatory for all personnel who wish to pursue State certification as an EMT.

EMT certification from Sacramento County Health Department, Division of Emergency Medical Services is the first step to starting a career working on an ambulance. EMT certification is also a pre-employment requirement for most professional fire departments. Together with varying levels of actual on-the-job experience, it is often required for admission to Paramedic training programs throughout the state and country.

EMT State certification has also become an important first step in the career path of students pursuing professions as physicians, registered nurses, physician assistants, and other allied health professions, by offering a distinct advantage in patient assessment and critical interventions skills, as well as the ability to obtain valuable work experience. Cosumnes River College's EMT 100 students will gain actual experience by spending hours off-campus in operating ambulance units and in hospital emergency departments.

Highlights include:
* Hands-on experience administering proper emergency medical care
* Preparation for the EMT state certification test
* Re-certification for EMT state certification
* First step in pursuing a paramedic license
* Hospital emergency room observation time and opportunities to “ride along” in ambulances

Catalog Date: June 1, 2020

Certificate Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>EMT 100</td>
<td>Emergency Medical Technician</td>
<td>7.5</td>
</tr>
<tr>
<td>Total Units:</td>
<td></td>
<td>7.5</td>
</tr>
</tbody>
</table>
### Student Learning Outcomes

Upon completion of this program, the student will be able to:

- **SLO #1:** Demonstrate and confirm knowledge of current information to work in the field of emergency medicine as an EMT.
- The students will be able to analyze fluid complex medical problems with patients and then apply appropriate patient care based on a standardized decision making process.
- Perform the skills and tasks of patient care and demonstrate proficiency on the basic equipment that EMTs use in the field.
- Demonstrate critical thinking techniques and how to apply them to sick and injured patients in the pre-hospital arena.
- **SLO #2:** Demonstrate and incorporate professional values and standards for medical personnel that the industry requires in pre-hospital emergency medicine.
- Implement and maintain professional appearance and conduct in all aspects of program activities.
- Perform patient assessment and care utilizing a team approach.
- **SLO #3:** Achieve the basic educational requirements for most paramedic programs in the state. Most paramedic programs will require at least 1 year work experience as an EMT on an ambulance as an application requirement for Paramedic school.
- Students will work in field clinical settings alongside experienced medical professionals and will apply skills and knowledge learned in the program.
- Students will complete and pass the State's EMT Certification Written Exam to achieve EMT certification.
- Students will utilize recently learned skills and knowledge and comprehend the need for EMTs to stay current on the most up to date emergency medical information and training.

### Career Information

**EMT; Emergency Room Technician; Fire Service** With additional training: **Firefighter; Rescue Worker; Paramedic; Emergency Medical Dispatcher**

### Emergency Medical Technology (EMT)

**EMT 100 Emergency Medical Technician**

| Units: | 7.5 |
| Hours: | 81 hours LEC; 162 hours LAB |
| Prerequisites: | All EMT 100 students must have an American Heart Association BLS for the Health Care Provider CPR card (required under NHTSA and California Regulations) prior to the first day of class. We will ONLY ACCEPT American Heart Association CPR cards (or eCards) – BLS for the Healthcare Provider from the American Heart Association. Online CPR courses without hands on skills component are NOT accepted. The college will NOT accept Life Guard Training Certificates or EMR (First Responder) Certificates as CPR cards. The student must have a BLS for the Healthcare Provider Cards from the American Heart Association and we no longer accept Red Cross Cards. Please go to Program website for more information on this training - [http://www.crcems.us/program-info/cpr-training/](http://www.crcems.us/program-info/cpr-training/) |
| Enrollment Limitation: | Not open to students with a current California EMT certification (license). California licensed Physicians, RNs, Paramedics, or military trained medics may be allowed to challenge the course under State law. Please check with the Program Director for more information. |
| Advisory: | AH 110 and BIOL 102; Students should take an Anatomy and Physiology course or an EMT Prep course prior to taking EMT 100. Two subject areas of many students struggle with in an Emergency Medical Technician (EMT) program are Medical Terminology and the Human Body topics, especially Cardiology and Neurology. UCLA EMS Education Program offers an Online EMT Prep course: [https://www.cpc.mednet.ucla.edu/course/emt-preparation](https://www.cpc.mednet.ucla.edu/course/emt-preparation) |

**Catalog Date:** June 1, 2020
This course provides instruction to the level of Emergency Medical Technician (Previously called EMT Basic or EMT-I). This course has additional financial costs that are required for clinical components. Topics include: skills necessary to provide emergency medical care at a basic life-support level with a fire, ambulance, or other specialized service. Cosumnes River College's Emergency Medical Technology 100 course is the primary step to provide the student with the skills and knowledge to apply for certification as an Emergency Medical Technician and is approved by the Sacramento County Health Department, Division of Emergency Medical Services, which is the certifying agency for Sacramento County by the State of California. This certification is mandatory for all personnel who wish to pursue a career working on an ambulance. EMT certification is also a pre-employment requirement for most paid fire departments. Together with varying levels of actual on-the-job experience, it is required for admission to paramedic training programs throughout the state and country. EMT students will gain actual clinical experience by spending time off-campus in operating ambulance units and in emergency departments of hospitals. Students will be required to complete background checks and drug screens, purchase uniforms and liability insurance, verify immunizations and have Tb clearance. Other requirements may be necessary for the clinical component of this course. The course requires students to work on an ambulance in the clinical component. Students may not have a beard or any facial hair below the lip to be compliant with OSHA regulations. This course is conducted in compliance with the California Code of Regulations. A final grade "B" or better is required for a course completion certification in this course. This is an intensive medical class that students should possess a strong background in anatomy and physiology as well as medical terminology. Students that do not possess both generally do not succeed in the course. It is STRONGLY recommended that students take a basic anatomy and physiology class as well as a medical terminology class prior to attempting this class. See Advisory. The EMT class has additional non-mandatory hours for quiz reviews and skills practice that students are strongly encouraged to attend. To become Certified (Licensed) as an EMT in California all applicants must be legal citizens, possess a high school diploma (GED), be at least 18 years old, pass background check, and have valid social security number. For more information please go to State EMS office website - www.emsa.ca.gov

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- **SLO #1**: Demonstrate knowledge of current information they need to work in the field of emergency medicine as an EMT.
- Recognize the nature and seriousness of the patient's condition or extent of injuries to assess requirements for appropriate emergency medical care. Identify the symptoms/signs of a major medical and traumatic emergencies in a pre-hospital arena.
- Recognize the indications and demonstrate the techniques for administering medications that are within the EMT-Basic scope of practice.
- Utilize communicating, transporting, and record keeping skills with patient care.
- Demonstrate critical thinking techniques and how to apply them to sick and injured patients in the pre-hospital arena. Perform safely and effectively the standard job expectations of an Emergency Medical Technician.
- Comprehend pathophysiology of common diseases and how they manifest in patients.
- Understand and be able to use basic medical terminology in patient care.
- **SLO #2**: Perform the essential skills and demonstrate proficiency in EMS equipment implementation.
- Demonstrate competency utilizing all emergency medical technician's basic equipment.
- Use appropriate decision making processes in coordinating lifting, extricating, and positioning of the patient to minimize discomfort and prevent further injury.
- Perform safely and effectively in patient care skills of an Emergency Medical Technician.
- **SLO 3#:** Demonstrate professional values, ethics, and standards for emergency medical personnel.
- Work in team approach to patient assessment and care.
- Work in field clinical setting with experienced medical professionals and apply skills and knowledge learned in the course.
- Utilize recently learned skills and knowledge and comprehend the need for EMTs to stay current on the most up to date emergency medical information and training.
- Implement and maintain professional appearance and conduct in all aspects of course activities.
- **SLO #4**: Participate in Prehospital care and emergency department operations for a period of time sufficient to gain an appreciation for the continuum of care. The student must participate in and document patient contacts in a field experience on an ambulance or ER.
- Perform ten patient assessments.
- **SLO #5**: Complete and pass the State's EMT Certification Written Exam required to achieve EMT certification.
EMT 102 Emergency Medical Care Refresher

This course provides continuing education and skills verification modules for current Emergency Medical Technicians (EMTs) certified at the Basic Life Support (BLS) level. It satisfies most of the refresher requirements of local, state and national Emergency Medical Services (EMS) certifying organizations. EMS related topics include airway management and ventilation, cardiac care and resuscitation, patient assessment, injury management, legal and ethical issues, vital signs monitoring and assisting with medication administration. This course is designed for currently California State certified EMT - Basic(I) and meets all state requirements for EMT (I) recertification by Sacramento Emergency Medical Services Agency. BLS (CPR) cards are not issued in the completion of this course. Students that have expired EMT certification should contact the instructor prior to signing up for EMT 102. This course does not provide preparation for the National Registry of Emergency Medical Technicians (NREMT) entry or recertification exam.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO #1: The student will be able to demonstrate knowledge of current information they need to work in the field of emergency medicine as an EMT.
- Recognize the nature and seriousness of the patient's condition or extent of injuries to assess requirements for appropriate emergency medical care.
- Identifying the symptoms/signs of a major medical and traumatic emergencies in a pre-hospital arena.
- Utilize communicating, transporting, and record keeping skills with patient care.
- Recognize the indications and demonstrate the techniques for administering medications and provide updated skills that are within the EMT-Basic scope of practice.
- SLO #2: Utilize, incorporate and demonstrate proficiency in all equipment within the EMT scope of practice in regards to patient care.
- Be able to perform efficient cardiopulmonary resuscitation and AED use utilizing current national standards.
- Competency in demonstrating and utilizing all emergency medical technicians basic equipment.
- Students will use appropriate decision making processes in coordinating lifting, extricating, and positioning of the patient to minimize discomfort and prevent further injury.
- SLO #3: Demonstrate professional values, ethics, and standards for emergency medical personnel.
- Establish and maintain effective communication with patients, family members, rescuers and other health care professionals, utilizing contemporary guidelines.
- Students will work in team approach to patient assessment and care.

EMT 109 Emergency Medical Responder

This course is an introduction to the principles and practices of the Emergency Medical Services (EMS). It provides the knowledge and skills needed to integrate the care provided through the EMS system.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO #1: describe the roles of EMS in the health care system.
- demonstrate the professional attributes expected of EMRs.
- utilize effective communication techniques with patients, bystanders, and other emergency responders in the EMS setting.
- SLO #2: demonstrate life support skills for patients with specific medical and trauma airway conditions.
• perform the duties of an EMR with regard for medical-legal and ethical issues, including functioning under medical direction and within the scope of practice.

• apply principles of anatomy, physiology, pathophysiology, life-span development, and therapeutic communications to the assessment and management of patients.

• SLO #3: identify the need for and perform immediately life-saving interventions to manage a patient's airway, breathing, and circulation.

• assess and manage patients of all ages with a variety of complaints, medical conditions and traumatic injuries.

• apply principles of emergency medical services operations, considerations, multiple casualty incidents, gaining access to and extricating patients, hazardous materials incidents, and responding to situations involving weapons of mass destruction.

EMT 115 Emergency Medical Technician (EMT) Didactic Introduction

Units: 1.5
Hours: 81 hours LAB
Prerequisite: All EMT 115 students must have an American Heart Association BLS for the Health Care Provider CPR card or BLS Provider Card or eCard (required under NHTSA and California Regulations) prior to the first day of class. We will ONLY ACCEPT American Heart Association CPR cards (or eCards) - BLS for the Healthcare Provider BLS Provider from the American Heart Association. Online CPR courses without hands on skills component are NOT accepted. The college will NOT accept Life Guard Training Certificates or EMR (First Responder) Certificates as CPR cards. The student must have a BLS for the Healthcare Provider Cards from the American Heart Association. Red Cross Cards are no longer accepted to meet this requirement. Please go to Program website for more information on this training - http://www.crcems.us/program-info/cpr-training/
Advisory: AH 110 and BIOL 102; These advisories are not required but are only a suggestion for students that do not possess a strong background in Anatomy and Physiology or Medical terminology. Students are advised to take an Anatomy and Physiology course or an EMT Prep course prior to taking EMT 115. Two subject areas many students struggle with in an Emergency Medical Technician (EMT) program are Medical Terminology and the Human Body topics, especially Cardiology and Neurology. Other Justification: EMT is an intense Medical class with low student success for students that are not proficient in Human Anatomy and Medical terminology.
Catalog Date: June 1, 2020

This 8-week course provides the first step of instruction to the level of Emergency Medical Technician (Previously called EMT Basic or EMT-I). This course has additional financial costs that are required for clinical components. Topics include skills necessary to provide emergency medical care at a basic life-support level with a fire, ambulance, or other specialized services. Cosumnes River College's Emergency Medical Technology EMT 115 course is the first step to provide the student with the skills and knowledge to apply for certification as an Emergency Medical Technician. Students must successfully complete EMT 115, EMT 116 and EMT 117 (taken in the same semester) to take the National testing to become a Certified (Licensed) EMT in the State of California. This course is approved by the Sacramento County Health Department, Division of Emergency Medical Services, which is the certifying agency for Sacramento County by the State of California's EMS Agency. This EMT state certification is mandatory for all personnel who wish to pursue a career working on an ambulance. EMT certification is also a pre-employment requirement for most paid fire departments. Together with varying levels of actual on-the-job experience, it is required for admission to paramedic training programs throughout the state and country. EMT 115 prepares the EMT students to gain the required medical and operational EMS knowledge to work in the field. EMT 116 and EMT 117 (second 8-week courses - taken concurrently in same semester) cover the EMS skills and Experience by spending time off-campus in operating ambulance units and in emergency departments of hospitals. For classes, EMT 116 and EMT 117 students will be required to complete background checks and drug screenings, purchase uniforms, and liability insurance verify immunizations and have Tb clearance. Other requirements may be necessary for the clinical component of this course. These courses require students to work on an ambulance in the clinical component. Students may not have a beard or any facial hair below the lip to be compliant with OSHA regulations. This course is conducted in compliance with the California Code of Regulations. Students must maintain 80% on all testing or better for a course completion certification in this course. This is an intensive medical class so students should possess a strong background in anatomy and physiology as well as medical terminology. Students that do not possess both generally do not succeed in the course. It is STRONGLY recommended that students take a basic anatomy and physiology class as well as a medical terminology class prior to attempting this class. See Advisory. The EMT class has additional non-mandatory hours for quiz reviews and skills practice that students are strongly encouraged to attend. For more information please go to State EMS office website - www.emsa.ca.gov. This course follows the U.S. Department of Transportation (DOT) National EMS Education Standards (DOT HS 811 077A, January 2009). See Program Website: https://www.crcems.us. All requirements will be discussed on the first class day. Students need the required American Heart Association BLS Provider CPR course and should read as much of the EMT textbook as possible before the first class day. For questions please contact the EMS program coordinator: Matthew McHugh.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• SLO #1: Demonstrate current knowledge in the national standards of EMS patient care to work in the field of emergency medicine as an EMT.

• Recognize the nature and seriousness of the patient's condition or extent of injuries to assess requirements for appropriate emergency medical care.
Identify the symptoms/signs of a major medical and traumatic emergencies in a pre-hospital arena.

Recognize the indications and demonstrate the techniques for administering medications that are within the EMT-Basic scope of practice.

Utilize communicating, transporting, and record keeping skills with patient care.

Demonstrate critical thinking techniques and how to apply them to sick and injured patients in the pre-hospital arena.

Perform safely and effectively the standard job expectations of an Emergency Medical Technician.

Understand and be able to use basic medical terminology in patient care.

SLO #2: Perform the essential patient assessment, skills and demonstrate proficiency in EMS equipment use and implementation.

Demonstrate competency utilizing all emergency medical technician's basic equipment.

Demonstrate and perform appropriate patient assessment and care for sick and injured patients.

Use appropriate decision making processes in coordinating lifting, loading, extricating, and positioning of the patient to minimize discomfort and prevent further injury.

Perform safely and effectively in patient care skills of an Emergency Medical Technician.

SLO #3: Demonstrate professional values, ethics, and standards for emergency medical personnel.

Work in team approach to patient assessment and care.

Implement and maintain professional appearance and conduct in all aspects of course activities.

---

EMT 116 Emergency Medical Technician (EMT) Didactic

**Conclusion**

**SLO #1:** Identify the symptoms/signs of a major medical and traumatic emergencies in a pre-hospital arena.

**Units:** 5

**Hours:** 81 hours LEC; 36 hours LAB

**Prerequisite:**

- EMT 115 with a grade of “C” or better
- All EMT 116 students must have met all the Class requirements listed in the EMT 115 syllabus to move on to EMT 116.
- The students must take EMT 115 and EMT 116 and EMT 117 in the same semester to meet the course and clinical requirements of the program to receive a State Approved Course Completion for EMT State of California Certification/License.
- Students must have and maintain an American Heart Association BLS for the Healthcare Provider CPR card or BLS Provider Card or eCard (required under NHTSA and California Regulations) prior to the first day of class.
- We will ONLY ACCEPT American Heart Association CPR cards (or eCards) – BLS for the Healthcare Provider BLS Provider from the American Heart Association.
- Online CPR courses without hands on skills component are NOT accepted.
- The college will NOT accept Lifeguard Training Certificates or EMR (First Responder) Certificates as CPR cards. The student must have a BLS for the Healthcare Provider Cards from the American Heart Association and we no longer accept Red Cross Cards.

**Catalog Date:**

June 1, 2020

This 8 week course provides instruction to the level of Emergency Medical Technician (Previously called EMT Basic or EMT-I).

This course must be taken in sequence with EMT 115 (first 8 week course) in the same semester. This course has additional financial costs that are required for clinical components. Topics include skills necessary to provide emergency medical care at a basic life-support level with a fire, ambulance, or other specialized services. Cosumnes River College’s Emergency Medical Technology EMT 116 (along with EMT 115) courses are the primary step to provide the student with the skills and knowledge to apply for certification as an Emergency Medical Technician and is approved by the Sacramento County Health Department, Division of Emergency Medical Services, which is the certifying agency for Sacramento County by the State of California. This certification is mandatory for all personnel who wish to pursue a career working on an ambulance. EMT certification is also a pre-employment requirement for most paid fire departments. Together with varying levels of actual on-the-job experience, it is required for admission to paramedic training programs throughout the state and country. EMT students will gain actual clinical experience by spending time off-campus in operating ambulance units and in emergency departments of hospitals. Students will be required to complete background checks and drug screenings, purchase uniforms and liability insurance, verify immunizations and have Tb clearance. Other requirements may be necessary for the clinical component of this course. The course requires students to work on an ambulance in the clinical component. Students may not have a beard or any facial hair below the lip to be compliant with OSHA regulations. This course is conducted in compliance with the California Code of Regulations. A final grade 80% or better is required for a course completion certification in this course. This is an intensive medical class that students should possess a strong background in anatomy and physiology as well as medical terminology. It is STRONGLY recommended that students take a basic anatomy and physiology class as well as a medical terminology class prior to attempting this class. See Advisory. The EMT class has additional non-mandatory hours for quiz reviews and skills practice that students are strongly encouraged to attend. For more information please go to State EMS office website - www.emsa.ca.gov. This course follows the U.S. Department of Transportation (DOT) National EMS Education Standards (DOT HS 811 077A, January 2009). See Program Website: https://www.crcems.us

---

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:
- SLO #1: Demonstrate current knowledge in the national standards of EMS patient care to work in the field of emergency medicine as an EMT.

- Recognize the nature and seriousness of the patient's condition or extent of injuries to assess requirements for appropriate emergency medical care.

- Identify the symptoms/signs of a major medical and traumatic emergencies in a pre-hospital arena.

- Recognize the indications and demonstrate the techniques for administering medications that are within the EMT scope of practice.

- Utilize communicating, transporting, and record keeping skills with patient care.

- Demonstrate critical thinking techniques and how to apply them to sick and injured patients in the pre-hospital arena.

- Perform safely and effectively the standard job expectations of an Emergency Medical Technician.

- Understand and be able to use basic medical terminology in patient care.

- SLO #2: Perform the essential patient assessment, skills and demonstrate proficiency in EMS equipment use and implementation.

- Demonstrate competency utilizing all emergency medical technician's basic equipment.

- Demonstrate and perform appropriate patient assessment and care for sick and injured patients.

- Use appropriate decision making processes in coordinating lifting, loading, extricating, and positioning of the patient to minimize discomfort and prevent further injury.

- Perform safely and effectively in patient care skills of an Emergency Medical Technician.

- SLO #3: Demonstrate professional values, ethics, and standards for emergency medical personnel.

- Work in team approach to patient assessment and care.

- Perform no less than ten patient assessments.

- Utilize recently learned skills and knowledge and comprehend the need for EMTs to stay current on the most up to date emergency medical information and training.

- Implement and maintain professional appearance and conduct in all aspects of course activities.

---

**EMT 117 Emergency Medical Technician (EMT) Practicum**

<table>
<thead>
<tr>
<th>Units:</th>
<th>1.5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hours:</td>
<td>81 hours LAB</td>
</tr>
<tr>
<td>Prerequisite:</td>
<td>EMT 115 with a grade of “C” or better; Students must meet all syllabus requirements in EMT 115 to advance to EMT 116 and EMT 117. The following requirements must be complete prior to the start of Clinical hours for EMT 116 and EMT 117: 1. The student must acquire the Student Access Card or an Official College Photo ID Card with ID holder stating EMT student. This ID must be worn as part of the uniform for clinical hours; 2. An approved Clinical uniform: all students going to clinical will be required to purchase an EMT 100 T-shirt and have dark blue work pants; 3. Criminal background checks with drug screen; 4. Blood borne pathogens training; 5. Immunization verification; 6. TB clearance: All students must have a verification of 2 step TB clearance no more than 2 months prior to the beginning of clinical; 7. A current American Health Association BLS Provider Card or eCard (required under the National Health Traffic Safety Association and California Regulations). Only the AHA BLS Provider Card or eCard is acceptable, as Online CPR courses without hands on skills component, or Lifeguard Training Certificates or EMR (First Responder) are NOT acceptable. Please go to Program website for more information on this training - <a href="http://www.crcems.us/program-info/cpr-training">http://www.crcems.us/program-info/cpr-training</a>; 8. Any other clinical requirement by the hospitals or EMS agencies; 9. A student must bring a watch with a seconds display each day to class; 10. A student must have the PPE, and other EMT equipment to participate in clinical hours. All of these requirements are a prerequisite for health and safety as mandated in Title 22, Division 9, Chapter 2 of the California Code of Regulations. Students must take EMT 115 in the same semester as EMT 116 and EMT 117 to meet clinical requirements to be successful in the program.</td>
</tr>
<tr>
<td>Prerequisite:</td>
<td>EMT 116</td>
</tr>
<tr>
<td>Catalog Date:</td>
<td>June 1, 2020</td>
</tr>
</tbody>
</table>
This 8-week course provides instruction to the level of Emergency Medical Technician (Previously called EMT Basic or EMT-I). This course must be taken in sequence with EMT 115 (first 8-week course) and concurrent with EMT 116 (second 8-week course) in the same semester. This course requires students to complete ride along in ambulances and clinical hands on skills at Emergency Rooms of Hospitals. This course has additional financial costs that are required for clinical components. Topics include skills necessary to provide emergency medical care at a basic life-support level with a fire, ambulance, or other specialized services. Cosumnes River College's Emergency Medical Technology EMT 116 and EMT 117 (along with EMT 115) courses are the primary step to provide the student with the skills and knowledge to apply for certification as an Emergency Medical Technician and is approved by the Sacramento County Health Department, Division of Emergency Medical Services, which is the certifying agency for Sacramento County by the State of California. This certification is mandatory for all personnel who wish to pursue a career working on an ambulance. EMT certification is also a pre-employment requirement for most paid fire departments. EMT students will gain actual clinical experience by spending time off-campus in operating ambulance units and in emergency departments of hospitals. Students will be required to complete background checks and drug screenings, purchase uniforms and liability insurance, verify immunizations and have Tb clearance. Other requirements may be necessary for the clinical component of this course. The course requires students to work on an ambulance in the clinical component. Students may not have a beard or any facial hair below the lip to be compliant with OSHA regulations. This course is conducted in compliance with the California Code of Regulations. A final grade 80% or better is required for a course completion certification in this course.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO #1: Demonstrate current knowledge in the national standards of EMS patient care to work in the field of emergency medicine as an EMT.
- Recognize the nature and seriousness of the patient's condition or extent of injuries to assess requirements for appropriate emergency medical care.
- Identify the symptoms/signs of a major medical and traumatic emergencies in a pre-hospital arena.
- Recognize the indications and demonstrate the techniques for administering medications that are within the EMT scope of practice.
- Utilize communicating, transporting, and record keeping skills with patient care.
- Demonstrate critical thinking techniques and how to apply them to sick and injured patients in the pre-hospital arena.
- Perform safely and effectively the standard job expectations of an Emergency Medical Technician.
- Understand and be able to use basic medical terminology in patient care.
- SLO #2: Perform the essential patient assessment, skills, and demonstrate proficiency in EMS equipment use and implementation.
- Demonstrate competency utilizing all emergency medical technician's basic equipment.
- Demonstrate and perform appropriate patient assessment and care for sick and injured patients.
- Use appropriate decision making processes in coordinating lifting, loading, extricating, and positioning of the patient to minimize discomfort and prevent further injury.
- Perform safely and effectively in patient care skills of an Emergency Medical Technician.
- SLO #3: Demonstrate professional values, ethics, and standards for emergency medical personnel.
- Work in team approach to patient assessment and care.
- Work in field clinical setting with experienced medical professionals and apply skills and knowledge learned in the course.
- Utilize recently learned skills and knowledge and comprehend the need for EMTs to stay current on the most up to date emergency medical information and training.
- Implement and maintain professional appearance and conduct in all aspects of course activities.
- SLO #4: Participate in Prehospital care and emergency department operations for a period of time sufficient to gain an appreciation for the continuum of care. The student must participate in and document patient contacts in a field experience on an ambulance or ER.
- Perform no less than ten patient assessments.

EMT 298 Work Experience in Emergency Medical Technology
This course provides students with opportunities to develop marketable skills in preparation for employment in their major field of study or advancement within their career. It is designed for students interested in work experience and/or internships in associate degree level or certificate occupational programs. Course content includes understanding the application of education to the workforce; completion of required forms which document the student's progress and hours spent at the work site; and developing workplace skills and competencies. Appropriate level learning objectives are established by the student and the employer. During the semester, the student is required to participate in a weekly orientation and 75 hours of related paid work experience, or 60 hours of unpaid work experience for one unit. An additional 75 or 60 hours of related work experience is required for each additional unit. Work Experience may be taken for a total of 16 units when there are new or expanded learning objectives. Only one Work Experience course may be taken per semester.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- **DEMONSTRATE AN UNDERSTANDING AND APPLICATION OF PROFESSIONAL WORKPLACE BEHAVIOR IN A FIELD OF STUDY RELATED ONE’S CAREER (SLO 1)**
  - Understand the effects time, stress, and organizational management have on performance.
  - Demonstrate an understanding of consistently practicing ethics and confidentiality in a workplace.
  - Examine the career/life planning process and relate its relevancy to the student.
  - Demonstrate an understanding of basic communication tools and their appropriate use.
  - Demonstrate an understanding of workplace etiquette.

- **DESCRIBE THE CAREER/LIFE PLANNING PROCESS AND RELATE ITS RELEVANCY TO ONE’S CAREER (SLO 2)**
  - Link personal goals to long term achievement.
  - Display an understanding of creating a professional first impression.
  - Understand how networking is a powerful job search tool.
  - Understand necessary elements of a résumé.
  - Understand the importance of interview preparation.
  - Identify how continual learning increases career success.

- **DEMONSTRATE APPLICATION OF INDUSTRY KNOWLEDGE AND THEORETICAL CONCEPTS AS WRITTEN IN LEARNING OBJECTIVES IN PARTNERSHIP WITH THE EMPLOYER WORK SITE SUPERVISOR (SLO 3)**

**Units:** 1 - 4  
**Hours:** 60 - 300 hours LAB  
**Prerequisite:** None.  
**Enrollment Limitation:** Students must be in a paid or unpaid internship, volunteer position or job related to career goals in Emergency Medical Technology.  
**General Education:** AA/AS Area III(b)  
**Catalog Date:** June 1, 2020
Engineering | Cosumnes River College

Engineering involves the application of scientific and mathematical principles used in design and in the solution of practical technical problems. CRC's program provides the foundation in mathematics, physics, and engineering necessary to transfer to a university and complete a Bachelor of Science degree in Engineering. However, because the lower division requirements of universities vary, the student should check the transfer university's catalog to be sure he/she meets its specific requirements. See a CRC counselor for assistance.

Dean

 (916) 691-7204

 CoxR@crc.losrios.edu

Associate Degrees

A.S. in Engineering - Civil/Mechanical Option

Pre-Professional Transfer Opportunities
CRC's program provides the foundation in mathematics, physics, and engineering necessary to transfer to a university and complete a bachelor's degree in engineering. Engineering involves the application of scientific and mathematical principles needed to solve practical technical problems. Although the first two years of engineering courses for all engineering degrees are similar, students should consult the lower division requirements of the institution to which they wish to transfer.

Highlights include:
* Challenging and rewarding classes that transfer to four-year universities
* A Mathematics, Engineering and Science Achievement (MESA) program

Note to Transfer Students:
If you are interested in transferring to a four-year college or university to pursue a bachelor's degree in this major, it is critical that you meet with a CRC counselor to select and plan the courses for your major. Schools vary widely in terms of the required preparation. The courses that CRC requires for an Associate's degree in this major may be different from the requirements needed for the Bachelor's degree.

When choosing whether to take the suggested electives, check university requirements; these courses may be required at some universities.

Catalog Date: June 1, 2020

Degree Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 400</td>
<td>General Chemistry I</td>
<td>5</td>
</tr>
<tr>
<td>CISP 360</td>
<td>Introduction to Structured Programming (4)</td>
<td>4</td>
</tr>
<tr>
<td>ENGR 400</td>
<td>Introduction to Electrical Circuits and Devices</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 312</td>
<td>Engineering Graphics</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 420</td>
<td>Statics</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 412</td>
<td>Properties of Materials</td>
<td>4</td>
</tr>
<tr>
<td>MATH 400</td>
<td>Calculus I</td>
<td>5</td>
</tr>
<tr>
<td>MATH 401</td>
<td>Calculus II</td>
<td>5</td>
</tr>
<tr>
<td>COURSE CODE</td>
<td>COURSE TITLE</td>
<td>UNITS</td>
</tr>
<tr>
<td>-------------</td>
<td>------------------------------------</td>
<td>-------</td>
</tr>
<tr>
<td>MATH 402</td>
<td>Calculus III</td>
<td>5</td>
</tr>
<tr>
<td>MATH 420</td>
<td>Differential Equations</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 411</td>
<td>Mechanics of Solids and Fluids</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 421</td>
<td>Electricity and Magnetism</td>
<td>4</td>
</tr>
<tr>
<td>Total Units:</td>
<td></td>
<td>49</td>
</tr>
</tbody>
</table>

1Check specific university requirements before choosing a course

The Engineering - Civil/Mechanical Option Associate in Science (A.S.) degree may be obtained by completion of the required program, plus general education requirements, plus sufficient electives to meet a 60-unit total. See CRC graduation requirements.

Career Information

Aerospace Engineer; Architectural Engineer; Chemical Engineer; Civil Engineer; Computer Engineer; Electrical Engineer; Mechanical Engineer, and other types of engineers Most career options require a B.S. degree.

A.S. in Engineering - Electrical/Computer Option

Pre-Professional Transfer Opportunities

CRC's program provides the foundation in mathematics, physics, and engineering necessary to transfer to a university and complete a bachelor's degree in engineering. Engineering involves the application of scientific and mathematical principles needed to solve practical technical problems. Although the first two years of engineering courses for all engineering degrees are similar, students should consult the lower division requirements of the institution to which they wish to transfer.

Highlights include:

* Challenging and rewarding classes that transfer to four-year universities
* A Mathematics, Engineering and Science Achievement (MESA) program

Note to Transfer Students:

If you are interested in transferring to a four-year college or university to pursue a bachelor's degree in this major, it is critical that you meet with a CRC counselor to select and plan the courses for your major. Schools vary widely in terms of the required preparation. The courses that CRC requires for an Associate's degree in this major may be different from the requirements needed for the Bachelor's degree.

When choosing whether to take the suggested electives, check university requirements; these courses may be required at some universities.

**Catalog Date:** June 1, 2020

Degree Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 400</td>
<td>General Chemistry I</td>
<td>5</td>
</tr>
<tr>
<td>CISP 360</td>
<td>Introduction to Structured Programming (4)</td>
<td>4</td>
</tr>
<tr>
<td>ENGR 400</td>
<td>Introduction to Electrical Circuits and Devices</td>
<td>3</td>
</tr>
<tr>
<td>MATH 400</td>
<td>Calculus I</td>
<td>5</td>
</tr>
<tr>
<td>MATH 401</td>
<td>Calculus II</td>
<td>5</td>
</tr>
<tr>
<td>MATH 402</td>
<td>Calculus III</td>
<td>5</td>
</tr>
<tr>
<td>MATH 420</td>
<td>Differential Equations</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 411</td>
<td>Mechanics of Solids and Fluids</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 421</td>
<td>Electricity and Magnetism</td>
<td>4</td>
</tr>
<tr>
<td>Total Units:</td>
<td></td>
<td>39</td>
</tr>
</tbody>
</table>
The Engineering - Electrical/Computer Option Associate in Science (A.S.) degree may be obtained by completion of the required program, plus general education requirements, plus sufficient electives to meet a 60-unit total. See CRC graduation requirements.

Career Information

Aerospace Engineer; Architectural Engineer; Chemical Engineer; Civil Engineer; Computer Engineer; Electrical Engineer; Mechanical Engineer, and other types of engineers Most career options require a B.S. degree.

A.S. in General Science

Areas of Study include:

- Physical Anthropology
- Astronomy
- Biology
- Chemistry
- Engineering
- Physical Geography
- Geology
- Physics

Eighteen (18) units of transfer level course work in science is required. Two laboratory courses must be included: one in the physical sciences and one in the biological sciences. Courses may be selected from astronomy, biology, chemistry, geology, physical geography, physical anthropology, and physics. The student, in consultation with a counselor, should choose science courses to meet his or her program, transfer, or general education requirements.

Students interested in transferring to a four-year university with a science major are encouraged to complete a science AS or AS-T degree such as Anthropology, Biology, Chemistry, Engineering, Geography, Geology, or Physics. This General Science degree may not include the majors-level transfer courses needed for many science majors. Students are strongly recommended to see a counselor for guidance.

Catalog Date: June 1, 2020

Degree Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Life Science with Lab:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A minimum of 4 units from the following:</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>ANTH 300</td>
<td>Biological Anthropology (3)</td>
<td></td>
</tr>
<tr>
<td>and ANTH 301</td>
<td>Biological Anthropology Laboratory (1)</td>
<td></td>
</tr>
<tr>
<td>BIOL 307</td>
<td>Biology of Organisms (4)</td>
<td></td>
</tr>
<tr>
<td>BIOL 310</td>
<td>General Biology (4)</td>
<td></td>
</tr>
<tr>
<td>BIOL 400</td>
<td>Principles of Biology (5)</td>
<td></td>
</tr>
<tr>
<td>BIOL 410</td>
<td>Principles of Botany (5)</td>
<td></td>
</tr>
<tr>
<td>BIOL 420</td>
<td>Principles of Zoology (5)</td>
<td></td>
</tr>
<tr>
<td>BIOL 430</td>
<td>Anatomy and Physiology (5)</td>
<td></td>
</tr>
<tr>
<td>BIOL 431</td>
<td>Anatomy and Physiology (5)</td>
<td></td>
</tr>
<tr>
<td>BIOL 440</td>
<td>General Microbiology (4)</td>
<td></td>
</tr>
<tr>
<td>B. Physical Science with Lab:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A minimum of 3 units from the following:</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>ASTR 400</td>
<td>Astronomy Laboratory (1)</td>
<td></td>
</tr>
<tr>
<td>and ASTR 300</td>
<td>Introduction to Astronomy (3)</td>
<td></td>
</tr>
<tr>
<td>CHEM 300</td>
<td>Beginning Chemistry (4)</td>
<td></td>
</tr>
<tr>
<td>CHEM 305</td>
<td>Introduction to Chemistry (5)</td>
<td></td>
</tr>
<tr>
<td>COURSE CODE</td>
<td>COURSE TITLE</td>
<td>UNITS</td>
</tr>
<tr>
<td>-------------</td>
<td>------------------------------------------------------------------------------</td>
<td>-------</td>
</tr>
<tr>
<td>CHEM 306</td>
<td>Introduction to Organic and Biological Chemistry (5)</td>
<td></td>
</tr>
<tr>
<td>CHEM 309</td>
<td>Integrated General, Organic, and Biological Chemistry (5)</td>
<td></td>
</tr>
<tr>
<td>CHEM 322</td>
<td>Environmental Chemistry Laboratory (1)</td>
<td></td>
</tr>
<tr>
<td>and CHEM 321</td>
<td>Environmental Chemistry (3)</td>
<td></td>
</tr>
<tr>
<td>CHEM 400</td>
<td>General Chemistry I (5)</td>
<td></td>
</tr>
<tr>
<td>CHEM 401</td>
<td>General Chemistry II (5)</td>
<td></td>
</tr>
<tr>
<td>CHEM 420</td>
<td>Organic Chemistry I (5)</td>
<td></td>
</tr>
<tr>
<td>CHEM 421</td>
<td>Organic Chemistry II (5)</td>
<td></td>
</tr>
<tr>
<td>GEOG 301</td>
<td>Physical Geography Laboratory (1)</td>
<td></td>
</tr>
<tr>
<td>and GEOG 300</td>
<td>Physical Geography: Exploring Earth's Environmental Systems (3)</td>
<td></td>
</tr>
<tr>
<td>GEOL 301</td>
<td>Physical Geology Laboratory (1)</td>
<td></td>
</tr>
<tr>
<td>and GEOL 300</td>
<td>Physical Geology (3)</td>
<td></td>
</tr>
<tr>
<td>GEOL 306</td>
<td>Earth Science Laboratory (1)</td>
<td></td>
</tr>
<tr>
<td>and GEOL 305</td>
<td>Earth Science (3)</td>
<td></td>
</tr>
<tr>
<td>GEOL 311</td>
<td>Historical Geology Laboratory (1)</td>
<td></td>
</tr>
<tr>
<td>and GEOL 310</td>
<td>Historical Geology (3)</td>
<td></td>
</tr>
<tr>
<td>ENGR 304</td>
<td>How Things Work (3)</td>
<td></td>
</tr>
<tr>
<td>PHYS 350</td>
<td>General Physics (4)</td>
<td></td>
</tr>
<tr>
<td>PHYS 360</td>
<td>General Physics (4)</td>
<td></td>
</tr>
<tr>
<td>PHYS 370</td>
<td>Introductory Physics - Mechanics and Thermodynamics (5)</td>
<td></td>
</tr>
<tr>
<td>PHYS 380</td>
<td>Introductory Physics - Electricity and Magnetism, Light and Modern Physics (5)</td>
<td></td>
</tr>
<tr>
<td>PHYS 411</td>
<td>Mechanics of Solids and Fluids (4)</td>
<td></td>
</tr>
<tr>
<td>PHYS 421</td>
<td>Electricity and Magnetism (4)</td>
<td></td>
</tr>
<tr>
<td>PHYS 431</td>
<td>Heat, Waves, Light and Modern Physics (4)</td>
<td></td>
</tr>
<tr>
<td>C. Additional Science Courses:</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
| A minimum of 11 units from the following:                                                                             | 11
<p>| ANTH 300    | Biological Anthropology (3)                                                  |       |
| ANTH 301    | Biological Anthropology Laboratory (1)                                       |       |
| ASTR 300    | Introduction to Astronomy (3)                                                |       |
| ASTR 400    | Astronomy Laboratory (1)                                                     |       |
| BIOL 300    | The Foundations of Biology (3)                                               |       |
| BIOL 307    | Biology of Organisms (4)                                                     |       |
| BIOL 310    | General Biology (4)                                                          |       |
| BIOL 342    | The New Plagues: New and Ancient Infectious Diseases Threatening World Health (3)|       |
| BIOL 350    | Environmental Biology (3)                                                   |       |
| BIOL 352    | Conservation Biology (3)                                                    |       |</p>
<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 390</td>
<td>Natural History Field Study (0.5 - 4)</td>
<td></td>
</tr>
<tr>
<td>BIOL 400</td>
<td>Principles of Biology (5)</td>
<td></td>
</tr>
<tr>
<td>BIOL 410</td>
<td>Principles of Botany (5)</td>
<td></td>
</tr>
<tr>
<td>BIOL 420</td>
<td>Principles of Zoology (5)</td>
<td></td>
</tr>
<tr>
<td>BIOL 430</td>
<td>Anatomy and Physiology (5)</td>
<td></td>
</tr>
<tr>
<td>BIOL 431</td>
<td>Anatomy and Physiology (5)</td>
<td></td>
</tr>
<tr>
<td>BIOL 440</td>
<td>General Microbiology (4)</td>
<td></td>
</tr>
<tr>
<td>BIOL 462</td>
<td>Genetics in Contemporary Human Society (3)</td>
<td></td>
</tr>
<tr>
<td>CHEM 300</td>
<td>Beginning Chemistry (4)</td>
<td></td>
</tr>
<tr>
<td>CHEM 305</td>
<td>Introduction to Chemistry (5)</td>
<td></td>
</tr>
<tr>
<td>CHEM 306</td>
<td>Introduction to Organic and Biological Chemistry (5)</td>
<td></td>
</tr>
<tr>
<td>CHEM 309</td>
<td>Integrated General, Organic, and Biological Chemistry (5)</td>
<td></td>
</tr>
<tr>
<td>CHEM 321</td>
<td>Environmental Chemistry (3)</td>
<td></td>
</tr>
<tr>
<td>CHEM 322</td>
<td>Environmental Chemistry Laboratory (1)</td>
<td></td>
</tr>
<tr>
<td>CHEM 400</td>
<td>General Chemistry I (5)</td>
<td></td>
</tr>
<tr>
<td>CHEM 401</td>
<td>General Chemistry II (5)</td>
<td></td>
</tr>
<tr>
<td>CHEM 420</td>
<td>Organic Chemistry I (5)</td>
<td></td>
</tr>
<tr>
<td>CHEM 421</td>
<td>Organic Chemistry II (5)</td>
<td></td>
</tr>
<tr>
<td>ENGR 304</td>
<td>How Things Work (3)</td>
<td></td>
</tr>
<tr>
<td>GEOG 300</td>
<td>Physical Geography: Exploring Earth's Environmental Systems (3)</td>
<td></td>
</tr>
<tr>
<td>GEOG 301</td>
<td>Physical Geography Laboratory (1)</td>
<td></td>
</tr>
<tr>
<td>GEOG 305</td>
<td>Global Climate Change (3)</td>
<td></td>
</tr>
<tr>
<td>GEOG 306</td>
<td>Weather and Climate (3)</td>
<td></td>
</tr>
<tr>
<td>GEOL 300</td>
<td>Physical Geology (3)</td>
<td></td>
</tr>
<tr>
<td>GEOL 301</td>
<td>Physical Geology Laboratory (1)</td>
<td></td>
</tr>
<tr>
<td>GEOL 305</td>
<td>Earth Science (3)</td>
<td></td>
</tr>
<tr>
<td>GEOL 306</td>
<td>Earth Science Laboratory (1)</td>
<td></td>
</tr>
<tr>
<td>GEOL 310</td>
<td>Historical Geology (3)</td>
<td></td>
</tr>
<tr>
<td>GEOL 311</td>
<td>Historical Geology Laboratory (1)</td>
<td></td>
</tr>
<tr>
<td>GEOL 330</td>
<td>Introduction to Oceanography (3)</td>
<td></td>
</tr>
<tr>
<td>GEOL 390</td>
<td>Field Studies in Geology (1 - 4)</td>
<td></td>
</tr>
<tr>
<td>PHYS 310</td>
<td>Conceptual Physics (3)</td>
<td></td>
</tr>
<tr>
<td>PHYS 350</td>
<td>General Physics (4)</td>
<td></td>
</tr>
<tr>
<td>PHYS 360</td>
<td>General Physics (4)</td>
<td></td>
</tr>
<tr>
<td>PHYS 370</td>
<td>Introductory Physics - Mechanics and Thermodynamics (5)</td>
<td></td>
</tr>
<tr>
<td>PHYS 380</td>
<td>Introductory Physics - Electricity and Magnetism, Light and Modern Physics (5)</td>
<td></td>
</tr>
</tbody>
</table>
### Engineering (ENGR)

#### ENGR 300 Introduction to Engineering

- **Units:** 1
- **Hours:** 18 hours LEC
- **Prerequisite:** None.
- **Transferable:** CSU; UC
- **Catalog Date:** June 1, 2020

This course will provide students with information to evaluate the engineering profession as a personal career choice. Students will explore the branches of engineering and the different types of work that engineers do. Participants will investigate personal characteristics which contribute to being happy and successful engineers, and will examine their own traits. They will learn what preparation is needed and strategies for successful completion. Course participants will appreciate the role of engineers in society and understand the responsibilities of engineers in their service to society.

### Student Learning Outcomes

Upon completion of this course, the student will be able to:

- **SLO#1 – DESCRIBE ASPECTS OF ENGINEERING AS A PROFESSION**
  - describe different branches of engineering
  - describe different types of work functions performed by engineers
  - explain the responsibility of engineers to their clients

- **SLO#2 – ASSESS ENGINEERING AS A SUITABLE PERSONAL CAREER CHOICE**
  - investigate personal characteristics which contribute to satisfaction and success in engineering and compare them to their own traits

- **SLO#3 – UNDERSTAND THE REQUIREMENTS FOR BECOMING AN ENGINEER**
  - ascertain the requirements for different engineering majors at different universities
  - create a personal education plan to become an engineer
  - describe and perform behaviors that will support success in becoming an engineer
ENGR 304 How Things Work

This course covers how everyday things and technologies operate and is designed primarily for non-science students or anyone interested in learning about technology. The basic scientific principles behind the technology will be explored. Systems studied will include mechanical, electrical, thermal, optical and others. Students will gain hands-on experience with basic machines and technologies during lab.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- APPLY THE SCIENTIFIC METHOD TO DEMONSTRATE HOW MODERN TECHNOLOGY WORKS AND IS DEVELOPED. (SLO 1)
- identify the scientific principles used in common engineering systems.
- CONSTRUCT A SCIENTIFIC ANALYSIS OF AN ENGINEERING SYSTEM THAT THE STUDENT ENCOUNTERS ROUTINELY. (SLO 2)
- analyze a system and break it down into simpler components and explain how the components interface to create a desired result.
- Build basic machines or technologies and investigate hands-on how things function
- DEMONSTRATE AN INCREASED SCIENTIFIC AND TECHNICAL LITERACY, INCLUDING AN INCREASED TECHNICAL VOCABULARY. (SLO 3)
- critique common scientific misconceptions regarding technology.
- SOLVE ENGINEERING PROBLEMS THAT REQUIRE CRITICAL THINKING TO COMPLETE. (SLO 4)

ENGR 312 Engineering Graphics

Students will learn the graphical tools needed to develop and communicate engineering ideas. They will learn to represent objects in technical drawings (orthographic projection). Students will create drawings using computer aided drafting software (two-dimensional). They will solve civil engineering problems using grade, bearing, scales, topographical maps, and plan and profile views. Students will use three-dimensional solid modeling software to create models of mechanical objects from which they will make drawings. Students will learn the steps in engineering design, and will complete a design project which will culminate in detail and assembly drawings. This course is primarily for Mechanical and Civil Engineering majors.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO#1 - CREATE AND USE TECHNICAL DRAWINGS USING TWO DIMENSIONAL COMPUTER SOFTWARE
  - represent objects completely in fully dimensioned orthographic projections
  - construct isometric drawings
  - determine the true length, grade, and bearing of scaled features
  - construct plan and profile drawings for civil engineering applications
  - construct a set of working drawings
- SLO#2 - CREATE AND USE THREE DIMENSIONAL SOLID MODELS

Units: 3
Hours: 36 hours LEC; 72 hours LAB
Prerequisite: Completion of MATH 110 or high school geometry with a grade of C or better; and MATH 120 with a grade of C or better.
Advisory: CSU; UC
Transferable: June 1, 2020
Catalog Date: June 1, 2020

Units: 3
Hours: 36 hours LEC; 54 hours LAB
Prerequisite: None.
Advisory: MATH 100
Transferable: CSU; UC
General Education: AA/AS Area IV; CSU Area B1; CSU Area B3
Catalog Date: June 1, 2020
ENGR 400 Introduction to Electrical Circuits and Devices

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO#1 - ANALYZE ELECTRIC CIRCUITS FOR DC, TRANSIENT, AND AC VOLTAGE AND CURRENT RESPONSES
- understand and apply various analysis techniques such as nodal analysis, loop analysis, superposition, source transformations, and Thevenin and Norton equivalents
- evaluate different analysis techniques and choose an appropriate technique for a particular circuit
- in circuits with step functions applied, solve for transient, forced, and complete response
- use phasors and impedances to analyze AC circuits
- SLO#2 - APPLY A SIMPLE MODEL FOR OPERATIONAL AMPLIFIERS TO SOLVE SIMPLE CIRCUITS
- SLO#3 - USE MULTIMETERS, SIGNAL GENERATORS, AND OSCILLOSCOPES
- SLO#4 - CALCULATE POWER IN DC AND AC CIRCUITS
- perform conservation of power checks
- apply the concepts of complex power to analyze AC circuits
- analyze Y-Y connected balanced three phase circuits

ENGR 412 Properties of Materials

Student Learning Outcomes

This is an introductory course on the relationship of the internal structure of materials to their properties. Topics include crystalline structure, imperfections, phases and phase diagrams, steels and non-ferrous alloys, polymers, ceramics, semiconductors, and corrosion. Students will apply the concepts in laboratory activities and will use typical materials testing equipment and analysis techniques. This course is required for CRC’s A.S.-Engineering, Civil/Mechanical Engineering option degree, and many university engineering B.S. degrees.
Upon completion of this course, the student will be able to:

- SLO1: RELATE THE PROPERTIES OF A MATERIAL TO ITS STRUCTURE ON A SUB-MICROSCOPIC SCALE.
  - Construct models of crystalline structures and explain how the structure's characteristics affect a material's properties.
  - Distinguish between the types of imperfections that occur in crystalline structures and compare their effects on a material's properties.
  - Describe different strengthening mechanisms and compare their effects.
  - Relate typical properties of polymers and ceramics to their molecular and crystalline or amorphous structures.
  - Describe the mechanism for electrical conduction in metals and semiconductors.

- SLO2: INTERPRET BINARY PHASE DIAGRAMS.
  - Perform analysis involving different compositions, temperature, and phases.
  - Analyze eutectic and eutectoid reactions and the microconstituents that result.

- SLO3: CHARACTERIZE MATERIAL PROPERTIES.
  - Perform tension, compression, and hardness tests, and interpret the results.

- SLO4: DESCRIBE, SPECIFY, AND COMPARE DIFFERENT PROCESSES FOR FORMING OR TRANSFORMING MATERIALS.
  - Calculate rates of steady-state diffusion.
  - Specify processes involving cold work and annealing that provide specified properties.
  - Describe solidification processes and the microstructures that result when casting metals.
  - Compare different thermal processes for strengthening steel and aluminum alloys, the microstructures that result, and their effect on strength.
  - Mix, pour, and test concrete.
  - Describe different forming processes for ceramics.

- SLO5: IDENTIFY AND DESCRIBE DIFFERENT FAILURE MECHANISMS AND APPROACHES TO PREVENTION.
  - Identify and describe ductile and brittle fracture, fatigue, and creep.
  - Differentiate between different corrosion mechanisms and choose appropriate ways to prevent corrosion.

- SLO6: CONDUCT LABORATORY INVESTIGATIONS AND EXHIBIT PROFESSIONALISM
  - Produce and analyze data, discuss results, draw conclusions.
  - Write well organized reports that demonstrate good technical writing skills and professional appearance.
  - Demonstrate good practice and professional behavior (showing appropriate respect for people and equipment), including safety precautions, in lab work.
  - Behave ethically in collaboration with others and in the use of assistance obtained outside the context of class.

### ENGR 420 Statics

**Units:** 3  
**Hours:** 54 hours LEC  
**Prerequisite:** MATH 401 and PHYS 411 with grades of "C" or better  
**Transferable:** CSU; UC  
**C-ID:** C-ID ENGR 130  
**Catalog Date:** June 1, 2020

This course covers analysis of two and three dimensional force systems for bodies in static equilibrium. Vector and scalar analysis methods address forces acting on rigid bodies, trusses, frames, and machines. Students will calculate internal forces in members and will create shear and bending moment diagrams for beams. Friction problems will include slipping vs tipping. Students will learn methods to calculate centroids and moments of inertia for bodies that are combinations of simple geometric shapes. This course is required for most engineering majors.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:
• SLO#1 - REDUCE SYSTEMS OF FORCES TO ONE EQUIVALENT FORCE, OR ONE FORCE AND ONE COUPLE.
transform information describing forces in a variety of formats into Cartesian vectors
• calculate moments of forces and couples using scalar and vector approaches

• SLO#2 - ANALYZE OBJECTS IN STATIC EQUILIBRIUM FOR EXTERNAL FORCES
• characterize reactions at supports for two and three dimensional objects
draw free body diagrams for particles, rigid bodies, and members of frames and machines
formulate and solve equilibrium equations for forces on particles, rigid bodies, and members of frames and machines in two and three dimensions

• SLO#3 - DETERMINE INTERNAL FORCES
• apply Method of Joints and Method of Sections to find forces in truss members
determine axial, shear, and bending moment at specified points in rigid bodies
produce explicit functions for shear and bending moment in beams
construct shear and bending moment diagrams for beams

• SLO#4 - ANALYZE SYSTEMS THAT INCLUDE DRY FRICTION
• solve for forces in problems that include impending motion, no impending motion, and slipping vs. tipping

• SLO#5 - DETERMINE GEOMETRICAL PROPERTIES OF COMPOSITE BODIES
calculate centroids for two and three dimensional composite bodies
calculate moments of inertia for two and three dimensional composite bodies

ENGR 495 Independent Studies in Engineering

Units: 1 - 3
Hours: 54 - 162 hours LAB
Prerequisite: None.
Transferable: CSU
Catalog Date: June 1, 2020

An independent studies project involves an individual student or small group of students in study, research, or activities beyond the scope of regularly offered courses. See the current catalog section of “Special Studies” for full details of Independent Studies.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• SLO #1: Actively engage in intellectual inquiry beyond that required in order to pass a course of study (College Wide Learning Outcome – Area 4).

• Discuss and outline a proposal of study (that can be accomplished within one semester term) with a supervising instructor qualified within the discipline.

• Design an independent study (to be completed individually or by collaboration of a small group) to foster special knowledge, skills, and experience that are not available in any one regularly scheduled course.

• Use information resources to gather discipline-specific information.

• SLO #2: Utilize modes of analysis and critical thinking to apply theoretical perspectives and/or concepts in the major discipline of study to significant problems and/or educational activities (College Wide Learning Outcome – Area 3).

• Analyze and apply the knowledge, skills and experience that are involved in the independent study to theoretical perspectives and/or concepts in the major discipline of study.

• Explain the importance of the major discipline of study in the broader picture of society.

• SLO #3: Communicate a complex understanding of content matter of the major discipline of study (College Wide Outcome – Area 3).

• Demonstrate competence in the skills essential to mastery of the major discipline of study that are necessary to accomplish the independent study.
ENGR 498 Work Experience in Engineering

**Units:** 1 - 4  
**Hours:** 60 - 300 hours LAB  
**Prerequisite:** None.  
**Enrollment Limitation:** Students must be in a paid or unpaid internship, volunteer position or job related to career goals in Engineering.  
**Transferable:** CSU  
**General Education:** AA/AS Area III(b)  
**Catalog Date:** June 1, 2020

This course provides students with opportunities to develop marketable skills in preparation for employment in their major field of study or advancement within their career. It is designed for students interested in work experience and/or internships in transfer level degree occupational programs. Course content includes understanding the application of education to the workforce; completion of required forms which document the student's progress and hours spent at the work site; and developing workplace skills and competencies. Appropriate level learning objectives are established by the student and the employer. During the semester, the student is required to participate in a weekly orientation and 75 hours of related paid work experience, or 60 hours of unpaid work experience for one unit. An additional 75 or 60 hours of related work experience is required for each additional unit. Work Experience may be taken for a total of 16 units when there are new or expanded learning objectives. Only one Work Experience course may be taken per semester.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- **DEMONSTRATE AN UNDERSTANDING AND APPLICATION OF PROFESSIONAL WORKPLACE BEHAVIOR IN A FIELD OF STUDY RELATED ONE'S CAREER.(SLO 1)**
  - Understand the effects time, stress, and organizational management have on performance.
  - Demonstrate an understanding of consistently practicing ethics and confidentiality in a workplace.
  - Examine the career/life planning process and relate its relevancy to the student.
  - Demonstrate an understanding of basic communication tools and their appropriate use.
  - Demonstrate an understanding of workplace etiquette.

- **DESCRIBE THE CAREER/LIFE PLANNING PROCESS AND RELATE ITS RELEVANCY TO ONE'S CAREER.(SLO 2)**
  - Link personal goals to long term achievement.
  - Display an understanding of creating a professional first impression.
  - Understand how networking is a powerful job search tool.
  - Understand necessary elements of a résumé.
  - Understand the importance of interview preparation.
  - Identify how continual learning increases career success.

- **DEMONSTRATE APPLICATION OF INDUSTRY KNOWLEDGE AND THEORETICAL CONCEPTS AS WRITTEN IN LEARNING OBJECTIVES IN PARTNERSHIP WITH THE EMPLOYER WORK SITE SUPERVISOR.(SLO 3)**
“Anyone who has read a great deal can imagine the new world that opened. Let me tell you something: from then until I left that prison, in every free moment I had, if I was not reading in the library, I was reading on my bunk. You couldn't have gotten me out of books with a wedge... Up to then, I never had been so truly free in my life.” — Malcolm X

The CRC English Department teaches universal skills applicable in multiple fields and disciplines. Today's business leaders want to hire colleagues who understand the human experience from a variety of perspectives and who have the skills to read detailed instructions and construct logical, persuasive reports. As Stanford University states, “Careers no longer follow the linear paths that they have for previous generations... The skills you [develop] as an English major... prepare you for a range of possible careers.” No matter where you plan to transfer, this degree will give you the skills and flexibility to follow your heart toward any number of dynamic careers.

Dean

(916) 691-7740

CasareA@crc.losrios.edu

Associate Degrees for Transfer

A.A.-T. in English

The Associate in Arts in English for Transfer Degree (AA-T) is designed to provide a seamless transfer pathway for students interested in pursuing at least one English degree option in the California State University (CSU) system. Students must complete the core curriculum and electives to meet a total of 60 transferable units with a minimum 2.0 GPA, which includes the CSU General Education Breadth or the Intersegmental General Education Transfer Curriculum (IGETC) pattern. Students must also earn a grade of C or better in all the courses for the major as described in the Required Program. Upon successful completion of the degree requirements, students will be guaranteed admission to the CSU system with junior status and will not have to repeat lower division coursework. Students are encouraged to meet with a counselor to develop their educational plans as degree options and general education requirements vary for each university.

Catalog Date: June 1, 2020

Degree Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Core:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENGWR 301</td>
<td>College Composition and Literature</td>
<td>3</td>
</tr>
<tr>
<td>ENGWR 302</td>
<td>Advanced Composition and Critical Thinking</td>
<td>3</td>
</tr>
<tr>
<td>List A:</td>
<td></td>
<td>6</td>
</tr>
<tr>
<td>ENGLT 310</td>
<td>English Literature I (3)</td>
<td></td>
</tr>
<tr>
<td>ENGLT 311</td>
<td>English Literature II (3)</td>
<td></td>
</tr>
<tr>
<td>ENGLT 320</td>
<td>American Literature I (3)</td>
<td></td>
</tr>
<tr>
<td>ENGLT 321</td>
<td>American Literature II (3)</td>
<td></td>
</tr>
<tr>
<td>ENGLT 340</td>
<td>World Literature I (3)</td>
<td></td>
</tr>
<tr>
<td>ENGLT 341</td>
<td>World Literature II (3)</td>
<td></td>
</tr>
<tr>
<td>COURSE CODE</td>
<td>COURSE TITLE</td>
<td>UNITS</td>
</tr>
<tr>
<td>-------------</td>
<td>--------------------------------------------</td>
<td>-------</td>
</tr>
<tr>
<td></td>
<td><strong>List B:</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>A minimum of 3 units from the following:</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Any course from List A not used above.</td>
<td></td>
</tr>
<tr>
<td>ENGCW 400</td>
<td>Creative Writing (3)</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>List C:</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>A minimum of 3 units from the following:</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Any course from Lists A or B not used above.</td>
<td></td>
</tr>
<tr>
<td>BUS 310</td>
<td>Business Communications (3)</td>
<td></td>
</tr>
<tr>
<td>ENGCW 400</td>
<td>Creative Writing (3)</td>
<td></td>
</tr>
<tr>
<td>ENGCW 410</td>
<td>Fiction Writing Workshop (3)</td>
<td></td>
</tr>
<tr>
<td>ENGCW 420</td>
<td>Poetry Writing Workshop (3)</td>
<td></td>
</tr>
<tr>
<td>ENGCW 430</td>
<td>Creative Non-Fiction Writing Workshop (3)</td>
<td></td>
</tr>
<tr>
<td>ENGCW 452</td>
<td>College Literary Magazine (4)</td>
<td></td>
</tr>
<tr>
<td>ENGCW 480</td>
<td>Honors Seminar: Creative Writing and Culture (3)</td>
<td></td>
</tr>
<tr>
<td>ENGED 305</td>
<td>Structure of English (3)</td>
<td></td>
</tr>
<tr>
<td>ENGLT 303</td>
<td>Introduction to the Short Story (3)</td>
<td></td>
</tr>
<tr>
<td>ENGLT 330</td>
<td>African American Literature (3)</td>
<td></td>
</tr>
<tr>
<td>ENGLT 336</td>
<td>Race and Ethnicity in Contemporary American Literature (3)</td>
<td></td>
</tr>
<tr>
<td>ENGLT 343</td>
<td>Contemporary Third World Literature (3)</td>
<td></td>
</tr>
<tr>
<td>ENGLT 345</td>
<td>Mythologies of the World (3)</td>
<td></td>
</tr>
<tr>
<td>ENGLT 360</td>
<td>Women in Literature (3)</td>
<td></td>
</tr>
<tr>
<td>ENGLT 370</td>
<td>Children and Literature (3)</td>
<td></td>
</tr>
<tr>
<td>ENGLT 402</td>
<td>Introduction to Shakespeare and Film (3)</td>
<td></td>
</tr>
<tr>
<td>HUM 300</td>
<td>Classical Humanities (3)</td>
<td></td>
</tr>
<tr>
<td>HUM 301</td>
<td>Introduction to the Humanities (3)</td>
<td></td>
</tr>
<tr>
<td>JOUR 300</td>
<td>Newswriting and Reporting (3)</td>
<td></td>
</tr>
<tr>
<td>SPAN 426</td>
<td>Introduction to Mexican American Literature (3)</td>
<td></td>
</tr>
<tr>
<td>SPAN 427</td>
<td>Introduction to Spanish American Literature (3)</td>
<td></td>
</tr>
<tr>
<td>TA 300</td>
<td>Introduction to the Theatre (3)</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Total Units:</strong></td>
<td>18</td>
</tr>
</tbody>
</table>

The Associate in Arts in English for Transfer (AA-T) degree may be obtained by completion of 60 transferable, semester units with a minimum 2.0 GPA, including (a) the major or area of emphasis described in the Required Program, and (b) either the Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education-Breadth Requirements.

**Student Learning Outcomes**

Upon completion of this program, the student will be able to:

- function successfully and completely at the university, in the workplace, and in diverse cultural settings with the academic literacy skills they have obtained. (P-SLO #1: Diversity)
- recognize the ethical implications of various modes of communication and the need to use this knowledge responsibly. (P-SLO #2: Ethics)
• become self-reliant, evaluative readers and writers, able to use critical thinking skills to read and write effectively and in academic and workplace settings. (P-SLO #3: Critical thinking)

• develop academic literacy skills, to utilize reading and writing processes, to find and comprehend information, and to apply that knowledge in myriad rhetorical situations. (P-SLO #4: Analytical thinking)

• obtain the necessary reading and writing skills for university-level courses. (P-SLO #5: Communication)

Career Information

The AA-T in English can provide students with the foundational knowledge necessary for transfer to a 4-year Bachelor of Arts (BA) degree program. Career opportunities for students who have earned BS or BA degrees in English include but are not limited to: Advertising; Business; Civil Servant; Columnist/Journalist; Contract Specialist; Editor/Evaluator; Information Specialist; Insurance; Interpreter; Lawyer; Lexicographer; Legislative Assistant; Librarian; Manager; Methods Analyst; Program Developer; Public Relations; Publisher; Researcher; Teacher; Technical Writer; Writing Consultant. Some careers may require additional training.

NOTE TO TRANSFER STUDENTS: The Associate Degree for Transfer program is designed for students who plan to transfer to a campus of the California State University (CSU). Other than the required core, the courses you choose to complete this degree will depend to some extent on the selected CSU for transfer. In addition, some CSU-GE Breadth or IGETC requirements can also be completed using courses required for this associate degree for transfer major (known as “double-counting”). Meeting with a counselor to determine the most appropriate course choices will facilitate efficient completion of your transfer requirements. For students wishing to transfer to other universities (UC System, private, or out-of-state), the Associate Degree for Transfer may not provide adequate preparation for upper-division transfer admissions; it is critical that you meet with a CRC counselor to select and plan the courses for the major, as programs vary widely in terms of the required preparation.

Associate Degrees

A.A. in English

Anyone who has read a great deal can imagine the new world that opened. Let me tell you something: from then until I left that prison, in every free moment I had, if I was not reading in the library, I was reading on my bunk. You couldn't have gotten me out of books with a wedge … Up to then, I never had been so truly free in my life” ~ Malcolm X.

The CRC English department teaches skills that are universal to every other discipline. Taking courses in English increases the student's chances of success in every other area the student chooses to pursue. The ability to read effectively and to write expressively will prove invaluable for any CRC student.

The English major offers courses in literature, composition, and creative writing designed to enhance communication skills, deepen cultural awareness, provide a breadth of knowledge appropriate for many degree and vocational programs, and prepare students for transfer to four-year institutions, and for a baccalaureate major in English or related majors.

HIGHLIGHTS

*Numerous composition and literature courses
*Composition designed for all levels of ability
*Creative writing and writing for publication
*Exemplary faculty: creative, dedicated and innovative

NOTE TO TRANSFER STUDENTS: If you are interested in transferring to a four-year college or university to pursue a bachelor's degree in this major, it is critical that you meet with a CRC counselor to select and plan the courses for your major. Schools vary widely in terms of the required preparation. The courses that CRC requires for an Associate's degree in this major may be different from the requirements needed for the Bachelor's degree.

Catalog Date: June 1, 2020

Degree Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGWR 300</td>
<td>College Composition</td>
<td>3</td>
</tr>
<tr>
<td>ENGWR 301</td>
<td>College Composition and Literature (3)</td>
<td>3</td>
</tr>
<tr>
<td>or ENGWR 302</td>
<td>Advanced Composition and Critical Thinking (3)</td>
<td></td>
</tr>
<tr>
<td>ENGLT 320</td>
<td>American Literature I</td>
<td>3</td>
</tr>
<tr>
<td>ENGLT 321</td>
<td>American Literature II</td>
<td>3</td>
</tr>
<tr>
<td>COURSE CODE</td>
<td>COURSE TITLE</td>
<td>UNITS</td>
</tr>
<tr>
<td>-------------</td>
<td>--------------</td>
<td>-------</td>
</tr>
<tr>
<td>ENGLT 310</td>
<td>English Literature I</td>
<td>3</td>
</tr>
<tr>
<td>ENGLT 311</td>
<td>English Literature II</td>
<td>3</td>
</tr>
</tbody>
</table>

**Electives:**
A minimum of 6 units from the following: 6

- ENGED 305 | Structure of English (3) |
- ENGED 320 | Service Learning: Tutoring Elementary Students in Reading (3) |
- ENGWR 330 | Writing for Publication (3) |
  or JOUR 340 | Writing for Publication (3) |
- ENGWR 331 | Writing for Publication (3) |
- ENGCW 400 | Creative Writing (3) |
- ENGCW 410 | Fiction Writing Workshop (3) |
- ENGCW 420 | Poetry Writing Workshop (3) |
- ENGCW 430 | Creative Non-Fiction Writing Workshop (3) |
- ENGCW 452 | College Literary Magazine (4) |
- ENGLT 336 | Race and Ethnicity in Contemporary American Literature (3) |
- ENGLT 345 | Mythologies of the World (3) |
- ENGLT 360 | Women in Literature (3) |
- ENGLT 343 | Contemporary Third World Literature (3) |
- ENGLT 340 | World Literature I (3) |
- ENGLT 341 | World Literature II (3) |
- ENGLT 370 | Children and Literature (3) |
- ENGLT 330 | African American Literature (3) |
- ENGLT 303 | Introduction to the Short Story (3) |
- ENGLT 402 | Introduction to Shakespeare and Film (3) |

**Total Units:** 24

*The English Associate in Arts (A.A.) degree may be obtained by completion of the required program, plus general education requirements, plus sufficient electives to meet a 60-unit total. See CRC graduation requirements.*

**Student Learning Outcomes**

Upon completion of this program, the student will be able to:

- function successfully and completely at the university, in the workplace, and in diverse cultural settings with the academic literacy skills they have obtained. (P-SLO #1: Diversity)

- recognize the ethical implications of various modes of communication and the need to use this knowledge responsibly. (P-SLO #2: Ethics)

- become self-reliant, evaluative readers and writers, able to use critical thinking skills to read and write effectively and in academic and workplace settings. (P-SLO #3: Critical thinking)

- develop academic literacy skills, to utilize reading and writing processes, to find and comprehend information, and to apply that knowledge in myriad rhetorical situations. (P-SLO #4: Analytical thinking)

- obtain the necessary reading and writing skills for university-level courses. (P-SLO #5: Communication)
English - Creative Writing (ENGCW)

ENGCW 400 Creative Writing

This course is designed to guide students in creative writing through experience in three genres: short story, poetry, and creative non-fiction. The course includes analysis of literary models (professional writings in each genre), individual and class criticism of work in a workshop mode, and lecture on and discussion of literary techniques in each genre.

Upon completion of this course, the student will be able to:

- **BECOME SELF-RELIANT, EVALUATIVE READERS AND WRITERS, ABLE TO USE CRITICAL THINKING SKILLS TO READ AND WRITE EFFECTIVELY IN ACADEMIC AND WORKPLACE SETTINGS. (SLO #1, P-SLO #3)**
- Demonstrate the ability to revise effectively his/her own writing using critical thinking skills.
- **DEVELOP ACADEMIC LITERACY SKILLS, TO UTILIZE READING AND WRITING PROCESSES, TO FIND AND COMPREHEND INFORMATION, AND TO APPLY THAT KNOWLEDGE IN MYRIAD RHETORICAL SITUATIONS. (SLO #2, P-SLO #4)**
- Demonstrate an understanding of the use of literacy concepts in professional imaginative writing, such as point-of-view and unexpressed thinking for creative non-fiction, imagery and persona for poetry, and plot conflict in short fiction.
- **OBTAIN THE NECESSARY READING AND WRITING SKILLS FOR UNIVERSITY-LEVEL COURSES. (SLO #2, P-SLO #5)**
- Demonstrate the ability to compose one short story or part of a novel, a substantial amount of poetry, and one piece of creative non-fiction.
- Demonstrate the ability in group discussion and/or in writing to analyze other students' writing, providing both critical praise and suggestions for improvement.

ENGCW 410 Fiction Writing Workshop

This is a creative writing course designed for students who wish to concentrate on fiction writing. Through lecture, discussion, assigned reading, writing exercises, short story (or novel chapter) writing, and critiques of student writing in a workshop mode, the student will examine critically the elements of literary creation. The students will keep a journal and prepare a portfolio of their work.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- **BECOME SELF-RELIANT, EVALUATIVE READERS AND WRITERS, ABLE TO USE CRITICAL THINKING SKILLS TO READ AND WRITE EFFECTIVELY IN ACADEMIC AND WORKPLACE SETTINGS. (SLO #1, P-SLO #3)**
- Demonstrate the ability to revise effectively his/her own writing using critical thinking skills.
Demonstrate the ability in group discussion and/or in writing to analyze other students’ writing, providing both critical praise and suggestions for improvement.

DEVELOP ACADEMIC LITERACY SKILLS, TO UTILIZE READING AND WRITING PROCESSES, TO FIND AND COMPREHEND INFORMATION, AND TO APPLY THAT KNOWLEDGE IN MYRIAD RHETORICAL SITUATIONS. (SLO #2, P-SLO #4)

Demonstrate an understanding of the use of literary concepts in professional imaginative writing.

OBTAIN THE NECESSARY READING AND WRITING SKILLS FOR UNIVERSITY-LEVEL COURSES. (SLO #3, P-SLO #5)

Demonstrate the ability to compose two short fiction stories.

ENGCW 420 Poetry Writing Workshop

Units: 3
Hours: 54 hours LEC
Prerequisite: ENGWR 101 with a grade of “C” or better, or placement through the assessment process.
Transferable: CSU; UC (ENGCW 400, 410, 420, or 430 combined: maximum transfer credit is two courses)
General Education: AA/AS Area II(b)
Catalog Date: June 1, 2020

This is a creative writing course for students who wish to concentrate on poetry writing. Through lecture, discussion, assigned reading, writing exercises, poetry writing, and critiques of student writing in a workshop mode, the students will examine critically the elements of literary creation. The students will keep a journal and prepare a portfolio of their work.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- BE SELF-RELIANT, EVALUATIVE READERS AND WRITERS, ABLE TO USE CRITICAL THINKING SKILLS TO READ AND WRITE EFFECTIVELY IN ACADEMIC AND WORKPLACE SETTINGS (SLO #1; PSLO #3).

- recognize some of the aesthetic factors which characterize well-written poetry, such as thoughtful line breaks and a reliance on specific images rather than on general statement as a way to communicate meaning.

- DEVELOP ACADEMIC LITERACY SKILLS, TO UTILIZE READING AND WRITING PROCESSES, TO FIND AND COMPREHEND INFORMATION, AND TO APPLY THAT KNOWLEDGE IN MYRIAD RHETORICAL SITUATIONS (SLO# 2; PSLO# 4).

- analyze in group discussion and/or writing other students’ poems, providing both critical praise and suggestions for improvement.

- OBTAIN THE NECESSARY READING AND WRITING SKILLS FOR UNIVERSITY-LEVEL COURSES (SLO# 3; PSLO# 5).

- effectively revise their own writing using critical thinking skills in an effort to incorporate such aesthetics into their own poems.

ENGCW 430 Creative Non-Fiction Writing Workshop

Units: 3
Hours: 54 hours LEC
Prerequisite: ENGWR 101 with a grade of “C” or better, or placement through the assessment process.
Transferable: CSU; UC (ENGCW 400, 410, 420, or 430 combined: maximum transfer credit is two courses)
General Education: AA/AS Area II(b)
Catalog Date: June 1, 2020

This is a creative writing course concentrating on the literary essay. The class focuses on constructive in-class analysis of personal essays written by students. Students will write and critically examine essays such as the memoir, autobiography, reflective, and philosophical that have a literary, stylistic component. The class will also emphasize multi-cultural, multi-generational, mythological, and ecological topics. Students will prepare a portfolio of completed work.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- BECOME SELF-RELIANT, EVALUATIVE READERS AND WRITERS, ABLE TO USE CRITICAL THINKING SKILLS TO READ AND WRITE EFFECTIVELY IN ACADEMIC AND WORKPLACE SETTINGS. (SLO #1, P-SLO #3)

- learn methods of revision and apply them to their own work.
ENGCW 452 College Literary Magazine

Units: 4
Hours: 54 hours LEC; 54 hours LAB
Prerequisite: None.
Advisory: ENGWR 101, or placement through the assessment process.
Transferable: CSU
Catalog Date: June 1, 2020

Obtain hands-on experience as an editor for a nationally distributed and award-winning literary journal. Write, select, and edit manuscripts in the genres of poetry, short fiction, and creative non-fiction. Correspond with established authors and artists to create the campus's annual literary journal. Learn to use a submission manager and obtain tips on publishing your writing from the editor's point of view.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- BECOME SELF-RELIANT, EVALUATIVE READERS AND WRITERS, ABLE TO USE CRITICAL THINKING SKILLS TO READ AND WRITE EFFECTIVELY IN ACADEMIC AND WORKPLACE SETTINGS. (SLO #1, P-SLO #3)
- gain increased opportunity for creative expression in writing and art.
- DEVELOP ACADEMIC LITERACY SKILLS, UTILIZE READING AND WRITING PROCESSES, FIND AND COMPREHEND INFORMATION, AND APPLY THAT KNOWLEDGE IN MYRIAD RHETORICAL SITUATIONS. (SLO #2, P-SLO #4)
- develop reading, writing, and oral expression skills along with critiquing and critical thinking skills.
- OBTAIN THE NECESSARY READING AND WRITING SKILLS FOR UNIVERSITY-LEVEL COURSES. (SLO #3, P-SLO #5)
- see completion of writing process from creation of manuscript to publication in a magazine.
- RECOGNIZE THE ETHICAL IMPLICATIONS OF VARIOUS MODES OF COMMUNICATION AND THE NEED TO USE THIS KNOWLEDGE RESPONSIBLY. (SLO #4, P-SLO #2)
- assemble the contents of the annual literary magazine.
- encourage others from the community to contribute manuscripts and art.
- develop individual and group leadership skills.

ENGCW 480 Honors Seminar: Creative Writing and Culture

Units: 3
Hours: 54 hours LEC
Prerequisite: ENGWR 101 with a grade of “C” or better, or placement through the assessment process.
Transferable: CSU
General Education: AA/AS Area I; CSU Area C2
Catalog Date: June 1, 2020
This course is an honors seminar for students who wish to write fiction and to do so with an awareness of fiction's role in culture. Students will study the relationship between cultural events and literary conventions: connections, for example, between World War II and Hemingway's concise sentences, the birth of jazz and the language of the beatniks, Existentialism and Ralph Ellison's view of character, or the systematic repression of Native American languages and Joy Harjo's fluid syntax. While students become familiar with the history and cultural place of fiction, they will be writing and analyzing fiction of their own. Students will be encouraged both to "write from instinct" and to begin deliberately cultivating a style, identifying personal influences, and situating their writing in relation to major cultural events. This course may be taken only once for credit. Enrollment is limited to Honors Program students. Details about the Honors Program can be found in the front of the Catalog and on the CRC website.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- **BECOME SELF-RELIANT, EVALUATIVE READERS AND WRITERS, ABLE TO USE CRITICAL THINKING SKILLS TO READ AND WRITE EFFECTIVELY IN ACADEMIC AND WORKPLACE SETTINGS.** (SLO #1, P-SLO #3)

- interpret and discuss fiction in terms of its historical and cultural context.

- play creatively with sentences and push the limits of standard grammar.

- discuss their own fiction--its content and style--in terms of literary influences and historical events.

- **DEVELOP ACADEMIC LITERACY SKILLS, TO UTILIZE READING AND WRITING PROCESSES, TO FIND AND COMPREHEND INFORMATION, AND TO APPLY THAT KNOWLEDGE IN MYRIAD RHETORICAL SITUATIONS.** (SLO #2, P-SLO #4)

- read aloud with a sensitivity to the sounds and rhythms of words and sentences.

- write fiction of a higher quality than when they entered the course: giving greater attention to details, strategically pacing their stories, evoking emotions from their readers, and creating complex, believable characters.

- **OBTAIN THE NECESSARY READING AND WRITING SKILLS FOR UNIVERSITY-LEVEL COURSES.** (SLO #3, P-SLO #5)

- identify the conventional parts of fiction--character, plot, narrator, irony, metaphor etc.--and explain the major historical shifts in the definitions and functions of these terms.

ENGCW 495 Independent Studies in English - Creative Writing

| Units: | 1 - 3 |
| Hours: | 54 - 162 hours LAB |
| Prerequisite: | None. |
| Transferable: | CSU |
| Catalog Date: | June 1, 2020 |

An independent studies project involves an individual student or small group of students in study, research, or activities beyond the scope of regularly offered courses. See the current catalog section of "Special Studies" for full details of Independent Studies.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- **SLO #1:** Actively engage in intellectual inquiry beyond that required in order to pass a course of study (College Wide Learning Outcome – Area 4).

- Discuss and outline a proposal of study (that can be accomplished within one semester term) with a supervising instructor qualified within the discipline.

- Design an independent study (to be completed individually or by collaboration of a small group) to foster special knowledge, skills, and experience that are not available in any one regularly scheduled course.

- Use information resources to gather discipline-specific information.

- **SLO #2:** Utilize modes of analysis and critical thinking to apply theoretical perspectives and/or concepts in the major discipline of study to significant problems and/or educational activities (College Wide Learning Outcome – Area 3).

- Analyze and apply the knowledge, skills and experience that are involved in the independent study to theoretical perspectives and/or concepts in the major discipline of study.

- Explain the importance of the major discipline of study in the broader picture of society.

- **SLO #3:** Communicate a complex understanding of content matter of the major discipline of study (College Wide Outcome – Area 3).
Demonstrate competence in the skills essential to mastery of the major discipline of study that are necessary to accomplish the independent study.

SLO #4: Identify personal goals and pursue these goals effectively (College Wide Outcome – Area 4).

Utilize skills from the “academic tool kit” including time management, study skills, etc., to accomplish the independent study within one semester term.

English - Education (ENGED)

ENGED 305 Structure of English

- **Units:** 3
- **Hours:** 54 hours LEC
- **Prerequisite:** ENGWR 300 with a grade of “C” or better
- **Transferable:** CSU
- **General Education:** AA/AS Area II(a)
- **Catalog Date:** June 1, 2020

Designed for prospective teachers or those entering professions requiring strong written language skills, this course affords students the opportunity to study the history of English, traditional and transformational grammars, linguistics, standard usage, phonology, and orthography. Students will examine the development and structure of the English language, language acquisition, and the cultural and linguistic diversity represented by the students in the California public school system. They will also apply grammatical concepts as they meet the 2,000 word writing requirement.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- UTILIZE ACADEMIC LITERACY SKILLS AND KNOWLEDGE NECESSARY TO FUNCTION SUCCESSFULLY AND COMPLETELY AT THE UNIVERSITY, IN THE WORKPLACE AND IN DIVERSE CULTURAL SETTINGS. (PSLO#1, SLO#1)
- examine the history and structure of English.
- compare and contrast the methods of language acquisition, including acquisition of English among culturally diverse populations.
- apply knowledge of standard usage and differentiate between standard and non-standard usage in writing and writing instruction.
- BECOME A SELF-RELIANT, EVALUATIVE READER AND WRITER, ABLE TO USE CRITICAL THINKING SKILLS TO READ AND WRITE EFFECTIVELY IN ACADEMIC AND WORKPLACE SETTINGS. (PSLO#3, SLO#2)
- analyze and apply principles of phonology and orthography.
- employ critical thinking skills in making appropriate rhetorical choices based on grammatical considerations.
- ASSIST STUDENTS IN OBTAINING THE NECESSARY READING AND WRITING SKILLS FOR UNIVERSITY-LEVEL COURSES. (PSLO#5, SLO#3)
- apply the principles of traditional and transformative English grammars as those principles relate to writing.
- apply techniques such as sentence combining to explain relationships between grammar and writing.

ENGED 320 Service Learning: Tutoring Elementary Students in Reading

- **Units:** 3
- **Hours:** 36 hours LEC; 54 hours LAB
- **Prerequisite:** ENGRD 110 with a grade of “C” or better, or placement through the assessment process.
- **Transferable:** CSU
- **General Education:** AA/AS Area III(b); CSU Area E1
- **Catalog Date:** June 1, 2020
This class offers students an opportunity to learn and practice basic methods of tutoring elementary children in reading. Students will meet on campus for the first part of the semester to be trained, and then will be assigned to a nearby elementary school where they will have in-depth practice at tutoring elementary children. This course, which provides an early field experience for students interested in elementary education, may be taken once for credit. Prior to beginning work in the schools, students may be required to be fingerprinted and pass a TB test.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- **SLO#1**: Define, clarify and analyze components of a developmentally-appropriate elementary school reading/language arts program.
  
  **Objective A**: Compare and hypothesize how classroom instruction and classroom tutoring differ and complement one another to allow opportunities for all learners to read, write, spell, speak and listen.

  **Objective B**: Discover how the various components of the elementary school reading/language arts programs are organized into a developmentally-appropriate curriculum by identifying how reading/language arts instruction is presented in the classroom.

  **Objective C**: Interpret and analyze how the Reading/Language Arts Framework for California Public Schools K - 12 provides a theoretical and developmentally-appropriate base for curriculum development and instruction.

  **Objective D**: Infer how the reading process relates to the reader as the integration of visual, auditory, psycho-social and cognitive functioning.

- **SLO#2**: Demonstrate knowledge of and successful tutoring of developmentally-appropriate/student-focused reading/language arts lessons.
  
  **Objective A**: Infer and critique how explicit and systematic instruction/assessment of phonics (including knowledge of the alphabetic principle, phonemic awareness and word-analysis techniques) allow learners to improve reading skills.

  **Objective B**: Develop and practice in the elementary classroom various word-analysis lessons as which are appropriate to meet students' learning needs.

  **Objective C**: Infer and critique how reading comprehension, spelling, listening and writing as a process are taught and assessed explicitly and implicitly in the classroom.

  **Objective D**: Develop and practice vocabulary development lessons, reading comprehension lessons, spelling activities and/or writing process lessons as appropriate to meet students' learning needs in the elementary classroom.

  **Objective E**: Assess the reading fluency of elementary students through the use of running records and/or reading fluency tests.

  **Objective F**: Analyze and evaluate how a "print rich" elementary school classroom motivates children to read and to write.

- **SLO#3**: Evaluate critical thinking skills, problem-solving skills and decision-making skills through successful tutoring and reflection on tutoring.
  
  **Objective A**: Practice specific tutoring strategies and lessons (including, as appropriate, behavior modification techniques and memory enhancement techniques) to address identified areas of learner weakness and needs in the reading/language arts curriculum.

  **Objective B**: Assess and evaluate one's growth as a tutor through analytical reflection of classroom tutoring.

  **Objective C**: Incorporate professional language and professional judgment in development of all written work and/or oral presentations which reflect upon the classroom or instruction; the classroom teacher has the right to know what a tutor may perceive of the classroom or of teaching in the classroom.

- **SLO#4**: Demonstrate college-level writing skills through all required written course assessment tools and through all written communication with teachers.
  
  **Objective A**: Prepare and submit a letter of introduction to the classroom teacher.

  **Objective B**: Prepare all course written assignments employing professional language and professional judgment when discussing, describing or analyzing classroom teaching, children and tutoring.

---

**ENGED 495 Independent Studies in English - Education**

**Units:** 1 - 3  
**Hours:** 54 - 162 hours LAB  
**Prerequisite:** None.  
**Transferable:** CSU  
**Catalog Date:** June 1, 2020

An independent studies project involves an individual student or small group of students in study, research, or activities beyond the scope of regularly offered courses. See the current catalog section of "Special Studies" for full details of Independent Studies.
Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO #1: Actively engage in intellectual inquiry beyond that required in order to pass a course of study (College Wide Learning Outcome – Area 4).
- Discuss and outline a proposal of study (that can be accomplished within one semester term) with a supervising instructor qualified within the discipline.
- Design an independent study (to be completed individually or by collaboration of a small group) to foster special knowledge, skills, and experience that are not available in any one regularly scheduled course.
- Use information resources to gather discipline-specific information.
- SLO #2: Utilize modes of analysis and critical thinking to apply theoretical perspectives and/or concepts in the major discipline of study to significant problems and/or educational activities (College Wide Learning Outcome – Area 3).
- Analyze and apply the knowledge, skills and experience that are involved in the independent study to theoretical perspectives and/or concepts in the major discipline of study.
- Explain the importance of the major discipline of study in the broader picture of society.
- SLO #3: Communicate a complex understanding of content matter of the major discipline of study (College Wide Outcome – Area 3).
- Demonstrate competence in the skills essential to mastery of the major discipline of study that are necessary to accomplish the independent study.
- SLO #4: Identify personal goals and pursue these goals effectively (College Wide Outcome – Area 4).
- Utilize skills from the "academic tool kit" including time management, study skills, etc., to accomplish the independent study within one semester term.

English - Laboratory (ENGLB)

ENGLB 70 Writing Center I

- **Units:** 0.5 - 1
- **Hours:** 27 - 54 hours LAB
- **Prerequisite:** None.
- **Catalog Date:** June 1, 2020

This laboratory course provides assistance in writing skills to students in all subject areas. Students may enter the course at any time during the first 9 weeks of the semester and earn either .5 or 1 unit. This course is graded on a credit/no credit basis. ENGLB 70 is recommended for students who are encountering difficulties in writing, spelling, sentence structure, paragraph or essay structure, and who would benefit from individual tutor/instructor assistance.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- Demonstrate knowledge of the writing process by engaging with the steps of writing in development of written assignments. (SLO 1)
- Write with a focus in development of a controlling idea (thesis statement) and with the assistance of word process. (Objective 1A)
- Facilitate the use of word processing to assist in the steps of the writing process. (SLO 2)
- Use word processing in the completion of writing tasks. (Objective 2A)

ENGLB 72 Writing Center II
Writing Center II is an independent study course designed to provide one-on-one assistant for students who experience significant difficulty in writing. The course is particularly recommended for students who test into ENGWR 42/ENGRD 19, but may be taken by any student in any discipline needing significant assistance in writing. Students may earn .5 to 1 unit of credit and the course may be added until the end of the 9th week of the regular semester.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- Write clear sentences for the purpose of academic writing. (SLO 1)
- Demonstrate ability to write for an academic purpose. (Objective 1A)
- Identify basic elements of text structure including: paragraph, topic sentences, supporting details, and examples. (Objective 1B)

ENGLB 73 Writing Center III

Writing Center III is designed for students seeking to improve their writing skills with the express purpose of learning to write for success in college level courses. The course is particularly recommended for students who test into ENGWR 58/ENGRD 59 but may be taken by any student in any discipline seeking to improve in writing for an academic purpose. Students may earn .5 to 1 unit of credit and the course may be added until the end of the 9th week of the regular semester.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- Write for the purpose of expressing comprehension and for evaluating text. (SLO 1)
- Evaluate one's own writing in terms of the ability to develop paragraphs with controlling ideas, main ideas, clear organization of thought, and proper grammar. (Objective 1A)
- Work independently with regards to completing discipline related writing coursework and homework. (Objective 1B)

ENGLB 74 Writing Center IV

Writing Center IV is an independent study course which provides assistance in developing writing skills for students who may be enrolled in college level courses where writing demands are significant, but the student is not yet fully confident or consistent in his/her ability to write as demanded by specific discipline courses. This course is particularly recommended for students who are enrolled in or who test into ENGWR 101 or ENGWR 300. The course is open to any student in any course seeking to improve in writing for an academic purpose. Students may earn .5 to 1 unit of credit and the course may be added until the end of the 9th week of the regular semester.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- Demonstrate an improved ability to practice reading, thinking and writing as interrelated processes. (SLO 1)
- Identify and practice components of college level writing. (Objective 1A)
- Identify and practice components of writing an academic research papers. (Objective 1B)
ENGLB 75 Reading Center I

Units: 0.5 - 1
Hours: 27 - 54 hours LAB
Prerequisite: None.
Catalog Date: June 1, 2020

Reading is a fundamental skill required by all college students. Reading Center I is designed to meet that need by providing independent study in foundational reading skills following diagnostic assessment of the student's reading abilities. The course is open to all students in all disciplines where reading demands are significant. Students may elect to take the course for .5 to 1.0 unit and the course may be added through the 9th week of the semester.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- Demonstrate general and specific improvement of reading ability based upon diagnostic assessment of need. (SLO 1)
- Identify individual reading strengths and needs based upon diagnostic assessment of reading ability and in consultation with instructor. (Objective 1A)
- Use specifically focused reading strategies to identify a focus for reading. (Objective 1B)

ENGLB 76 Reading Center II

Units: 0.5 - 1
Hours: 27 - 54 hours LAB
Prerequisite: None.
Catalog Date: June 1, 2020

Reading Center II is an independent study course open to any student experiencing significant difficulty in reading as required for college. The course may especially be recommended for students enrolled in ENGRD 19/ENGWR 42 or ESLR 40, but may be taken by any student in any discipline where reading demands are significant and where the student may not be prepared. Students may elect to take the course for .5 to 1.0 unit and the course may be added through the 9th week of the semester.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- Read for the purpose of analyzing text to enhance comprehension. (SLO 1)
- Identify and utilize vocabulary techniques for learning new words. (Objective 1A)
- Use context to identify meaning. (Objective 1B)
- Identify main ideas in text and determine how main idea relates to basic structure of paragraphs and texts of extended length. (Objective 1C)

ENGLB 77 Reading Center III

Units: 0.5 - 1
Hours: 27 - 54 hours LAB
Prerequisite: None.
Advisory: ENGRD 59 or ENGWR 58, or placement through the assessment process.
Catalog Date: June 1, 2020

Reading Center independent practice at reading skills necessary for college success. Students meet with an instructor for determination of reading needs, and an agreed upon prescription is then developed. Student may elect to take the course for .5 unit or 1.0 unit. This lab class may be recommended by instructors of ENGRD 59/ENGWR 58 but is open to any student in any discipline wishing to improve her/his reading skills. The course be added until the end of the 9th week of the semester.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- Read for the purpose of analyzing text to enhance comprehension. (SLO 1)
- Identify and utilize vocabulary techniques for learning new words. (Objective 1A)
- Use context to identify meaning. (Objective 1B)
- Identify main ideas in text and determine how main idea relates to basic structure of paragraphs and texts of extended length. (Objective 1C)
Demonstrate general reading abilities, which will lead to success in college level reading tasks. (SLO 1)

improve vocabulary range and usage, comprehension, study reading, reading rate, and critical reading through the use of analytical and critical reading strategies. (Objective 1A)

Improve vocabulary skills by following a diagnostic prescriptive methodology. (Objective 1B)

ENGLB 78 Reading Center IV

Units: 0.5 - 1
Hours: 27 - 54 hours LAB
Prerequisite: None
Advisory: ENGRD 110, 310, or 312, or placement through the assessment process.
Catalog Date: June 1, 2020

Critical reading is a skill needed for success in college and particularly in 300 level courses. Many students enter those courses who are not confident in their reading abilities or their abilities to read critically. Reading Center 4 provides practice in this area. This course is open to any student in any discipline where reading and research may be required. It may be recommended for students enrolled in ENGRD 310, ENGRD 312, or ENGRD 110. Students may enroll through the 9th week of the semester and may elect to take the course for .5 unit or 1.0 unit.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- Demonstrate the ability to analyze and interpret a variety of college level texts across a variety of college disciplines. (SLO 1)
- Identify how research has been analyzed in a variety of academic research papers. (Objective 1A)
- Practice interpretation of research findings and conclusions. (Objective 1B)
- Practice writing research conclusions based upon one's analysis of data (or literature review) from a variety of academic research papers from a variety of disciplines. (Objective 1C)

English - Literature (ENGLT)

ENGLT 303 Introduction to the Short Story

Units: 3
Hours: 54 hours LEC
Prerequisite: ENGWR 101 with a grade of "C" or better, or placement through the assessment process.
Transferable: CSU; UC
General Education: AA/AS Area I; CSU Area C2; IGETC Area 3B
Catalog Date: June 1, 2020

Students will read, analyze, and discuss short stories by a wide variety of writers. Reading will emphasize American and British writers but will include authors from other countries as well. Thematic emphasis will focus on the connections between literature and the human condition.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- APPLY CRITICAL THINKING SKILLS TO READ AND WRITE EFFECTIVELY AS SELF-RELIANT, EVALUATIVE READERS AND WRITERS(SLO #1, PSLO #3):
- Demonstrate an understanding of the characteristic features of the short fiction genre.
- Read and analyze critically works of short fiction written in the last 200 years.
- Discover connections between literary themes and life situations.
- Demonstrate critical thinking about those discoveries both verbally and in writing.
ENGLT 310 English Literature I

Study of significant works of major English authors from Beowulf through Samuel Johnson, with consideration of the most important aspects of English literary history.

Upon completion of this course, the student will be able to:

- PREPARE STUDENTS TO BECOME SELF-RELIANT, EVALUATIVE READERS AND WRITERS, ABLE TO USE CRITICAL THINKING SKILLS TO READ AND WRITE EFFECTIVELY IN ACADEMIC AND WORKPLACE SETTINGS (SLO #1; PSLO #3)
- DEMONSTRATE AN UNDERSTANDING OF THE MAJOR ERAS OF DEVELOPMENT OF LITERATURE IN ENGLAND FROM ANGLO-SAXON TIMES THROUGH THE NEOCLASSICAL PERIOD OF THE 18TH CENTURY (SLO #2)
- read and understand the different genres and writers in English literature
- demonstrate an understanding of English culture and history as expressed in the literature
- DEMONSTRATE ANALYTICAL SKILLS IN CLASS DISCUSSION AND WRITING ASSIGNMENTS (SLO #3)
- write interpretive essays showing insight into the themes expressed in the literature of the period

ENGLT 311 English Literature II

Survey of significant works of major English authors from the beginning of Romanticism in the Eighteenth Century to the work of major authors in the Twentieth Century, with consideration of the important aspects of English literary history.

Upon completion of this course, the student will be able to:

- BECOME A SELF-RELIANT, EVALUATIVE READER AND WRITER, ABLE TO USE CRITICAL THINKING SKILLS TO READ AND WRITE EFFECTIVELY IN ACADEMIC AND WORKPLACE SETTINGS. (PSLO #3; SLO #1)
- demonstrate an understanding of the major eras of development of literature from the beginning of Romanticism in the 18th Century through the present.
- read and understand the major types of writers in British literature.
- demonstrate an understanding of English culture and history as expressed in literature.
- write interpretive essays showing insight into the themes expressed in this literature.
- demonstrate analytical skills in class discussions and writing assignments.

ENGLT 320 American Literature I
This course is a survey of the more representative works in American literature from early America through the Civil War.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- **BECOME SELF-RELIANT, EVALUATIVE READERS AND WRITERS, ABLE TO USE CRITICAL THINKING SKILLS TO READ AND WRITE EFFECTIVELY IN ACADEMIC AND WORKPLACE SETTINGS.** *(SLO 1, P-SLO 3)*

- respond in writing and discussion to major literary works of the United States.

- demonstrate an awareness—through literature—of the development of cultural patterns in America.

- demonstrate the ability to interpret a piece of literature and to discuss intelligently the problems and ideas presented in literature.

- recognize and analyze the elements of poetry, non-fiction and fiction.

- demonstrate the ability to recognize the power of literature as a humanizing force.

- demonstrate understanding of appropriate academic discourse and the conventions of critical literary analysis

- relate the literary works to their historical, philosophical, social, political, regional, and/or aesthetic contexts

---

**ENGLT 321 American Literature II**

Students will survey the representative works in American Literature after the Civil War.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- **BECOME SELF-RELIANT, EVALUATIVE READERS AND WRITER, ABLE TO USE CRITICAL THINKING SKILLS TO READ AND WRITE EFFECTIVELY IN ACADEMIC AND WORKPLACE SETTINGS.** *(SLO 1, P-SLO 3)*

- respond in writing and discussion to major literary works of the United States, from after the Civil War through the present.

- demonstrate an awareness—through literature—of the development of cultural patterns in America.

- demonstrate the ability to interpret a piece of literature and to discuss intelligently the problems and ideas presented in literature.

- recognize and analyze the elements of poetry, prose, and drama.

- demonstrate the ability to recognize the power of literature as a humanizing force.

---

**ENGLT 330 African American Literature**

Students will survey the representative works in African American Literature.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- **BECOME SELF-RELIANT, EVALUATIVE READERS AND WRITERS, ABLE TO USE CRITICAL THINKING SKILLS TO READ AND WRITE EFFECTIVELY IN ACADEMIC AND WORKPLACE SETTINGS.** *(SLO 1, P-SLO 3)*

- respond in writing and discussion to major literary works of the United States, from after the Civil War through the present.

- demonstrate an awareness—through literature—of the development of cultural patterns in America.

- demonstrate the ability to interpret a piece of literature and to discuss intelligently the problems and ideas presented in literature.

- recognize and analyze the elements of poetry, prose, and drama.

- demonstrate the ability to recognize the power of literature as a humanizing force.
A survey of the most representative African American writers from the slave narrative to the present. The comprehensive literary study includes analysis of significant historical and cultural influences.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- PREPARE STUDENTS TO BECOME SELF-RELIANT, EVALUATIVE READERS AND WRITERS, ABLE TO USE CRITICAL THINKING SKILLS TO READ AND WRITE EFFECTIVELY AND IN ACADEMIC AND WORKPLACE SETTINGS (SLO #1; PSLO #3)
- evaluate the literature critically and assess its historical significance.
- demonstrate an appreciation for the contributions of African American Writers to mainstream literature.
- demonstrate critical thinking skills in class discussion and in written analytical essays.
- demonstrate the effects of African American Literature on the reader through the use of textual analysis and reader response.
- demonstrate the ability to incorporate bibliographic research effectively into analytical papers.

ENGLT 335 Latino, Mexican-American, and Chicano Literature

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Advisory: Eligibility for ENGWR 300.
Transferable: CSU; UC
Catalog Date: June 1, 2020

This course explores literature (poetry, short stories, novels, creative nonfiction, and performance) authored by Latinx writers. It typically examines the following themes: resistance, survival, identity, homeland, immigration, the border, socio-political activism, gender, and sexuality. All or most of each text is in English. Knowledge of the Spanish language is helpful but not required.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- CONTRIBUTE TO A COMMUNITY OF EVALUATIVE READERS AND WRITERS, AND USE CRITICAL THINKING SKILLS TO READ AND WRITE EFFECTIVELY IN ACADEMIC AND WORKPLACE SETTINGS. (SLO #1, PSLO #3)
- demonstrate awareness of the effects of literature on the reader through textual analysis, classroom discussion, and response papers.
- analyze the themes of gender and ethnicity and the concomitant issues of protest, identity and stereotyping as they emerge from various writers.
- demonstrate an understanding of the difficulties facing a range of Latinx people in a culture dominated by traditional European values.
- analyze how the Latinx authors express their responses to racism, sexism, ethnocentrism, and/or classism.
- analyze how authors celebrate their connection and relationship to Latinx culture write interpretive essays based on the literature.
- demonstrate the ability to perform bibliographic research and incorporate findings into analytic papers that evaluate literary, historical, and sociological aspects of diverse cultures.

ENGLT 336 Race and Ethnicity in Contemporary American Literature

Units: 3
Hours: 54 hours LEC
Prerequisite: ENGWR 101 with a grade of "C" or better, or placement through the assessment process.
Transferable: CSU; UC
General Education: AA/AS Area I; AA/AS Area VI; CSU Area C2; IGETC Area 3B
Catalog Date: June 1, 2020
This class will examine literature written in the United States during the last 50 years in which the issues of race and racism, ethnicity and ethnocentrism, and culture and assimilation predominate the thematic concerns. All genres will be examined, as well as writers from many of the ethnic groups in America, including African Americans, Mexican Americans, Native Americans, and Asian Americans.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- PREPARE STUDENTS TO BECOME SELF-RELIANT, EVALUATIVE READERS AND WRITERS, ABLE TO USE CRITICAL THINKING SKILLS TO READ AND WRITE EFFECTIVELY AND IN ACADEMIC AND WORKPLACE SETTINGS. (SLO #1, PSLO #3)
- demonstrate awareness of the effects of literature on the reader through textual analysis, classroom discussion, and response papers.
- analyze the themes of gender and ethnicity and the concomitant issues of protest, identity and stereotyping as they emerge from various writers.
- demonstrate an understanding of the difficulties facing women and minorities in culture dominated by traditional European values.
- analyze how the author’s voice expresses his or her response to racism, sexism, ethnocentrism, and/or classism.
- write interpretive essays based on the literature.
- demonstrate the ability to perform bibliographic research and incorporate findings into analytic papers that evaluate literary, historical, and sociological aspects of the diverse cultures present in the United States.

ENGLT 340 World Literature I

Units: 3  
Hours: 54 hours LEC  
Prerequisite: ENGWR 300 with a grade of "C" or better, or placement through the assessment process.  
Transferable: CSU; UC  
General Education: AA/AS Area I; AA/AS Area VI; CSU Area C2; IGETC Area 3B  
C-ID: C-ID ENGL 140  
Catalog Date: June 1, 2020

The course will acquaint students with a diverse range of literature from the Ancient World through the Renaissance. Students will identify the commonalities and differences in the myths, epic poetry, philosophy, sacred texts, lyric poetry, prose, and drama of early Middle Eastern, Asian, African, South American, European, and North American literatures.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO #1: Prepare students to become self-reliant, evaluative readers and writers able to use critical thinking to communicate understanding and appreciation of literature. (SLO #1; PSLO #1, #2, #3)
- Analyze and evaluate similarities and differences in theme, myth, and archetype apparent in literatures of different cultures.
- Evaluate historical, philosophical, and cultural contexts of the various literatures.
- Analyze and apply various interpretative tools or critical approaches to a diverse selection of world literatures.
- SLO #2: Appraise significant aspects of culture and its contributions, and appreciate the social experiences of early Middle Eastern, Asian, African, South American, European, and North American cultures. (PSLO #4,#5)
- Evaluate the effects of ethnocentricity, ethnicity, ageism, racism, classism, and sexism and synthesize this information in short essays, a research paper, and written exam.
- Analyze cultural tolerance and awareness in journals, short essays, a research paper, and written exams.

ENGLT 341 World Literature II
This course is a survey of significant masterpieces from mid-seventeenth to late-twentieth century literature.

Upon completion of this course, the student will be able to:

- **DEMONSTRATE THAT HE/SHE IS A SELF-RELIANT, EVALUATIVE READER AND WRITER, ABLE TO USE CRITICAL THINKING SKILLS TO READ AND WRITE EFFECTIVELY IN ACADEMIC AND/OR WORKPLACE SETTINGS (SLO #1; PSLO #3)**

- identify themes, myths, and archetypes as they emerge in world literature.

- recognize characteristics of various literary movements and genre as they emerge and develop in the chronology of the written tradition.

- demonstrate an understanding of the relationships between literature and significant historical events.

- evaluate literature critically and assess its historical significance.

- respond in writing and discussion to major literary works of the world.

---

**ENGLT 343 Contemporary Third World Literature**

This course is an introduction to literature of writers from Africa, Central and South America, Asia and the Middle East. Approached through the reading and discussion of all genre, basic elements of literature interpretation will be stressed to enhance understanding of the world view and culture of writers often not covered in other literature classes. A special effort will be made to sample recent Nobel Prize winners from each area of the world.

Upon completion of this course, the student will be able to:

- **SLO #1: PREPARE STUDENTS TO BECOME SELF-RELIANT, EVALUATIVE READERS AND WRITERS, ABLE TO USE CRITICAL THINKING SKILLS TO READ AND WRITE EFFECTIVELY IN ACADEMIC AND WORKPLACE SETTINGS. (SLO #1, PSLO #3)**

- demonstrate critical skills in class discussion and writing analytical essays.

- demonstrate awareness of the effects of literature on the reader through textual analysis, classroom discussion, and response papers.

- analyze the themes that often emerge from oppressed peoples.

- analyze how the author’s voice shows his or her coping with intercultural struggles.

- **SLO #2: FACILITATE STUDENTS TO RECOGNIZE ETHICAL IMPLICATIONS OF VARIOUS MODES OF COMMUNICATION AND THE NEED TO USE THIS KNOWLEDGE RESPONSIBLY. (SLO #2, PSLO #2)**

- demonstrate an understanding and appreciation of the cultural diversity found in writing from different parts of the world.

- **SLO #3: ENABLE STUDENTS TO DEVELOP ACADEMIC LITERACY SKILLS, TO UTILIZE READING AND WRITING PROCESSES, TO FIND AND COMPREHEND INFORMATION, AND TO APPLY THAT KNOWLEDGE IN MYRIAD RHETORICAL SITUATIONS. (SLO #3, PSLO #4)**

- write personal response essays using various forms

- demonstrate the ability to perform bibliographic research and incorporate findings into original analytical papers that evaluate literary, historical, and sociological aspects of diverse culture literature.
ENGLT 345 Mythologies of the World

This course explores and examines several universal themes of human experience as found through a broad survey of actual myths gathered from around the world. Special emphasis is also placed on the relationships and the similarities of various mythologies. The course includes fairly intensive instruction of primary interpretative theories of mythological research and analysis. This course emphasizes some of the myths underlying the western world view and recognizes diversity and commonality in myths from Middle Eastern, Native North American, African, Asian, and South American cultures. Students analyze, contrast, and compare myths on topics including the goddess culture, creation, the hero’s journey, Judeo-Christian themes, the dying god, and psychological applications. From this process, they will gain an understanding of ethnocentrism, ethnicity and racism and the impact of these on the American experience. The format of instruction will involve lecture, group discussion, and other activities.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO #1: PREPARE STUDENTS TO BECOME SELF-RELIANT, EVALUATIVE READERS AND WRITERS, ABLE TO USE CRITICAL THINKING SKILLS TO READ AND WRITE EFFECTIVELY AND IN ACADEMIC AND WORKPLACE SETTINGS (SLO#1; PSLO #3).
- articulate an understanding of such themes in mythology as human relationship to God, deities, sacrifice, birth, creation, destruction, healing, and the hero’s journey, and the many cultures in which these themes occur.
- develop an appreciation of the common thematic framework that underlies the mythologies of various cultures and demonstrate in short written responses, formal essays, and written exams the ability to analyze, using various interpretative tools, the metaphorical messages inherent in myth.
- engage in critical analysis of myths through reading, writing, and discussion of mythologies from around the world.
- SLO #2: FACILITATE STUDENTS TO RECOGNIZE ETHICAL IMPLICATIONS OF VAROUS MODES OF COMMUNICATION AND THE NEED TO USE THIS KNOWLEDGE RESPONSIBLY (SLO #2; PLSO #2)
- demonstrate an ability to compare, contrast, and analyze significant aspects of the cultural contributions and social experiences as manifest within the myths of Western, Eastern, Middle Eastern, Native North American, African, Asian and South American mythic traditions.
- SLO #3: ENABLE STUDENTS TO DEVELOP ACADEMIC LITERACY SKILLS, TO UTILIZE READING AND WRITING PROCESSES, TO FIND AND COMPREHEND INFORMATION, AND TO APPLY THAT KNOWLEDGE IN MYRIAD RHETORICAL SITUATIONS (SLO #3; PLSO #4)
- develop a basic understanding of symbolism in myth, literature, and culture.
- apply an understanding of universal mythic themes and images to the reading of modern literature.

ENGLT 360 Women in Literature

This course is designed for women and men who are interested in examining the roles women have occupied in literature, both as writers and as protagonists. Emphasis will be placed on literature that develops protagonists and explores literary themes that focus on women’s experiences in childhood, adolescence, marriage, childbirth and child rearing, death, love, dependence, independence, and their own creativity. Female authors and protagonists from Western, Eastern, and Third World countries will be included. Male authors may also be included. Over the course of the semester, students will examine issues of ethnicity, ethnocentrism, racism, ageism, classism, gender inequity, and religious differences that are raised in the literature under discussion. In order to develop a sense of cultural tolerance to such issues, the literature will include a variety of genres, such as short stories, novels, plays, and poetry, the emphasis to be determined by the instructor.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO #1: PREPARE STUDENTS TO BECOME SELF-RELIANT, EVALUATIVE READERS AND WRITERS, ABLE TO USE CRITICAL THINKING SKILLS TO READ AND WRITE EFFECTIVELY AND IN ACADEMIC AND WORKPLACE SETTINGS (SLO#1; PSLO #3).
- articulate an understanding of such themes in mythology as human relationship to God, deities, sacrifice, birth, creation, destruction, healing, and the hero’s journey, and the many cultures in which these themes occur.
- develop an appreciation of the common thematic framework that underlies the mythologies of various cultures and demonstrate in short written responses, formal essays, and written exams the ability to analyze, using various interpretative tools, the metaphorical messages inherent in myth.
- engage in critical analysis of myths through reading, writing, and discussion of mythologies from around the world.
- SLO #2: FACILITATE STUDENTS TO RECOGNIZE ETHICAL IMPLICATIONS OF VAROUS MODES OF COMMUNICATION AND THE NEED TO USE THIS KNOWLEDGE RESPONSIBLY (SLO #2; PLSO #2)
- demonstrate an ability to compare, contrast, and analyze significant aspects of the cultural contributions and social experiences as manifest within the myths of Western, Eastern, Middle Eastern, Native North American, African, Asian and South American mythic traditions.
- SLO #3: ENABLE STUDENTS TO DEVELOP ACADEMIC LITERACY SKILLS, TO UTILIZE READING AND WRITING PROCESSES, TO FIND AND COMPREHEND INFORMATION, AND TO APPLY THAT KNOWLEDGE IN MYRIAD RHETORICAL SITUATIONS (SLO #3; PLSO #4)
- develop a basic understanding of symbolism in myth, literature, and culture.
- apply an understanding of universal mythic themes and images to the reading of modern literature.
ENGLT 365 Introduction to Gay, Lesbian, Bisexual and Transgender Literature

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Advisory: Eligibility for ENGWR 300
Transferable: CSU
Catalog Date: June 1, 2020

This course surveys representative literature concerning lesbian, gay, bisexual, transgender, and queer or questioning (LGBTQ+) themes and issues as written by or about LGBTQ+ people from throughout its literary history to the present day. This comprehensive literary study includes attention to diverse LGBTQ+ concerns as they intersect with issues concerning race, gender, ability, and class. Moreover, students will be expected to analyze the significant historical and cultural influences of the LGBTQ+ community through literature.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- Contribute to a community of evaluative readers and writers and use critical thinking skills to read and write effectively in academic and workplace settings. (SLO #1)
- Compose essays and other writings that respond to, evaluate, and analyze LGBTQ+ literary works. (SLO #2)
- Assess literature by or about LGBTQ+ people as a reflection of the authors' cultures and values. (Objective 2a)
- Demonstrate a basic knowledge of LGBTQ+ literature and the cultural, intersectional, and intellectual contribution it represents. (SLO #3)
- Recognize the contributions of diverse LGBTQ+ writers to mainstream literature and the LGBTQ+ subculture. (Objective 3a)
- Assess the intersectional concerns of LGBTQ+ Literature (race, class, gender, ability etc.). (Objective 3b)
- Identify and explain LGBTQ+ issues at work in literature over the course of several historical periods in the U.S. and globally. (SLO #4)
- Discuss the significance of LGBTQ+ writers and topics within a historical framework. (Objective 4a)
This course is designed primarily for parents, prospective teachers, preschool workers and those in frequent contact with children and/or interested in literature written for children. Topics include wide reading of historical and contemporary children's literature, criteria for selection, and practice in presenting and responding to literature, including storytelling and oral reading.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- develop and apply criteria for evaluating children's literature (SLO#1).
- develop principles of selection of literature for children.
- understand and interpret the contributions of outstanding authors, illustrators and critics of children's literature.
- recognize the characteristics and value of the various genres of children's literature.
- understand literary terminology, including the elements of fiction and poetic devices and develop skill at expressing ideas in class literary discussions.
- develop critical thinking skills: defining issues; gathering, analyzing and evaluating ideas; synthesizing and developing conclusions.
- develop ideas and practical activities for helping children to experience, appreciate, and respond to literature (SLO#2).
- interpret and apply the theories and practice of oral reading and storytelling.

ENGLT 402 Introduction to Shakespeare and Film

In this course, students will draw connections between traditional and contemporary literary genres as they read William Shakespeare's plays and critically analyze film versions of these plays. Students will read and analyze a selection of Shakespeare's histories, comedies, tragedies, and romances in the context of Elizabethan drama. Then they will view a variety of cinematic interpretations of these plays and compare and contrast such elements as plot, character, theme, staging, and critical and directorial interpretation.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- PREPARE STUDENTS TO BECOME SELF-RELIANT, EVALUATIVE READERS AND WRITERS, ABLE TO USE CRITICAL THINKING SKILLS TO READ AND WRITE EFFECTIVELY AND IN ACADEMIC AND WORKPLACE SETTINGS (SLO #1; PSLO #3)
- Identify the components of comedy, tragedy, history, and romance.
- Analyze the cultural and societal implications of the plays.
- Develop, articulate, and support interpretations of the plays.
- Correlate the study of Shakespearean drama to the study of Shakespeare's plays on film.
- Contrast plot, character, theme, setting and staging in the plays and films.
- Analyze critical and directorial interpretations of Shakespeare's plays on film.
- Recognize the study of written and visual Shakespearean texts as a humanizing force.
This course analyzes the process, challenges, failures, and successes of adapting literary and stage material into film. It compares faithful and unfaithful adaptations through reading the original texts and viewing the adapted films with an awareness of their historical and cultural contexts. The course examines intention, creative distinctions, as well as limits and strengths of each medium. This course requires at least one research essay proposing and justifying details for an adaptation and including appropriate MLA documentation. This course is the same as HONOR 378. This course, under either name, may be taken one time for credit.

Upon completion of this course, the student will be able to:

- CRITICALLY ANALYZE, COMPARE, AND EVALUATE VARIOUS WORKS OF LITERATURE AND FILM (SLO#1; PSLO #4 and #1; Honors Prog. SLO #2 and #5). Outcome may be evaluated by all or some of the following criteria:
  - Annotate and analyze written texts and respond thoughtfully to them.
  - Analyze and summarize films and respond thoughtfully to them.
  - Determine themes, plot structure, characters, and symbols used in written works and films.
  - Question a director's intention and effectiveness of the director's choices.
  - Compare and contrast elements of adaptations (such as theme for example) to the corresponding elements in the original texts.
  - Construct criteria for judging strengths and weaknesses of adaptations.
  - Appraise the successes and failures of adaptations.
  - Assess the effects of historical and/or social context for each work studied.
  - Critique his or her own and other student writing.

- APPLY COMPLEX CRITICAL THINKING SKILLS TO READ AND WRITE EFFECTIVELY AS SELF-RELIANT, EVALUATIVE READERS AND WRITERS (SLO#2; PSLO #2 and #3; Honors Prog. SLO #2 and #5). Outcome may be evaluated by all or some of the following criteria:
  - Demonstrate awareness of the effects of literature on the reader through textual analysis, classroom discussion, and response papers.
  - Apply terminology from literary studies.
  - Analyze and interpret elements of literature.
  - Appraise the strengths and weaknesses inherent in the genres of fiction, non-fiction, and drama.
  - Evaluate literary texts in cultural context, as cultural and artistic expressions in their historical and social background.
  - Compose interpretive essays based on the literature.
  - Propose his or her own plan of adapting a literary work into film and justify the choices made in this proposal.

- ANALYZE, CRITIQUE, AND EXPRESS IDEAS EFFECTIVELY AS SELF-RELIANT, EVALUATIVE VIEWERS OF FILMS BY APPLYING COMPLEX CRITICAL THINKING SKILLS (SLO#3; PSLO #2 and #4; Honors Prog. SLO #2 and #5). Outcome may be evaluated by all or some of the following criteria:
  - Apply terminology from film studies and critical theories.
  - Analyze and the interpret elements of film.
  - Appraise the strengths and weaknesses inherent in the genres of film.
  - Evaluate films based on concepts such as narrative modes, genre conventions, and production exigencies.
  - Evaluate films in cultural context, as cultural and artistic expressions in their historical and social background.
  - Compose interpretive essays based on the literature.
ASSESS ISSUES AS WELL AS RESEARCH, EVALUATE, AND SYNTHESIZE SOURCES TO SUPPORT A THESIS BY APPLYING COMPLEX CRITICAL THINKING SKILLS (SLO#4; PSLO #2, #3 and #5; Honors Prog. SLO # 3 and #4. Outcome may be evaluated by all or some of the following criteria:

- Evaluate and justify his or her own choices made in a proposed adaptation of a literary work.
- Integrate details from research to support his or her own choices made in the proposed adaptation.
- Appraise and use a variety of research techniques.
- Evaluate sources.
- Research and incorporate sources effectively and meaningfully in writing.
- Summarize, paraphrase, and directly quote outside sources as support for his or her ideas and/or represent a belief held by the opposition.
- Use MLA documentation format correctly.

ENGLT 495 Independent Studies in Literature

| Units: | 1 - 3 |
| Hours: | 54 - 162 hours LAB |
| Prerequisite: | None. |
| Transferable: | CSU |
| Catalog Date: | June 1, 2020 |

An independent studies project involves an individual student or small group of students in study, research, or activities beyond the scope of regularly offered courses. See the current catalog section of “Special Studies” for full details of Independent Studies.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO #1: Actively engage in intellectual inquiry beyond that required in order to pass a course of study (College Wide Learning Outcome – Area 4).
- Discuss and outline a proposal of study (that can be accomplished within one semester term) with a supervising instructor qualified within the discipline.
- Design an independent study (to be completed individually or by collaboration of a small group) to foster special knowledge, skills, and experience that are not available in any one regularly scheduled course.
- Use information resources to gather discipline-specific information.
- SLO #2: Utilize modes of analysis and critical thinking to apply theoretical perspectives and/or concepts in the major discipline of study to significant problems and/or educational activities (College Wide Learning Outcome – Area 3).
- Analyze and apply the knowledge, skills and experience that are involved in the independent study to theoretical perspectives and/or concepts in the major discipline of study.
- Explain the importance of the major discipline of study in the broader picture of society.
- SLO #3: Communicate a complex understanding of content matter of the major discipline of study (College Wide Outcome – Area 3).
- Demonstrate competence in the skills essential to mastery of the major discipline of study that are necessary to accomplish the independent study.
- SLO #4: Identify personal goals and pursue these goals effectively (College Wide Outcome – Area 4).
- Utilize skills from the “academic tool kit” including time management, study skills, etc., to accomplish the independent study within one semester term.

English - Reading (ENGRD)

ENGRD 19 Foundations of Reading and Writing Improvement
This course integrates and accelerates reading and writing at the basic skills level with a focus on learning to use language to learn. Course content, activities, and assignments integrate reading and writing for an academic purpose. Reading and writing are instructed and contextualized through a focus on a variety of fiction and non-fiction texts, and through the discussion of the meaning of a college education (including a focus on student services, academic programs, and campus events). Successful completion of this course will serve as a prerequisite for ENGRD 59/ENGWR 58 at Cosumnes River College. Placement in the course will be through the college assessment process; self-placement will not be allowed. This course is the same as ENGWR 42, and only one may be taken for credit. See "Cross-Listed Courses" in the catalog.

Student Learning Outcomes
Upon completion of this course, the student will be able to:

- Apply Standard English conventions in a variety of texts read and written (i.e., sentences, paragraphs, extended texts of multiple paragraphs). (SLO 1)
- Recognize and compose complete sentences by applying correct usage of grammar and punctuation at a basic level.
- Demonstrate at a basic level, control of punctuation, spelling, capitalization, and grammar within paragraphs and in texts of multiple paragraphs.
- Apply context clues and structural analysis to decode words and to determine word meaning. (SLO 2)
- Apply basic structures of paragraphs in a variety of extended texts. (SLO 3)
- Write paragraphs with stated main ideas and supporting details.
- Infer meaning within a variety of texts read and written. (SLO 4)
- Draw logical conclusions from texts of varying lengths.
- Evaluate personal opinions about texts read by explaining those opinions in writing.

ENGRD 59 Reading Development with Writing

The focus of this course will be on writing and reading instruction as integrally related skills. Students will study and practice reading comprehension in the context of the writing process with the goal of accelerating the pathway to the English Reading and English Writing requirements. Students will develop critical thinking skills and the ability to write clear and correct sentences as they write a variety of focused, developed, organized paragraphs and essays. Students will write both full-process and in-class essays. This course may include a departmental final or portfolio assessment. Successful completion of this course will serve as a prerequisite for ENGWR 101 and ENGRD 110 only at Cosumnes River College. As enrollment into course will be based upon prerequisite, there will be no self-placement. This course is the same as ENGWR 58, and only one may be taken for credit.

Student Learning Outcomes
Upon completion of this course, the student will be able to:

- Comprehend, think critically, and respond appropriately in writing to a variety of professionally written non-fiction and fiction texts. (SLO 1)
- Use context to determine the meanings of words and to interpret the meaning behind a variety of non-fiction and fiction texts.
- Differentiate between main ideas and support details in a variety of non-fiction texts.
- Develop written responses with clearly stated main ideas/thesis statements and appropriate support details (including facts and supported opinions developed through careful critical thinking) when responding to a variety of non-fiction and fiction texts.
- Identify implied meanings and formulate appropriate conclusions in reading a variety of fiction and non-fiction texts.
- Identify and analyze basic organizational patterns in a variety of expository texts (e.g., generalization-example, cause-effect, and comparison-contrast).
• Compose fully developed, logically structured paragraphs and essays using the stages of pre-writing, drafting, revising, and editing. (SLO 2)

• Achieve coherence and unity in essay form with planned organization and the use of transitions.

• Achieve various purposes through writing.

• Develop text with thoughtful, focused thesis statements, relevant topic sentences, specific examples and details.

• Develop skill and confidence in writing timed essays.

• Recognize and begin to apply the conventions of standard written English. (SLO 3)

• Identify standard written English conventions in a variety of written texts.

• Write clear and correct sentences using correct capitalization, spelling, and punctuation.

• Recognize and correct major sentence errors in one’s own writing, such as fragments, run-on sentences, subject-verb agreement, pronoun agreement and references.

• Use word processor for composition and revision.

ENGRD 110 Comprehension Strategies and Vocabulary Development For College

Units: 3
Hours: 54 hours LEC
Prerequisite: ENGRD 59 or ENGWR 58 with a grade of “C” or better, or placement through the assessment process.
Catalog Date: June 1, 2020

This reading course is designed to help students prepare for college level reading by refining vocabulary, literal and inferential comprehension skills, textbook reading techniques, and study skills and by reading for pleasure. Efficiency is gained by learning to vary rate and comprehension depending upon purposes for reading. Students are encouraged to enroll in ENGLB 70 for access to individualized help in the Reading and Writing Center.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• SLO #1 Read actively.
  make predictions before reading and adjust them while reading
  survey the organization of the text
  assess prior knowledge and personal experience
  ask guide questions to connect ideas

• SLO #2 Demonstrate a variety of vocabulary development techniques.
  employ dictionary skills to define unknown words
  understand the meaning of commonly used prefixes, root, and suffixes
  understand parts of speech
  apply the above structural analysis to define unknown words
  examine the surrounding contexts to define unknown words by formal definition, example, contrast ideas, and logical reasoning
  establish and expand specialized vocabulary

• SLO #3 Identify stated and implied main ideas and supporting details in textbooks, periodicals, fictions, and various appropriate reading materials.

• SLO #4 Construct critical reading skills.
  differentiate between facts, opinions, and informed opinions
  draw proper conclusions and make judgments upon examining factual information and implied messages in the text
  interpret author’s point of view and tone
  identify literal and figurative language
SLO #5 Implement textbook comprehension techniques.

- implement SQ3R technique
- construct outlines
- produce summaries
- organize information by making concept maps
- employ effective highlighting skills

SLO #6 Adjust reading rates and techniques.

- determine purpose of reading to choose a proper reading rate
- adapt various reading rates to achieve the purpose of reading
- utilize and adjust effective reading techniques to accommodate reading rates

ENGRD 113 Reading and Writing Skills for College

**Same As:**
- ENGWR 109

**Units:**
- 4.5

**Hours:**
- 72 hours LEC; 27 hours LAB

**Prerequisite:**
- ENGRD 59 or ENGWR 58 with a grade of "C" or better, or placement through the assessment process.

**Catalog Date:**
- June 1, 2020

This integrated reading and writing course is designed to accelerate the preparation for college reading and writing competency requirement for students who are assessed into one level below transfer English courses. This course prepares students for ENGRD 310/312 and ENGWR 300 with integrated teaching and learning in both reading and writing to accelerate a pathway for English Reading and Writing requirements. Students will learn to develop reading skills in vocabulary expansion, unlocking meanings with context clues and word parts, increasing comprehension, SQ3R, and critical thinking. Students will also learn to develop skills in writing correct, clear, and concise sentences with proper English grammar that transfer to well-developed and organized paragraphs and essays. Other skills include paraphrasing, summarizing, pre-reading and pre-writing techniques, revising and editing essays, analyzing and comparing ideas, identifying author's tone, bias, and purpose. This course is most ideal for students who are assessed into both ENGRD 110 and ENGWR 101. Upon successful completion of this course, students will have met the prerequisite for ENGRD 310/312 and ENGWR 300. This course may include a departmental final. This course is the same as ENGWR 109, and only one may be taken for credit.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO #1 Demonstrate proficiency with reading and writing as a process that includes pre-reading/writing, reading/drafting, and post-reading and writing.
  - Objective 1A: Annotate written texts.
  - Objective 1B: Identify organizational thought patterns in various styles of text.
  - Objective 1C: Make predictions before reading and adjust them while reading.
  - Objective 1D: Assess prior knowledge and personal experience through brainstorming, asking questions, and free write to make association with written texts.
  - Objective 1E: Construct summaries and outlines of written texts.

- SLO #2 Demonstrate proficiency in composing and recognizing coherent sentences, paragraphs and essays in proper English grammar in various reading materials and writing tasks.
  - Objective 2A: Understand parts of speech and apply the understanding in writing.
  - Objective 2B: Establish and expand specialized vocabulary and choose the appropriate words to express ideas.
  - Objective 2C: Use clear and varied sentences in writing with proper punctuation, capitalization and word form.
  - Objective 2D: Develop error-free prose and recognize common errors in spelling in different styles of writing.
  - Objective 2E: Achieve coherence and unity in writing with a focused and logical thesis statement
  - Objective 2F: Organize evidence and examples to support ideas in a logical manner that fits the style of writing and fulfill the purpose of writing
ENGRD 119 College Textbook Reading Skills

<table>
<thead>
<tr>
<th>Units:</th>
<th>0.5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hours:</td>
<td>27 hours LAB</td>
</tr>
<tr>
<td>Prerequisite:</td>
<td>None.</td>
</tr>
<tr>
<td>Catalog Date:</td>
<td>June 1, 2020</td>
</tr>
</tbody>
</table>

This course offers instruction in academic reading skills to students who are concurrently enrolled in a college course. The instruction includes informal lecture, self-paced individual work, workshop, guided practice, and assisted learning. Pass or No Pass only.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO #1 Understand the composition and structure of written text in various styles in academic discipline.
  - Objective 1A: Recognize the structure of a paragraph and different types of supports.
  - Objective 1B: Identify stated and implied main idea and support details.
  - Objective 1C: Recognize the organization patterns of a written text.
  - Objective 1D: Understand writer's use of language to achieve the purpose.
- SLO #2 Build and expand specialized vocabulary for different disciplines.
  - Objective 2A: Understand roots, prefixes and suffixes and etymology in vocabulary development.
  - Objective 2B: Unlock the meaning of unknown words using contextual clues.
- SLO #3 Apply study skills.
  - Objective 3A: Use annotation, highlighting, summarizing, outlining, and mapping to comprehend, evaluate and analyze written text.
  - Objective 3B: Employ proper time management skills to organize the process of assignment completion and reading process.
ENGRD 200 Reading the American Cultural Experience

This academic English Reading course examines the crucial questions of what it means to read critically and at college level. Students will engage in extensive reading in and out of class as they focus on analyzing and interpreting a variety of texts. The focus of required reading will be on using language to analyze and interpret multicultural issues and conflicts which arise in diverse cultural settings and communities. The purpose of this language study will be to develop academic vocabulary, academic research and writing skills, and the ability to read and think analytically and critically about the written word. Concurrent enrollment in ENGLB 74 (Writing Center IV) or ENGLB 78 (Reading Center IV) will allow for concentrated independent study on the content and requirements of the course.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- Read analytically and critically in a variety of texts interrogating the multicultural American experience. (SLO 1)
- Apply skills of making inferences, distinguishing fact and opinion by appraising an author’s purpose, tone, bias, and point of view in a variety of fiction and non-fiction texts. (Objective A)
- Evaluate the quality and sufficiency of evidence and other forms of support for a written argument which critiques the multicultural American experience. (SLO 2)
- Assess elements of argumentation in extended text focusing on propaganda, assumptions, faulty analogies, non-sequiturs, deductive and inductive patterns, and topics relative to the issue of the multicultural American experience. (Objective A)
- Select suitable critical reading/metacognitive reading strategies to construct meaning and self-regulate comprehension and learning. (SLO 3)
- Assess proper strategies to regulate reading rate for reader-specified and text/context-specified purpose. (Objective A)
- Respond appropriately in writing to a variety of fiction and non-fiction texts. (SLO 4)
- Develop analytical response essays to stories, essays, and arguments regarding the multicultural American experience. (Objective A)
- Write an argumentative research paper on a significant aspect of the multicultural American experience. (Objective B)
- Apply appropriate mechanics when writing. (Objective C)

ENGRD 310 Critical Reading as Critical Thinking

This course covers the theory and practice of essential reading skills for proficient academic performance with an emphasis on (1) reading strategy applications in textbook, fiction, and nonfiction, (2) critical analysis and evaluation of college level academic texts in multicultural writings, fiction and non-fiction reading, (3) critical and analytical evaluation of college level expository, narrative, descriptive, and argumentative essays and research, (4) development and expansion of critical thinking skills required in today's diverse work environment, (5) vocabulary development, and (6) development of flexibility in reading rate. This course meets the Reading Competency requirement for the AA and AS degrees, and is CSU transferable. Additional work in the Reading and Writing Center (ENGLB 70 or 75) may be advised.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO #1: Deepen knowledge of general academic and discipline-specific vocabulary and concepts.
- Apply knowledge of structural analysis and contextual analysis to unknown words
ENGRD 311 Intensive Critical Thinking for College Success

Units: 4
Hours: 72 hours LEC
Prerequisite: ENGRD 59 or ENGWR 58 with a grade of "C" or better, or placement through the assessment process.
Transferable: CSU
General Education: AA/AS Area II(b); CSU Area A3
Catalog Date: June 1, 2020

This course emphasizes the theory and application of critical thinking through reading expository, argumentative, fictional and nonfictional literature and works to develop the following: critical and analytical reading skills for college-level text, critical and analytical evaluation in research, synthesizing information to form logical conclusions, comparing and evaluating multiple sources, application in critical reading strategies across the discipline, vocabulary development and expansion for college-level reading. This accelerated course is for students who are ready for the challenge of an intensive learning experience at college level. This course meets the Reading Competency requirement for AA and AS degrees and is CSU transferable.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO #1 Read actively.
- Employ proper reading strategies during pre-reading, reading and post-reading stages such as surveying, defining purpose of reading, predicting, asking guide questions, annotating, highlighting, constructing outlines, and writing summaries.
- SLO #2 Demonstrate and deepen vocabulary development techniques.
- Understand common word parts and spelling rules.
- Apply knowledge of contextual analysis and structural analysis in decoding unknown words.
- Establish adequate vocabulary capacity in specialized terminology for college-level text.
- SLO #3 Construct critical reading and thinking skills to evaluate the logic of arguments in college-level texts.
- Differentiate between facts, opinions, informed opinions, and use of deceptive language in arguments and persuasion.
- Identify author's tone, purpose, issue, claim and conclusion in a nonfiction work.
- Evaluate author's evidence, bias, clarification and credibility to draw logical and reasonable conclusion.
- SLO #4 Develop and apply analytical and critical reasoning skills in a variety of college level texts.
- Research and assess various forms of propaganda, assumptions, faulty analogies, non-sequiturs, deductive and inductive patterns, and argument.
- Synthesize information to draw logical and reasonable conclusion about written text.
ENGRD 312 Academic Textbook Reading

Units: 3  
Hours: 54 hours LEC  
Prerequisites: ENGRD 110 with a grade of "C" or better, or placement through the assessment process.  
Advisory: ENGLB 70, ENGLB 75, ENGWR 101, or ESLW 320  
Transferable: CSU  
Catalog Date: June 1, 2020

This course refines students’ skills and ability to read, understand, and respond to college-level textbooks across the curriculum. Emphasis is placed on discipline-based vocabulary, critical reading and thinking strategies, interpretation of visual aids and data, and employing appropriate reading rate to fulfill the purpose of reading. This course meets the Reading Competency requirement for the A.A. and A.S. degrees, and is CSU transferable. Students are encouraged to also enroll in ENGLB 70 or 75 for access to individualized help in the Reading and Writing Center.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO #1 Apply the principles of textbook reading
- Interpret graphs, figures, data presentations, and recognize textbooks' learning aids.
- Examine schema; develop and expand vocabulary using context clues, word parts; and establish specialized and technical terms.
- SLO #2 Evaluate textbook materials
- Adapt critical reading strategies to construct new material in various reading environments across the discipline as a critical and analytical thinker.
- Evaluate and analyze reading material to make connections between the new and existing information.
- SLO #3 Use writing as a learning tool
- Demonstrate knowledge and comprehension of reading material through academic writing.
- Express personal opinions and validate facts about various types of reading material in academic writing.
- SLO #4 Employ reading rates
- Correlate, define, and apply appropriate reading rates for academic reading across the disciplines.
- Modify reading rate flexibility to meet the purpose of reading.
- SLO #5 Synthesize new information
- Synthesize and create new information obtained from reading material in writing, discussion, or presentation.
- Draw relevant conclusions about new information in various reading environments.
- SLO #6 Adapt critical reading strategies
- Analyze the author's tone, attitude, purpose, and thesis.
- Formulate questions and make judgments about reading material.
- Associate background knowledge and personal experience with new information.
- Recognize fallacies in logic and reasoning.
- SLO #7 Analyze and relate all above objectives to courses taught throughout the disciplines
Student Learning Outcomes

Upon completion of this course, the student will be able to:

- **SLO #1**: Actively engage in intellectual inquiry beyond that required in order to pass a course of study (College Wide Learning Outcome – Area 4).

- Discuss and outline a proposal of study (that can be accomplished within one semester term) with a supervising instructor qualified within the discipline.

- Design an independent study (to be completed individually or by collaboration of a small group) to foster special knowledge, skills, and experience that are not available in any one regularly scheduled course.

- Use information resources to gather discipline-specific information.

- **SLO #2**: Utilize modes of analysis and critical thinking to apply theoretical perspectives and/or concepts in the major discipline of study to significant problems and/or educational activities (College Wide Learning Outcome – Area 3).

- Analyze and apply the knowledge, skills and experience that are involved in the independent study to theoretical perspectives and/or concepts in the major discipline of study.

- Explain the importance of the major discipline of study in the broader picture of society.

- **SLO #3**: Communicate a complex understanding of content matter of the major discipline of study (College Wide Outcome – Area 3).

- Demonstrate competence in the skills essential to mastery of the major discipline of study that are necessary to accomplish the independent study.

- **SLO #4**: Identify personal goals and pursue these goals effectively (College Wide Outcome – Area 4).

- Utilize skills from the “academic tool kit” including time management, study skills, etc., to accomplish the independent study within one semester term.

---

**English - Writing (ENGWR)**

**ENGWR 44 Basics of Sentence Structure**

<table>
<thead>
<tr>
<th>Units:</th>
<th>1.5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hours:</td>
<td>27 hours LEC</td>
</tr>
<tr>
<td>Prerequisite:</td>
<td>None.</td>
</tr>
<tr>
<td>Catalog Date:</td>
<td>June 1, 2020</td>
</tr>
</tbody>
</table>

This course offers training in grammar, sentence building, correct usage, and punctuation. This course is recommended for students who wish to review basic principles of standard English as preparation or reinforcement of developmental writing for ENGWR 58 or ENGWR 101 or college composition for ENGWR 300. Graded on a pass/no pass basis.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- **IDENTIFY AND COMPOSE GRAMMAR AND USAGE OF STANDARD ENGLISH AT A PROFICIENT LEVEL OF BASIC WRITING (SLO #1)**.

- Recognize, identify, compose and apply sentence building, correct usage, and punctuation at a basic level of writing in Standard English.

- Identify and apply basic Standard English usage in terms of sentence components, pronoun agreement, pronoun usage, modifiers, parallelism, shifts, conciseness, sentence combining, and capitalization.
ENGWR 51 Developmental Writing

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- **DEMONSTRATE UNDERSTANDING OF THE WRITING PROCESS TO ACHIEVE VARIOUS PURPOSES THROUGH WRITING (SLO #1).**
- Objective A: Demonstrate knowledge of the writing process, including prewriting, drafting, outlining, revising, and editing/proofreading.
- **COMPREHEND AND THINK CRITICALLY ABOUT PROFESSIONALLY WRITTEN TEXTS (SLO #2).**
- Objective A: Practice reading comprehension skills of note-taking, differentiating between main idea and support, drawing appropriate inferences, and analysis of style and organization of expository texts.
- **COMPOSE FULLY DEVELOPED, LOGICALLY STRUCTURED PARAGRAPHS AND SHORT ESSAYS (SLO #3).**
- Objective A: Practice writing focused paragraphs and essays with clear topic sentences/thesis statements and appropriate support.
- Objective B: Practice coherence and unity in paragraphs and essays through planned organization and the use of transitions.
- **RECOGNIZE AND BEGIN TO APPLY THE CONVENTIONS OF STANDARD WRITTEN ENGLISH (SLO #4).**
- Objective A: Use correct capitalization, spelling, and punctuation.
- Objective B: Recognize and correct major sentence errors in his/her own writing, such as fragments, run-on sentences, subject-verb agreement, pronoun agreement and references.
- Objective C: Practice writing timed essays with a focus on applying standard written English skills.

ENGWR 55 Fluency and Style in English Writing

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- **EMPLOY DIFFERENT SENTENCE PATTERNS IN HIS/HER WRITING (SLO #1).**
  - Write sentences that indicate relationships between ideas.
  - Write sentences that achieve variety in his/her writing.
- **IDENTIFY STYLISTIC DEVICES IN THE WRITING OF OTHERS (SLO #2).**
  - Identify sentence patterns, such as subordination and coordination.
• Identify stylistic devices, such as participles and appositives.

• RECOGNIZE AND BEGIN TO APPLY THE CONVENTIONS OF STANDARD WRITTEN ENGLISH (SLO #3).

• Write clear and correct sentences.

• Use correct capitalization, spelling, and punctuation.

• Use knowledge of different sentence patterns to recognize and correct major sentence errors in his/her own writing, such as fragments and run-on sentences.

ENGWR 58 Writing Development with Reading

Same As: ENGRD 59
Units: 4
Hours: 72 hours LEC
Prerequisite: ENGRD 19 with a grade of "C" or better, or placement through the assessment process.
Catalog Date: June 1, 2020

The focus of this course will be on writing and reading instruction as integrally related skills. Students will study and practice reading comprehension in the context of the writing process with the goal of accelerating the pathway to the English Reading and English Writing requirements. Students will develop critical thinking skills and the ability to write clear and correct sentences as they write a variety of focused, developed, organized paragraphs and essays. Students will write both full-process and in-class essays. This course may include a departmental final or portfolio assessment. Successful completion of this course will serve as a prerequisite for ENGWR 101 and ENGRD 110 only at Cosumnes River College. As enrollment into course will be based upon prerequisite, there will be no self-placement. This course is the same as ENGRD 59, and only one may be taken for credit.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• Comprehend, think critically, and respond appropriately in writing to a variety of professionally written non-fiction and fiction texts. (SLO 1)

• Use context to determine the meanings of words and to interpret the meaning behind a variety of non-fiction and fiction texts.

• Differentiate between main ideas and support details in a variety of non-fiction texts.

• Develop written responses with clearly stated main ideas/thesis statements and appropriate support details (including facts and supported opinions developed through careful critical thinking) when responding to a variety of non-fiction and fiction texts.

• Identify implied meanings and formulate appropriate conclusions in reading a variety of fiction and non-fiction texts.

• Identify and analyze basic organizational patterns in a variety of expository texts (e.g., generalization-example, cause-effect, and comparison-contrast).

• Compose fully developed, logically structured paragraphs and essays using the stages of pre-writing, drafting, revising, and editing. (SLO 2)

• Achieve coherence and unity in essay form with planned organization and the use of transitions.

• Achieve various purposes through writing.

• Develop text with thoughtful, focused thesis statements, relevant topic sentences, specific examples and details.

• Develop skill and confidence in writing timed essays.

• Recognize and begin to apply the conventions of standard written English. (SLO 3)

• Identify standard written English conventions in a variety of written texts.

• Write clear and correct sentences using correct capitalization, spelling, and punctuation.

• Recognize and correct major sentence errors in one’s own writing, such as fragments, run-on sentences, subject-verb agreement, pronoun agreement and references.

• Use word processor for composition and revision.

ENGWR 99 English Summer Bridge Program
This is a writing and grammar course that is part lecture and part lab. Students will focus on reading and writing as integrally related skills, hone their reading and writing processes, and practice grammar and sentence formation—all to become more college ready. This course is recommended for students who wish to review basic principles of standard English and practice college-level writing for ENGWR 51, ENGWR 101 or ENGWR 300. The course is graded on a pass/no pass basis.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- Demonstrate understanding of the writing process to achieve various purposes through writing (SLO #1)
- Comprehend and analyze various professionally written texts (SLO #2)
- Compose fully developed, logically structured paragraphs and short essays (SLO #3)
- Recognize and begin to apply the conventions of standard written English (SLO #4)
- Feel more comfortable in a college-level setting
- Feel more confident about writing skills and ability to succeed at the college level

ENGWR 101 College Writing

This course focuses on the connections between critical thinking, writing, and reading that are necessary for the independent development of essays in ENGWR 300 and other transfer-level courses. It emphasizes writing in response to various reading selections, including at least one full-length work. The essay writing process includes prewriting, thesis development and organization of ideas, drafting of essays, and revision. The course also requires outside research and includes an introduction to basic formatting and referencing of sources using MLA-style documentation. Students will write a minimum of four full-process essays totaling at least 4500 words.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- READ ANALYTICALLY AND THINK CRITICALLY ABOUT PROFESSIONALLY WRITTEN TEXTS (SLO #1).
- Annotate written texts.
- Select ideas from written texts by using current methods to accurately incorporate the ideas of others into his or her writing where appropriate.
- Identify the organizational structure of professional essays.
- Summarize texts.
- DEMONSTRATE PROFICIENCY WITH WRITING AS A PROCESS THAT INCLUDES PREWRITING, DRAFTING, AND REVISING BY COMPOSING UNIFIED, STRUCTURED, DEVELOPED ESSAYS (SLO #2).
- Accomplish various purposes through writing.
- Organize written texts logically.
- Write focused, thoughtful thesis statements.
- Achieve coherence and unity in writing at three levels: sentence, paragraph, and essay.
- SUPPORT OPINIONS AND CONCLUSIONS USING SUFFICIENT EVIDENCE, INCORPORATING THE IDEAS OF OTHERS WHERE APPROPRIATE (SLO #3).
- Incorporate sources effectively in writing.
- Construct a simple argument in writing that gives reasons to support a claim.
ENGWR 108 Accelerated College Writing

This course provides intensive instruction and practice in the critical thinking and writing skills necessary for success in college composition. Assignments are often connected to the students' assignments in ENGWR 300. The course includes the drafting, revision, and editing processes as well as instruction in critical thinking, reading comprehension, grammar, mechanics, and usage.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- DEMONSTRATE PROFICIENCY WITH WRITING AS A PROCESS THAT INCLUDES PREWRITING, DRAFTING, AND REVISING BY COMPOSING UNIFIED, STRUCTURED, DEVELOPED ESSAYS (SLO#1):

- employ a recursive writing process that includes pre-writing, drafting, revising, and editing;

- compose fully developed, structured, coherent, and unified essays;

- CONSTRUCT SENTENCES THAT DEMONSTRATE CONTROL OF GRAMMAR, SENTENCE VARIETY, WORD CHOICE, AND CONVENTIONS OF STANDARD WRITTEN ENGLISH (SLO#2):

- identify and correct sentence errors (especially sentence fragments, comma-splices and run-on sentences, subject-verb disagreement, incorrect verb tense and form, punctuation, pronoun

- READ ANALYTICALLY AND THINK CRITICALLY ABOUT PROFESSIONALLY WRITTEN TEXTS (SLO#3):

- summarize, analyze, and respond to college-level texts;

- incorporate the ideas of others into writing and demonstrate competence in MLA formatting and in-text citing.

ENGWR 109 Reading and Writing Skills for College

This integrated reading and writing course is designed to accelerate the preparation for college reading and writing competency requirement for students who are assessed into one level below transfer English courses. This course prepares students for ENGRD 310/312 and ENGWR 300 with integrated teaching and learning in both reading and writing to accelerate a pathway for English Reading and Writing requirements. Students will learn to develop reading skills in vocabulary expansion, unlocking meanings with context clues and word parts, increasing comprehension, SQ3R, and critical thinking. Students will also learn to develop skills in writing correct, clear, and concise sentences with proper English grammar that transfer to well developed and organized paragraphs and essays. Other skills include paraphrasing, summarizing, pre-reading and pre-writing techniques, revising and editing essays, analyzing and comparing ideas, identifying author's tone, bias, and purpose. This course is most ideal for students who are assessed into both ENGRD 110 and ENGWR 101. Upon successful completion of this course, students will have met the prerequisite for ENGRD 310/312 and ENGWR 300. This course may include a departmental final. This course is the same as ENGRD 113, and only one may be taken for credit.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO #1 Demonstrate proficiency with reading and writing as a process that includes pre-reading/writing, reading/drafting, and post-reading and writing.

- Objective 1A: Annotate written texts.
Objective 1B: Identify organizational thought patterns in various styles of text.

Objective 1C: Make predictions before reading and adjust them while reading.

Objective 1D: Assess prior knowledge and personal experience through brainstorming, asking questions, and free write to make association with written texts.

Objective 1E: Construct summaries and outlines of written texts.

SLO #2 Demonstrate proficiency in composing and recognizing coherent sentences, paragraphs, and essays in proper English grammar in various reading materials and writing tasks.

Objective 2A: Understand parts of speech and apply the understanding in writing.

Objective 2B: Establish and expand specialized vocabulary and choose the appropriate words to express ideas.

Objective 2C: Use clear and varied sentences in writing with proper punctuation, capitalization, and word form.

Objective 2D: Develop error-free prose and recognize common errors in spelling in different styles of writing.

Objective 2E: Achieve coherence and unity in writing with a focused and logical thesis statement.

Objective 2F: Organize evidence and examples to support ideas in a logical manner that fits the style of writing and fulfill the purpose of writing.

SLO #3 Construct and demonstrate critical thinking skills through analyzing, evaluating, and synthesizing and through applying appropriate reading and writing strategies.

Objective 3A: Differentiate between facts, opinions, and informed opinions to interpret author’s tone and point of view.

Objective 3B: Draw proper conclusions and make effective evaluation upon examining factual information and implied messages in the text.

Objective 3C: Construct arguments in writing and provide evidence to support a claim.

Objective 3D: Incorporate and integrate multiple outside sources adequately and properly in writing.

Objective 3E: Adapt various reading techniques to accommodate reading rates.

Objective 3F: Follow MLA format in citing various sources when writing to respond to reading.

SLO #4 Apply appropriate comprehension strategies using effective and sufficient techniques in various reading materials and reflect such skills in written communication.

Objective 4A: Implement and apply SQ3R (Survey, Question, Read, Recite, Review) technique.

Objective 4B: Employ dictionary skills, structural analysis, and context clues to define unknown words.

Objective 4C: Understand the meaning of commonly used prefixes, roots, and suffixes.

Objective 4D: Use concept map to organize information that reflects comprehension of written texts.

Objective 4E: Employ effective highlighting skills.

Objective 4F: Apply, analyze and organize primary and secondary sources to synthesize ideas.

SLO #5 Apply study skills.

Objective 5A: Use annotation, highlighting, summarizing, outlining, and mapping to comprehend, evaluate, and analyze written texts.

Objective 5B: Employ proper time management skills to organize the process of assignment completion.

ENGWR 110 College Reading and Writing Skills

Units: 4
Hours: 72 hours LEC
Prerequisite: None.
Catalog Date: June 1, 2020

This pre-transfer-level course is designed to prepare students for success in ENGWR 300 and other courses that require writing. Students will read primarily transfer-level non-fiction texts of varying length, and write essays responding to and incorporating these readings. The course will focus on reading and writing fundamentals, such as active reading strategies, writing process, thesis development, paragraph structure, logical support, and sentence awareness.
Student Learning Outcomes

Upon completion of this course, the student will be able to:

- Comprehend, think critically, and respond appropriately in writing to a variety of professionally written non-fiction and fiction texts. (SLO 1)
- Use context to determine the meanings of words and to interpret the meaning behind a variety of non-fiction and fiction texts.
- Differentiate between main ideas and support details in a variety of non-fiction texts.
- Develop written responses with clearly stated main ideas/thesis statements and appropriate support details (including facts and supported opinions developed through careful critical thinking) when responding to a variety of non-fiction and fiction texts.
- Identify implied meanings and formulate appropriate conclusions in reading a variety of fiction and non-fiction texts.
- Identify and analyze basic organizational patterns in a variety of expository texts (e.g., generalization-example, cause-effect, and comparison-contrast).
- Compose fully developed, logically structured paragraphs and essays using the stages of pre-writing, drafting, revising, and editing.(SLO 2)
- Achieve coherence and unity in essay form with planned organization and the use of transitions.
- Achieve various purposes through writing.
- Develop text with thoughtful, focused thesis statements, relevant topic sentences, specific examples and details.
- Develop skill and confidence in writing timed essays.
- Recognize and begin to apply the conventions of standard written English. (SLO 3)
- Identify standard written English conventions in a variety of written texts.
- Write clear and correct sentences using correct capitalization, spelling, and punctuation.
- Recognize and correct major sentence errors in one's own writing, such as fragments, run-on sentences, subject-verb agreement, pronoun agreement and references.
- Use a computer for composition and revision.

ENGWR 300 College Composition

Units: 3
Hours: 54 hours LEC
Prerequisite: ENGWR 101 or equivalent skills demonstrated through the assessment process. Grade of "C" or better required to meet prerequisite.
Transferable: CSU; UC
General Education: AA/AS Area II(a); CSU Area A2; IGETC Area 1A
C-ID: C-ID ENGL 100
Catalog Date: June 1, 2020

This course offers instruction in critical thinking, reading and writing, and is designed to help the student demonstrate, in both argumentative and expository prose, sound logic and/or argumentation, clear organization, precise diction, and appropriate style. Throughout the course, fluency and correctness are emphasized.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- COMPOSE EFFECTIVE COLLEGE-LEVEL ESSAYS USING A VARIETY OF RHETORICAL STRATEGIES AND APPLYING APPROPRIATE CITATIONS AND Formatting STANDARDS (SLO #1).
- Use pre-writing, drafting, revision, and editing/proofreading to create essays.
- Write focused, thoughtful thesis statements.
- Support opinions in writing through careful, critical thinking.
- Adequately develop essays using a variety of approaches, such as comparison/contrast, classification, definition, narration, description, causal analysis.
- Construct a logical argument in writing that deals with the opposition and gives reasons to support a claim.
- Achieve coherence and unity in writing at three levels: sentence, paragraph, and essay.
ENGWR 301 College Composition and Literature

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- Organize written texts logically without dependence on formulaic prescriptions.
- RESEARCH, EVALUATE, AND SYNTHESIZE SOURCES TO SUPPORT A THESIS (SLO #2).
- Use MLA documentation format correctly.
- Summarize, paraphrase, and directly quote outside sources as support for his or her ideas.
- Research and incorporate sources effectively and meaningfully in writing.
- CRITICALLY ANALYZE, COMPARE, AND EVALUATE VARIOUS COMPLEX WORKS (SLO #3).
- Annotate and analyze written texts and respond thoughtfully to them.
- Analyze and evaluate the 3-fold rhetorical concerns of audience, writer, and message in written texts.
- Effectively critique his or her own and other student writing.
- APPLY THE CONVENTIONS OF STANDARD WRITTEN ENGLISH EMPLOYING A VARIETY OF SENTENCE STRUCTURES AND COLLEGE-LEVEL DICTION (SLO #4).
- Use clear and varied sentences to write error-free prose.

ENGWR 301 offers the study of literature, with an emphasis on analytical reading and writing. It covers principles of argument and analysis, such as reasoning inductively and deductively. Assigned readings may include novels, short stories, poems, plays, and literary criticism. Essays written for the course (6,000 words minimum) generalize from the texts to present carefully reasoned arguments. At least one essay includes citations from secondary sources, documented according to current MLA format.
identify premises, both explicitly and implicitly stated.

- distinguish among facts, inferences, assumptions, and implications.

- recognize fallacious reasoning, including but not limited to the standard critical thinking fallacies, in various critical interpretations of literary works (including the students' own interpretations) and respond to (and correct, if necessary) these fallacies.

- compare opposing interpretations by literary scholars.

- OBTAIN THE NECESSARY READING AND WRITING SKILLS FOR UNIVERSITY-LEVEL COURSES (SLO 5, P-SLO 5)

- propose a thesis-driven argument of interpretation or evaluation and support it with textual evidence, using a sufficient variety and number of appropriate examples.

- support the thesis with a sufficient number and variety of appropriate examples from both primary and secondary texts, taking into account alternate and opposing points of view.

- construct logical discourse through order, repetition, and transitional devices.

- use diction appropriate to the audience and the rhetorical purpose of writing.

- use elements of style with increasing complexity (such as absolute phrases or repetition) to achieve coherence.

---

**ENGWR 302 Advanced Composition and Critical Thinking**

<table>
<thead>
<tr>
<th>Units:</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hours:</td>
<td>54 hours LEC</td>
</tr>
<tr>
<td>Prerequisites:</td>
<td>ENGWR 300 with a grade of &quot;C&quot; or better, or placement through the assessment process.</td>
</tr>
<tr>
<td>Transferable:</td>
<td>CSU; UC</td>
</tr>
<tr>
<td>General Education:</td>
<td>AA/AS Area I(b); CSU Area A3; IGETC Area 1B</td>
</tr>
<tr>
<td>C-ID:</td>
<td>C-ID ENGL 105</td>
</tr>
<tr>
<td>Catalog Date:</td>
<td>June 1, 2020</td>
</tr>
</tbody>
</table>

This course is designed for students who have had ENGWR 300 and who desire further instruction in the techniques of effective critical thinking as expressed in written argument and in the major principles of advanced composition and rhetoric.

### Student Learning Outcomes

Upon completion of this course, the student will be able to:

- **PREPARE STUDENTS TO BECOME SELF-RELIANT, EVALUATIVE READERS AND WRITERS ABLE TO USE CRITICAL THINKING SKILLS TO READ AND WRITE EFFECTIVELY IN ACADEMIC AND WORKPLACE SETTINGS. (SLO#1, PSLO#3)

- write effective precis and responses, stance/position papers, proposals, evaluations and analyses of cause in which they demonstrate an understanding of the diction and structural differences between the Upper, Middle and Lower styles in English, and demonstrate an ability to determine which of these styles is appropriate to the tone, purpose and audience of their essay; demonstrate an ability to use the advanced principles of clarity (agent-action-goal) and coherence (concatenation, focus maintenance, clear orientation and subject control), concision and emphasis to develop more sophisticated writing skills appropriate to upper-division college essays; demonstrate a highly-developed ability to use the thoughts, facts, and experiences of other to support their own assertions effectively and to cite those thoughts, facts and experiences when appropriate to the Upper Middle Style, including but not limited to the use of tropes and schemes and the use of syntactic symbolism; demonstrate the ability to limit the topic appropriately to a scope that can be developed appropriately in the length of the composition; demonstrate an ability to select examples details, data and other evidence to support the validate the thesis and other generalization; demonstrate (in taking stances or criticizing the arguments of others) an ability to rephrase written argument accurately, producing a faithful distillation of the central meaning of the text or the writer's ostensible intention; demonstrate a clear awareness of the specific audience of the essay and of any special limitations or opportunities imposed or provided by the rhetorical situation, and demonstrate an ability to respond to those limitations and opportunities appropriately by adjusting the arguments and the language of the essay appropriately.

- **ENABLE STUDENTS TO DEVELOP ACADEMIC LITERACY SKILLS, TO UTILIZE READING AND WRITING PROCESSES, TO FIND AND COMPREHEND INFORMATION, AND TO APPLY THAT KNOWLEDGE IN MYRIAD RHETORICAL SITUATIONS. (SLO#2, PSLO#4)

- read analytically and evaluate ideas in focused class discussion and in written techniques, read competing points of view of subjects and determine their own stances on the subjects and be able to express those stances logically and effectively, demonstrating an ability to identify and state the main idea, thesis or unifying theme in expository or argumentative discourse; to point out instances of inferential reasoning and deductive and inductive logic; to distinguish between opinion, judgment and what may be taken as a fact, and to describe an appropriate process of verification in establishing whether an utterance is factual or not; to recognize and articulate assumptions (including unstated assumptions) in an argument; to draw and justify inferences made about the intention of the writer based on observations of the writer's diction and style (e.g., tone, persona and metaphor); to point out logical fallacies or slanted or propagandist use of language.

- **ASSIST STUDENTS IN OBTAINING THE NECESSARY READING AND WRITING SKILLS FOR UNIVERSITY-LEVEL COURSES. (SLO#3, PSLO#5)**

---
demonstrate more sophisticated structure, coherence and emphasis; demonstrate their understanding of the elements of style, with particular emphasis placed on the role of grammar as an element of style; demonstrate an understanding of some of the principles of classical rhetoric and of the Upper Middle Style found in most American journals-of-record; demonstrate an understanding of opposing viewpoints on issues and to develop their own stances on those issues; and demonstrate an ability to argue cogently in a number of modes, including but not limited to making proposals, making evaluation and position the existence of causal relationships.

ENGWR 309 Documenting Research for College Composition

Units: 1
Hours: 18 hours LEC
Prerequisite: ENGWR 101 with a grade of "C" or better, or placement through the assessment process.
Advisory: LIBR 318
Transferable: CSU; UC
Catalog Date: June 1, 2020

Learn to add credibility and to avoid plagiarism in your writing as you explore the principles and mechanics of documenting research while developing critical thinking skills. The final product of the course is a well-researched argumentative essay that shows mastery of the documentation style guidelines of the Modern Language Association of America (MLA).

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- BECOME SELF-RELIANT, EVALUATIVE READERS AND WRITERS, ABLE TO USE CRITICAL THINKING SKILLS TO READ AND WRITE EFFECTIVELY IN ACADEMIC AND WORKPLACE SETTINGS. (SLO #1, P-SLO #3)
- Write a researched argumentative essay in which the parenthetical references correctly follow MLA guidelines.
- Evaluate Internet sites for their credibility in academic research.
- DEVELOP ACADEMIC LITERACY SKILLS, UTILIZE READING AND WRITING PROCESSES, FIND AND COMPREHEND INFORMATION, AND APPLY THAT KNOWLEDGE IN MYRIAD RHETORICAL SITUATIONS. (SLO #2, P-SLO #4)
- Use basic argumentative principles such as providing reasons with grounds, backing up assumptions underlying reasons, and dealing with the opposition.
- Use the Internet to find credible sources to support a research paper.
- OBTAIN THE NECESSARY READING AND WRITING SKILLS FOR UNIVERSITY-LEVEL COURSES. (SLO #3, P-SLO #5)
- Distinguish between quoting, paraphrasing, and summarizing and using each method of textual reference in a research paper.
- Use the college library's full text databases to find current research on a given topic.
- RECOGNIZE THE ETHICAL IMPLICATIONS OF VARIOUS MODES OF COMMUNICATION AND THE NEED TO USE THIS KNOWLEDGE RESPONSIBLY. (SLO #4, P-SLO #2)
- Create a works cited page that documents at least 10 different kinds of sources compiled for a research paper.

ENGWR 330 Writing for Publication

Same As: JOUR 340
Units: 3
Hours: 54 hours LEC
Prerequisite: ENGWR 300, ENGWR 480, HONOR 375, or JOUR 300 with a grade of "C" or better
Transferable: CSU
Catalog Date: June 1, 2020

This is an introductory course in writing nonfiction for publication. Emphasis will be on developing magazine articles that sell; finding ideas; analyzing magazines; writing query letters; researching and interviewing; organizing, writing and illustrating articles. Individual and class criticism of student work will be featured. This course is the same as JOUR 340, and only one may be taken for credit.

Student Learning Outcomes

Upon completion of this course, the student will be able to:
ENGWR 331 Writing for Publication

Units: 3
Hours: 54 hours LEC
Prerequisite: ENGWR 300 with a grade of "C" or better
Advisory: ENGWR 330
Transferable: CSU
Catalog Date: June 1, 2020

This course offers a marketing approach to selling nonfiction writing. The course surveys consumer, general interest and specialty magazines, including trade journals, company publications, regional magazines and local markets. Activities will include the following: reporting on magazine categories; analysis of a variety of magazine article styles and types; writing and sending articles to the marketplace; individual and class criticism of student manuscripts. Emphasis will be placed on increasing freelance writing publication. The course may be taken twice for credit, with the understanding that many universities and four-year colleges place a nine-unit limit on transfer credit from advanced composition courses (ENGWR 330, 331 and ENGCW 400).

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- review selling procedures, writing an effective query, and writing as a business.
- understand and apply techniques for increasing freelance production and sales through multiple submissions to the magazine marketplace.
- examine consumer, general interest, specialty, local and international magazines.
- mail out query letters and manuscripts on schedule.
- gain hands-on experience using computers to research and write articles.
- develop writing and editing skills.
- develop oral presentation and interpersonal skills.
- develop critical thinking skills; identifying and defining problems or issues; collecting analyzing, and evaluating information; synthesizing and developing conclusions.
- gain personal satisfaction through preparing work for publication.
ENGWR 341 Introduction to Technical and Professional Writing

This course emphasizes principles of reader-centered writing for the workplace, focusing specifically on aspects of technical and professional writing. The course teaches the writing of documents used in industry and business. These documents may include memos, letters, brochures, reports, process analyses, technical descriptions, procedures, proposals, grants, scientific reports, web sites, software documentation, and case studies. The course may include team projects that require collaboration outside the classroom. The course complements communication skills needed for the division of Career and Technical Education. The course is intended to be applicable to AS and AA CTE degrees.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- IDENTIFY THE VARIOUS FORMS OF TECHNICAL COMMUNICATION, INCLUDING THE AUDIENCES TO WHOM THEY ARE FOCUSED (SLO#1).
- Analyze a variety of document formats with regards to audience and purpose.
- Propose writing solutions to fill information needs.
- Compose documents suited for the appropriate audience.
- Revise professional documentation based on audience feedback.
- RESEARCH, EVALUATE, AND SYNTHESIZE SOURCES TO SUPPORT A PROPOSAL OR HYPOTHESIS (SLO#2).
- Collect and evaluate technical and organizational information.
- Compose documents by incorporating summary, paraphrase, and direct quotations as support for the writer's ideas and correctly using Council of Science Editors (CSE) or American Psychological Association (APA) style to format and cite.
- DESIGN, CREATE AND COMPOSE DOCUMENTS DEPENDENT ON PURPOSE AND SITUATION (SLO#3).
- Design documents to make content visually appealing and accessible through highlighting, headings, subheading, bulleted, and visual aids.
- Compose documents persuasively to convince the audience by arousing interest, supporting points with research, refuting opposing points, writing ethically by documenting sources and reviewing for accuracy.
- Incorporate the rhetorical appeals of ethos, logos, and pathos in written communication.
- Avoid logical fallacies when communicating persuasively.
- Use various communication channels including social media, routine correspondence, electronic communication, sales letters, brochures, and flyers to market services and products.

ENGWR 480 Honors College Composition

Same As: HONOR 375
Units: 3
Hours: 54 hours LEC
Prerequisite: ENGWR 101 with a grade of "C" or better, or placement through the assessment process.
Transferable: CSU
General Education: AA/AS Area II(a)
Catalog Date: June 1, 2020
This course offers the honors student a challenging course that will develop skills in critical thinking, reading, and writing. It asks students to critically analyze, compare, and evaluate various complex works. The course is designed to help students demonstrate, in both argumentative and expository prose, complex critical thinking, effective organization, precise diction, and sophisticated style; at least one of those essays requires research and appropriate MLA documentation. Essays written during the term will total at least 8,000 words. Throughout the course, fluency and correctness are emphasized. This course is not open to students who have successfully passed ENGWR 300 or ESLW 340. This course is the same as HONOR 375. This course, under either name, may be taken one time for credit.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- **COMPOSE CAREFULLY REASONED AND STYLISTICALLY SOPHISTICATED COLLEGE-LEVEL ESSAYS USING A VARIETY OF RHETORICAL STRATEGIES AND APPLYING APPROPRIATE CITATIONS AND FORMATTING STANDARDS (SLO #1; PSLO #1; Honors Prog.SLO # 1 and #5).**
- Use pre-writing, drafting, revision, and editing/proofreading to create essays.
- Write focused, thoughtful thesis statements.
- Support opinions in writing through careful, critical thinking.
- Compose stylistically sophisticated essays using a variety of approaches, such as comparison/contrast, classification, definition, narration, description, causal analysis.
- Construct a carefully reasoned argument in writing that considers audience and opposition.
- Build coherence and unity in writing at three levels: sentence, paragraph, and essay.
- Organize written texts logically and creatively without dependence on formulaic prescriptions.
- APPLY COMPLEX CRITICAL THINKING SKILLS BY DEFINING ISSUES AS WELL AS RESEARCHING, EVALUATING, AND SYNTHESIZING SOURCES TO SUPPORT A THESIS (SLO #2; PSLO #2 and PSLO #3; Honors Prog. SLO # 3 and #4).
- Appraise and use a variety of research techniques.
- Evaluate sources.
- Research and incorporate sources effectively and meaningfully in writing.
- Summarize, paraphrase, and directly quote outside sources as support for his or her ideas and/or represent a belief held by the opposition.
- Use MLA documentation format correctly.
- CRITICALLY ANALYZE, COMPARE, AND EVALUATE VARIOUS COMPLEX WORKS (SLO #3; PSLO #4; Honors Prog. SLO #2 and #5).
- Annotate and analyze complex written texts and respond thoughtfully to them.
- Analyze and evaluate the 3-fold rhetorical concerns of audience, writer, and message in written texts.
- Question an author's claim and support.
- Critique his or her own and other student writing.
- APPLY THE CONVENTIONS OF STANDARD WRITTEN ENGLISH EMPLOYING A VARIETY OF SENTENCE STRUCTURES AND COLLEGE-LEVEL DICTION (SLO #4; PSLO #5; Honors Prog. SLO #1).
- Use clear and varied sentences to demonstrate overall mastery of the conventions of standard written English.
- Analyze his or her own and other student style and diction.

**ENGWR 495 Independent Studies in English - Writing**

<table>
<thead>
<tr>
<th>Units:</th>
<th>1 - 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hours:</td>
<td>54 - 162 hours LAB</td>
</tr>
<tr>
<td>Prerequisite:</td>
<td>None.</td>
</tr>
<tr>
<td>Transferable:</td>
<td>CSU</td>
</tr>
<tr>
<td>Catalog Date:</td>
<td>June 1, 2020</td>
</tr>
</tbody>
</table>

An independent studies project involves an individual student or small group of students in study, research, or activities beyond the scope of regularly offered courses. See the current catalog section of "Special Studies" for full details of Independent Studies.
Upon completion of this course, the student will be able to:

- **SLO #1:** Actively engage in intellectual inquiry beyond that required in order to pass a course of study (College Wide Learning Outcome – Area 4).
- Discuss and outline a proposal of study (that can be accomplished within one semester term) with a supervising instructor qualified within the discipline.
- Design an independent study (to be completed individually or by collaboration of a small group) to foster special knowledge, skills, and experience that are not available in any one regularly scheduled course.
- Use information resources to gather discipline-specific information.
- **SLO #2:** Utilize modes of analysis and critical thinking to apply theoretical perspectives and/or concepts in the major discipline of study to significant problems and/or educational activities (College Wide Learning Outcome – Area 3).
- Analyze and apply the knowledge, skills and experience that are involved in the independent study to theoretical perspectives and/or concepts in the major discipline of study.
- Explain the importance of the major discipline of study in the broader picture of society.
- **SLO #3:** Communicate a complex understanding of content matter of the major discipline of study (College Wide Outcome – Area 3).
- Demonstrate competence in the skills essential to mastery of the major discipline of study that are necessary to accomplish the independent study.
- **SLO #4:** Identify personal goals and pursue these goals effectively (College Wide Outcome – Area 4).
- Utilize skills from the “academic tool kit” including time management, study skills, etc., to accomplish the independent study within one semester term.
English as a Second Language  
| Cosumnes River College

CRC offers a comprehensive ESL program with courses in grammar, listening/speaking, pronunciation, reading, and writing designed to provide the English language learner with the command of the English language necessary to pursue both transfer and vocational courses and enter the workforce. Students can enter with virtually no knowledge of English and progress to an extremely proficient level.

Alex Casareno  
📞 (916) 691-7740  
✉️ CasareA@crc.losrios.edu

Certificates

ESL Listening and Speaking for Academic and Workforce Preparation Certificate

This certificate of proficiency recognizes English language learners who have successfully completed coursework in ESL Listening and Speaking from the novice to low intermediate level.

Catalog Date: June 1, 2020

Certificate Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>ESLL 31</td>
<td>Listening and Speaking for College Readiness</td>
<td>3</td>
</tr>
<tr>
<td>ESLL 41</td>
<td>Listening, Speaking and Presentation Skills for College</td>
<td>3</td>
</tr>
<tr>
<td>ESLP 41</td>
<td>The Basics of English Pronunciation</td>
<td>3</td>
</tr>
<tr>
<td>Total Units:</td>
<td></td>
<td>9</td>
</tr>
</tbody>
</table>

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- PSLO #1: USE INTERACTIVE SPEAKING STRATEGIES EFFECTIVELY
- PSLO #2: PREPARE AND DELIVER SHORT YET ENGAGING PRESENTATIONS ON ACADEMIC TOPICS
- PSLO #3: USE NOTE-TAKING TECHNIQUES TO TAKE ORGANIZED, ACCURATE NOTES BASED ON SHORT LECTURES FROM A VARIETY OF DISCIPLINES
- PSLO #4: DEMONSTRATE AN EMERGING ABILITY TO PRONOUNCE ALL THE SOUNDS OF ENGLISH IN CONTROLLED SPEECH.
- PSLO #5: USE BASIC WORD STRESS RULES TO IDENTIFY AND PRONOUNCE STRESSED SYLLABLES.
- PSLO #6: USE BASIC RULES OF SUPRASEGMENTAL STRESS TO IDENTIFY AND PRONOUNCE SENTENCE STRESS AND INTONATION.
ESL Listening and Speaking for College Success Certificate

This certificate of proficiency recognizes English language learners who have successfully completed coursework in ESL Listening and Speaking from the intermediate-mid to advanced-low level.

**Catalog Date:** June 1, 2020

### Certificate Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>ESLP 51</td>
<td>Building English Fluency and Comprehensibility</td>
<td>3</td>
</tr>
<tr>
<td>ESLL 111</td>
<td>Academic Listening, Speaking, and Presentation Skills</td>
<td>3</td>
</tr>
<tr>
<td>ESLL 121</td>
<td>Academic Listening, Note-taking, and Discussion</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total Units:</strong></td>
<td></td>
<td><strong>9</strong></td>
</tr>
</tbody>
</table>

### Student Learning Outcomes

Upon completion of this program, the student will be able to:

- PSLO 1: USE PRE-LISTENING STRATEGIES TO PREPARE FOR LECTURES
- PSLO 2: DEMONSTRATE COMPETENCE TAKING ACCURATE NOTES BASED ON LECTURES
- PSLO 3: ACTIVELY PARTICIPATE IN A VARIETY OF CLASS DISCUSSION ACTIVITIES
- PSLO 4: DEMONSTRATE THE ABILITY TO PRONOUNCE ALL THE SOUNDS OF ENGLISH IN CONTROLLED SPEECH WITH OCCASIONAL ERRORS.
- PSLO 5: USE OF A VARIETY OF WORD STRESS RULES TO IDENTIFY AND PRONOUNCE STRESSED SYLLABLES.
- PSLO 6: USE RULES OF SUPRASEGMENTAL STRESS TO IDENTIFY AND PRONOUNCE RHYTHM, SENTENCE STRESS, AND INTONATION

---

ESL Reading for Academic and Workforce Preparation Certificate

This certificate of proficiency recognizes English language learners who have successfully completed coursework in ESL Reading from the novice to low intermediate level.

**Catalog Date:** June 1, 2020

### Certificate Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>ESL 37</td>
<td>Novice-High Integrated Reading and Writing</td>
<td>6</td>
</tr>
<tr>
<td>ESL 47</td>
<td>Intermediate-Low Integrated Reading and Writing</td>
<td>6</td>
</tr>
<tr>
<td><strong>Total Units:</strong></td>
<td></td>
<td><strong>12</strong></td>
</tr>
</tbody>
</table>

### Student Learning Outcomes

Upon completion of this program, the student will be able to:

- PSLO 1: EMPLOY ‘TOP-DOWN’ COMPREHENSION STRATEGIES
- PSLO 2: EMPLOY LEVEL-APPROPRIATE VOCABULARY BUILDING STRATEGIES
• PSLO 3: DEMONSTRATE COMPREHENSION OF MULTI-PARAGRAPH ACADEMIC TEXTS
• PSLO 4: DEMONSTRATE AN EMERGING ABILITY TO SYNTHESIZE INFORMATION FROM TEXT AND USE THAT INFORMATION TO GENERATE IDEAS FOR WRITING.

ESL Reading for College Success Certificate

This certificate of proficiency recognizes English language learners who have successfully completed coursework in ESL Reading from the intermediate to advanced-low level.

Catalog Date: June 1, 2020

Certificate Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>ESL 110</td>
<td>ESL College English Preparation: Intermediate</td>
<td>6</td>
</tr>
<tr>
<td>ESL 130</td>
<td>ESL College English Preparation: Advanced-Low</td>
<td>6</td>
</tr>
<tr>
<td>Total Units:</td>
<td></td>
<td>12</td>
</tr>
</tbody>
</table>

Student Learning Outcomes

Upon completion of this program, the student will be able to:

• PSLO 1: DEMONSTRATE ACADEMIC READING SKILLS BOTH IN CLASS UNDER THE PRESSURE OF TIME AND OUT OF CLASS.
• PSLO 2: RESPOND TO READINGS IN CLEAR WRITTEN AND ORAL RESPONSES THAT SHOW CRITICAL ANALYSIS.
• PSLO 3: DEMONSTRATE THE ABILITY TO INFERENCE, SUMMARIZE, PARAPHRASE, AND MAKE GRAPHIC ORGANIZERS OR OUTLINES.

ESL Writing for Academic and Workforce Preparation Certificate

This certificate of proficiency recognizes English language learners who have successfully completed coursework in ESL Writing from the novice to low intermediate level.

Catalog Date: June 1, 2020

Certificate Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>ESL 37</td>
<td>Novice-High Integrated Reading and Writing</td>
<td>6</td>
</tr>
<tr>
<td>ESL 47</td>
<td>Intermediate-Low Integrated Reading and Writing</td>
<td>6</td>
</tr>
<tr>
<td>Total Units:</td>
<td></td>
<td>12</td>
</tr>
</tbody>
</table>

Student Learning Outcomes

Upon completion of this program, the student will be able to:

• PSLO 1: EMPLOY THE WRITING PROCESS TO COMPLETE WRITING ASSIGNMENTS WHICH INCLUDE A CLEAR TOPIC, CONTROLLING IDEA, AND SUPPORTING DETAILS AT VARIOUS LEVELS OF SPECIFICITY.
• PSLO 2: DEMONSTRATE AN EMERGING ABILITY TO APPLY NEW INFORMATION TO WRITING
• PSLO 3: USE COMMON ENGLISH SENTENCE PATTERNS CORRECTLY.
ESL Writing for College Success Certificate

This certificate of proficiency recognizes English language learners who have successfully completed coursework in ESL Writing from the intermediate-mid to advanced-low level.

**Catalog Date:** June 1, 2020

Certificate Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>ESL 110</td>
<td>ESL College English Preparation: Intermediate</td>
<td>6</td>
</tr>
<tr>
<td>ESL 130</td>
<td>ESL College English Preparation: Advanced-Low</td>
<td>6</td>
</tr>
<tr>
<td><strong>Total Units:</strong></td>
<td></td>
<td><strong>12</strong></td>
</tr>
</tbody>
</table>

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- **PSLO 1:** Employ the writing process to complete several multi-draft essays that include outside sources.
- **PSLO 2:** Consistently demonstrate college-appropriate skills both in and out of the classroom.
- **PSLO 3:** Complete college-level assignments including following multi-part instructions, using independent thinking or basic research, completing work on time even when multiple steps are required, and utilizing correct formatting for all written assignments.
- **PSLO 4:** Respect academic integrity by using one’s own ideas and words in writing and citing sources when necessary.

English as a Second Language (ESL)

ESL 24 Novice-Mid ESL Skills Lab

**Units:** 0.5 - 1.5  
**Hours:** 27 - 81 hours LAB  
**Prerequisite:** None.  
**Enrollment Limitation:** Students may only enroll in one ESL Skills Lab per semester.  
**Advisory:** ESL 20, ESLR 20, and ESLW 20; Concurrent enrollment in ESSL 20, ESLR 20, and/or ESLW 20 is recommended as ESL 24 is designed to supplement the instruction students receive in those courses.  
**Catalog Date:** June 1, 2020

This course develops, expands, and reinforces multiple English language skills at the novice-mid level in an independent and/or small group environment. Coursework includes integrated study topics relative to vocabulary and study skills, reading, grammar use, idiomatic language study and application, conversation and listening skills, and assorted integrated software programs. Late registration is allowed as long as space is available and with the permission of the instructor. This course is not a substitute for other ESL courses. Students will earn .5 units for each 27 hours of lab completed for a maximum of 1.50 units. This course is a Pass/No Pass course.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- **SLO #1:** Recognize basic parts of speech and basic elements of English sentences.
- Identify nouns, verbs, adjectives, articles, and prepositions.
- Analyze basic English sentences to identify subjects, verbs, and completers.
- **SLO #2:** Use the simple present, past, future and present progressive tenses correctly.
- Produce sentences in oral or written form using verb form and tense correctly.
- **SLO #3:** Demonstrate comprehension of basic English.
• Answer simple questions about the literal content of basic level English text or aural passages.

• SLO #4: DEMONSTRATE UNDERSTANDING OF THE ENGLISH ALPHABETIC PRINCIPLES.
  
  • Recognize all the letters of the English alphabet as well as most of the phonetic sounds of English.
  
  • Produce the sounds of American English with occasional native language interference.

ESL 27 Beginning-Low Integrated Reading and Writing

<table>
<thead>
<tr>
<th>Units:</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hours:</td>
<td>108 hours LEC</td>
</tr>
<tr>
<td>Prerequisite:</td>
<td>None.</td>
</tr>
<tr>
<td>Catalog Date:</td>
<td>June 1, 2020</td>
</tr>
</tbody>
</table>

This course focuses on the fundamental reading and writing skills which are necessary for success in an academic English program. Students will develop an understanding of vocabulary building, reading comprehension, and the basic grammar and sentence structure necessary for paragraph writing. Students will use content from course readings to develop ideas for their own writing. This course is part of the reading and writing sequence which prepares ESL students to take college courses leading to a certificate, degree, and/or transfer.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• SLO #1: DEMONSTRATE UNDERSTANDING OF THE ALPHABETIC PRINCIPLES OF ENGLISH.
  
  • Recognize and write all letters of the English alphabet
  
  • Associate speech sounds and spoken words to their alphabetic equivalents.
  
  • Analyze the syllabic structure of spoken and written words.
  
  • Apply the alphabetic principle to vocalize printed words having regular spellings.

• SLO #2: EMPLOY BASIC VOCABULARY BUILDING RESOURCES AND STRATEGIES.
  
  • Use an English language learner dictionary to determine appropriate meaning of new words.
  
  • Infer meanings of new words given visual and contextual clues.

• SLO #3: DEMONSTRATE EXPLICIT COMPREHENSION OF BASIC TEXTS.
  
  • Interpret and answer simple questions about the literal content of beginning-level texts.
  
  • Employ rudimentary scanning to locate explicit information in assigned texts.
  
  • Ask/write questions about the literal content of beginning-level texts.

• SLO #4: DIFFERENTIATE BETWEEN BASIC PARTS OF SPEECH AND BASIC PARTS OF SENTENCES.
  
  • Identify nouns, verbs, adjectives, adverbs, articles and prepositions.
  
  • Identify subjects, verbs, and completers.

• SLO #5: CONSTRUCT SIMPLE AFFIRMATIVE AND NEGATIVE STATEMENTS AND QUESTIONS.
  
  • Use the simple present, past, and future and the present progressive tenses correctly.
  
  • Use English word order with proper punctuation and spelling.

• SLO #6: WRITE A BASIC PARAGRAPH OF ABOUT 10 SENTENCES WITH A CLEAR BEGINNING, MIDDLE, AND END.
  
  • Respond to a prompt by writing sentences that are related or tell a story.
  
  • Use correct paragraph format.

ESL 34 Novice-High Skills Lab
This course develops, expands, and reinforces multiple English language skills at the novice-high level in an independent and/or small group environment. Coursework includes integrated study topics relative to vocabulary and study skills, reading and grammar use, idiomatic language study and application, conversation and listening skills, and assorted integrated software programs. Late registration is allowed as long as space is available and with the permission of the instructor. This course is not a substitute for other ESL courses. Students will earn .5 units for each 27 hours of lab completed for a maximum of 1.50 units. This course is a Pass/No Pass course.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO #1: IDENTIFY BASIC PARTS OF SPEECH AND BASIC ELEMENTS OF ENGLISH SENTENCES.
  - Identify subjects, verbs, and completers in simple, compound and basic complex sentences.
  - Recognize the function of various types of conjunctions and use them correctly.
- SLO #2: EMPLOY STRATEGIES TO IMPROVE READING AND AURAL COMPREHENSION.
  - Identify topics, main ideas, and supporting details in reading passages and listening activities.
  - Identify vocabulary meaning based on context clues.
- SLO #3: DEVELOP EFFECTIVE WRITING AND REVISION STRATEGIES.
  - Identify main ideas, topic sentences, and supporting details in own writing.
  - Construct simple sentences using simple present, simple past, and future tenses.
  - Apply basic punctuation and capitalization rules.
- SLO #4: EMPLOY BASIC RULES OF SYLLABICATION, STRESS AND INTONATION OF STANDARD AMERICAN ENGLISH
  - Distinguish the three -s ending sounds and understand the cause for the variant sounds.
  - Differentiate the three -ed ending sounds and understand the cause for the variant sounds.
  - Recognize basic stress, rhythm, and intonation patterns of American English and how these affect meaning.

ESL 37 Novice-High Integrated Reading and Writing

This course focuses on learning academic reading and writing skills at the novice-high level, with an emphasis on vocabulary development, reading comprehension, and the writing process. Students will develop paragraphs with a clear beginning, middle, and end in the context of a multiple paragraph writing assignment. This course is part of the reading and writing sequence which prepares ESL students to take college courses leading to a certificate, degree, and/or transfer.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO 1: DEMONSTRATE COMPREHENSION OF MULTI-PARAGRAPH TEXT WITH INCREASING LEVELS OF SOPHISTICATION.
  - Identify main ideas, topic sentences, and supporting details.
  - Use skimming and scanning strategies to identify general ideas and locate specific information.
  - Use background knowledge and personal experience to improve understanding of a reading.
- SLO 2: DEVELOP VOCABULARY BUILDING STRATEGIES
  - Use context clues to determine meaning of new words.
- Identify basic prefixes, suffixes and roots and use that information to determine part of speech and meaning.
- Use a variety of strategies to successfully acquire new vocabulary.
- SLO 3: EMPLOY THE WRITING PROCESS TO COMPLETE MULTI-PARAGRAPH WRITING ASSIGNMENTS.
- Write focused paragraphs with a clear beginning, middle, and end based on topics covered in the course.
- Apply basic steps in the writing process including prewriting, writing, editing, and revising.
- Demonstrate use of basic writing and formatting conventions including punctuation, capitalization, margins, indentations, spelling, and legible handwriting.
- SLO 4: PRODUCE SIMPLE SENTENCES AS WELL AS BASIC COMPOUND AND COMPLEX SENTENCES WITH CORRECT ENGLISH SYNTAX, PUNCTUATION AND CAPITALIZATION.
- Recognize dependent and independent clauses in simple, compound and complex sentences by identifying subjects, verbs, and completers.
- Produce compound and complex sentences by using conjunctions effectively.
- SLO 5: USE GRAMMAR TO COMMUNICATE EFFECTIVELY IN WRITING.
- Use simple present, present continuous, simple past, and simple future correctly according to context.
- Use singular and plural count nouns and noncount nouns with correct articles and quantifiers.
- Use adjectives effectively.

ESL 39 College Ready Skills for English Language Learners

| Units: | 2 |
| Hours: | 36 hours LEC |
| Prerequisites: | ESLL 20, ESLR 20, or ESLW 20 with a grade of "C" or better, or placement through the assessment process. |
| Catalog Date: | June 1, 2020 |

This is a course to prepare English language learners for success in the American academic experience. This course provides college success strategies, language skills, and support resources in the language appropriate for entry level ESL students.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO #1: DEMONSTRATE AN UNDERSTANDING OF AMERICAN COLLEGE POLICIES AND PRACTICES.
- Identify college services and resources.
- Demonstrate an understanding of how to use an online management systems and the college website.
- Recognize and use vocabulary related to a college campus, resources, and policies.
- SLO #2: USE BASIC STRATEGIES TO INCREASE ACADEMIC SUCCESS IN READING, WRITING, AND LISTENING/SPEAKING.
- Use basic reading skills such as previewing, scanning, and part of speech recognition to increase reading comprehension.
- Identify and use linear patterns of organization including basic outlining.
- Use a variety of set phrases for speaking with professors and classmates.
- Use basic strategies for correcting errors in writing.
- SLO #3: DEVELOP AWARENESS OF STUDY STRATEGIES AND TEST-TAKING STRATEGIES.
- Demonstrate an understanding of time management and expectations of work done outside of class.
- Identify a variety of test questions and develop the ability to follow directions on tests in English.
- Use a variety of strategies for increasing academic vocabulary in English.

ESL 44 Intermediate-Low Skills Lab
This course develops, expands, and reinforces multiple English language skills at the intermediate-low level in an independent and/or in small group environment. Coursework includes integrated study topics relative to vocabulary and study skills, reading and grammar use, idiomatic language study and application, pronunciation and listening skills, composition and writing, and/or workplace skills. This is an open-entry open-exit course. Students may register until the end of the ninth week of the semester if space allows. This course is not a substitute for other ESL courses. Students will earn .5 units for each 27 hours of lab completed for a maximum of 1.50 units. This course is graded Pass/No Pass.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO #1: EXTRACT VITAL INFORMATION FROM LISTENING PASSAGES AND LECTURES TO TAKE NOTES OF MAIN AND SUPPORTING IDEAS.
- SLO #2: DEMONSTRATE EXPLICIT COMPREHENSION OF LEVEL APPROPRIATE TEXTS.
  - Locate topics, recognize main ideas and major supporting details in intermediate level reading passages.
- SLO #3: DISTINGUISH THE MEANINGS CONVEYED BY FUNDAMENTAL ENGLISH GRAMMAR STRUCTURES.
  - Identify and produce simple, compound and complex sentences with correct punctuation.
  - Identify and produce sentences with appropriate verb structures.
- SLO #4: EXHIBIT AN EMERGING UNDERSTANDING OF THE REVISION AND EDITING PROCESS AS TOOLS FOR WRITING IMPROVEMENT.

ESL 47 Intermediate-Low Integrated Reading and Writing

ESL 47 is an integrated reading and writing course for English language learners at the intermediate level. In preparation for academic writing, students build skills in pre-writing, learn to write strong paragraphs, and practice the basics of essay structure. Students also build academic reading skills and vocabulary. With the information gathered through readings, students begin to use academic content to supplement their ideas in writing. This course is part of the reading and writing sequence, which prepares ESL students to take college courses leading to a certificate, degree, and/or transfer.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO 1: DEMONSTRATE COMPREHENSION OF MULTI-PARAGRAPH ACADEMIC TEXTS
  - Actively and critically respond to readings through discussions, journals, etc.
  - Begin to demonstrate understanding of main and supporting ideas through the use of graphic organizers or basic outlines.
- SLO 2: EMPLOY LEVEL-APPROPRIATE VOCABULARY BUILDING STRATEGIES
  - Begin using prefixes and suffixes to expand vocabulary.
  - Recognize and identify word families.
- SLO 3: USE COMMON ENGLISH SENTENCE PATTERNS
  - Use simple, compound, and complex sentences with correct punctuation and conjunctions.
- SLO 4: EMPLOY THE WRITING PROCESS TO COMPLETE SEVERAL WRITING ASSIGNMENTS.
  - Show the ability to complete all steps of the writing process for paragraph and basic essay writing.
  - Write fully developed paragraphs with a clear topic sentence, supporting sentences, and concluding sentence.
Show the ability to move from paragraph to basic essay writing.

Demonstrate an understanding of unity and coherence in writing.

Apply level-appropriate grammar to writing to make ideas clear, concise, and specific.

Use correct formatting, spelling, punctuation, capital letters, and grammar in in-class and out-of-class writing assignments.

SLO 5: DEMONSTRATE AN EMERGING ABILITY TO APPLY NEW INFORMATION TO WRITING.

Synthesize information learned in readings.

Apply content from the readings to generate ideas for writing assignments.

ESL 54 Intermediate-Mid Skills Lab

Units: 0.5 - 1.5
Hours: 27 - 81 hours LAB
Prerequisite: None.
Advisory: concurrent enrollment in ESL 50, ESLR 50, and/or ESLW 50 is recommended as ESL 54 is designed to supplement the instruction students receive these courses.
Catalog Date: June 1, 2020

This course develops, expands, and reinforces multiple English language skills at the intermediate-mid level in an independent and/or in small group environment. Coursework includes integrated study topics relative to vocabulary and study skills, reading and grammar use, idiomatic language study and application, pronunciation and listening skills, composition and writing, and/or workplace skills. This is an open-entry open-exit course. Students may register until the end of the ninth week of the semester if space allows. This course is not a substitute for other ESL courses. Students will earn .5 units for each 27 hours of lab completed for a maximum of 1.50 units. This course is a Pass/No Pass course.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO #1: IDENTIFY CENTRAL MEANING IN ACADEMIC SPOKEN DISCOURSE.
  - Take notes on short academic lectures, identify main ideas, subtopics, and important details.
- SLO #2: DEMONSTRATE IMPLICIT AND EXPLICIT COMPREHENSION OF LEVEL APPROPRIATE TEXTS.
  - Derive main ideas and supporting details from new texts.
  - Distinguish between fact and opinion and draw conclusions
- SLO #3: WRITE SIMPLE, COMPOUND, AND COMPLEX SENTENCES WITH CORRECT PUNCTUATION.
  - Use clause and sentence combining strategies with a variety of connectors with correct punctuation.
- SLO #4: IDENTIFY AND USE GRAMMAR STRUCTURES, VERB TENSE AND ASPECT, AND WORD FORMS WITH CONFIDENCE AND RARE ERRORS.

ESL 110 ESL College English Preparation: Intermediate

Units: 6
Hours: 108 hours LEC
Prerequisite: None.
Catalog Date: June 1, 2020

ESL 110 is an accelerated course that integrates reading and writing. This course addresses the reading and writing skills English language learners need to succeed in college-level courses. Students focus on refining college-level academic skills in reading and writing with an emphasis on speed, vocabulary development, fluency, use of standard English, and analytical skills. Students will do extensive reading and writing with ever-increasing critical analysis. Students will follow the writing process in essay writing and will move from personal experiences to incorporating academic information. The class is the first semester of a two-semester sequence that moves students to ENGWR 300 and ENGRD 310/312.

Student Learning Outcomes

Upon completion of this course, the student will be able to:
SLO 1: DEMONSTRATE IMPLICIT AND EXPLICIT COMPREHENSION OF MULTI-PARAGRAPH, MULTI-PAGE ACADEMIC TEXTS

Actively and critically respond to readings through discussions, journals, etc.

Demonstrate understanding of ideas and organization in outlines, a variety of graphic organizers, and concise summaries that include the use of paraphrasing.

Demonstrate synthesis of new and previous information to reach conclusions.

SLO 2: EMPLOY VOCABULARY BUILDING STRATEGIES

SLO 3: USE A VARIETY OF ENGLISH SENTENCE PATTERNS WITH CORRECT PUNCTUATION

Use simple, compound, and complex sentences with correct punctuation and a variety of coordinators.

Use sentence combining strategies and clauses, including adjective, adverb, noun, and condition clauses.

SLO 4: EMPLOY THE WRITING PROCESS TO COMPLETE SEVERAL MULTI-DRAFT ESSAYS.

Use a variety of prewriting strategies, organizing, writing, and revising in the completion of essay writing.

SLO 5: DEMONSTRATE COLLEGE-APPROPRIATE SKILLS BOTH IN AND OUT OF THE CLASSROOM

Use effective time management strategies such as prioritizing assignments by level of importance and difficulty.

ESL 130 ESL College English Preparation: Advanced-Low

Units: 6
Hours: 108 hours LEC
Prerequisite: ESL 110 with a grade of "C" or better, or placement through the assessment process.
Catalog Date: June 1, 2020

ESL 130 is an accelerated course that integrates reading and writing at the high-intermediate and advanced-low level and prepares English language learners to be successful in college-level courses. Students refine academic reading skills with an emphasis on comprehension of academic texts, reading fluency, annotation, and vocabulary development. Students develop research and synthesizing skills and write a variety of essays based on critical analysis of readings. The course also emphasizes competent sentence variety and mastering the mechanics of English in the context of the essay. This class is the second semester of a two-semester sequence that moves students to ENGWR 300 and ENGRD 310/312.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO 1: DEMONSTRATE ACADEMIC READING SKILLS BOTH IN CLASS UNDER THE PRESSURE OF TIME AND OUT OF CLASS.
  Demonstrate the appropriate use of a variety of pre-reading techniques.
  Adapt strategies to address various reading tasks by choosing the appropriate reading skill to fit the task, working through difficult passages, annotating, and using text clues including headings, captions, etc. to aid comprehension.

- SLO 2: RESPOND TO READINGS IN CLEAR WRITTEN AND ORAL RESPONSES THAT SHOW CRITICAL ANALYSIS.
  Demonstrate the ability to infer, summarize, paraphrase, and make graphic organizers or outlines.

- SLO 3: EMPLOY THE WRITING PROCESS TO COMPLETE SEVERAL MULTI-DRAFT ESSAYS THAT INCLUDE OUTSIDE SOURCES.
  Use a variety of prewriting strategies, conduct basic research, write multiple drafts, and revise writing.
  Use instructor feedback and independent proofreading skills to complete final drafts with few grammatical errors.

- SLO 4: CONSISTENTLY DEMONSTRATE COLLEGE-APPROPRIATE SKILLS BOTH IN AND OUT OF THE CLASSROOM
  Complete college-level assignments including following multi-part instructions, using independent thinking or basic research, completing work on time even when multiple steps are required, and utilizing correct formatting for all written assignments.
  Respect academic integrity by using one's own ideas and words in writing and citing sources when necessary.

English as a Second Language - Grammar (ESLG)

ESLG 31 Basic English Grammar
This course provides English language learners with an introduction to the basics of English grammar including parts of speech, word form, word order, and the fundamental verb tenses necessary for writing. Students will learn to recognize how words function in English sentences, and be able to identify

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- **SLO 1:** UNDERSTAND THE PARTS OF SPEECH AND HOW THEY FUNCTION IN ENGLISH.
  - Recognize nouns, verbs, adjectives, adverbs, pronouns, articles, prepositions, and conjunctions.
  - Understand the function of each of the parts of speech in the context of a simple sentence.

- **SLO 2:** RECOGNIZE AND CONSTRUCT SIMPLE AND PROGRESSIVE VERB FORMS IN THE PAST, PRESENT, AND FUTURE.
  - Understand the use of auxiliary verbs and main verbs when constructing the past, present, and future tenses.
  - Utilize the correct auxiliary verb when creating negative statements, yes/no questions, and information questions.

- **SLO 3:** RECOGNIZE AND CONSTRUCT SIMPLE SENTENCES AND BASIC COMPOUND AND COMPLEX SENTENCES.
  - Analyze sentences to determine type, an use knowledge of sentence formation to correct errors.
  - Create original sentences using a variety of sentence types based on purpose or need.

ESLG 41 Elements of English Sentences

| Units: | 3 |
| Hours: | 54 hours LEC |
| Prerequisite: | ESLW 20 with a grade of "C" or better, or placement through the assessment process. |
| Catalog Date: | June 1, 2020 |

This course provides English Language Learners with a review of the basic elements of English sentences including parts of speech, word order, proper use of word form, and the simple and progressive verb tenses. Students will learn to recognize a variety of English sentence patterns in listening, and reading and be able to produce those patterns in their own speaking and writing.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- **SLO 1:** ANALYZE SENTENCES TO IDENTIFY THE PARTS OF SPEECH AND HOW THEY FUNCTION.
  - Label the parts of speech in a sentence.
  - Explain how words function in a given sentence.

- **SLO 2:** RECOGNIZE AND CONSTRUCT SIMPLE AND PROGRESSIVE VERB FORMS IN THE PAST, PRESENT AND FUTURE.
  - Identify simple and progressive verb forms in the past, present, and future and explain the reason a particular tense is used.
  - Produce sentences that use the simple and progressive past, present, and future verb forms correctly.

- **SLO 3:** CONSTRUCT SIMPLE AND COMPOUND SENTENCES IN THE CONTEXT OF A PARAGRAPH USING APPROPRIATE WORD FORMS AND CORRECT VERB FORM AND TENSE.
  - Explain the difference between the simple and compound sentence structures and how to use them effectively.
  - Write a paragraph using simple and compound sentence correctly.

ESLG 51 Grammar for Intermediate ESL Writers
This course reviews the form and use of the simple and continuous tenses in the present, past and future as well as the present perfect and present perfect continuous. It also provides instruction in other intermediate-level grammar topics such as gerunds and infinitives, articles, and nouns. It is intended for students who need additional grammar instruction to support their development writers in English.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- **SLO #1:** ANALYZE THE GRAMMATICAL STRUCTURES IN SELECTED SAMPLES OF WRITTEN AND ORAL ENGLISH.
  - Identify parts of speech, word forms, parts of a sentence, and clause structures in a variety of samples of English.

- **SLO #2:** DEMONSTRATE AN UNDERSTANDING OF GRAMMATICAL CONCEPTS TO EFFECTIVELY COMMUNICATE IDEAS BOTH ORALLY AND IN WRITING.
  - Demonstrate an understanding of verb tense by choosing tense and aspect to clearly communicate about time in response to level-appropriate topics.
  - Build sentences to demonstrate skill in using a limited variety of phrase and clause structures.
  - Demonstrate an emerging ability to recognize the role of modals and conditionals and use these structures in writing.
  - Demonstrate the ability to manipulate word forms to write correct sentences with parallel forms.
  - Proofread one's own writing for the grammatical concepts learned in the course.

ESLG 110 Grammar for Intermediate-High ESL Students

This course is intended for English language learners who need to develop an understanding of English grammar to study at the college level. It continues to build competency in the English verb tense system and provides instruction in more advanced clause structures, such as noun clauses, adverb clauses, and conditionals. Students will apply these concepts in writing assignments.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- **SLO #1:** ANALYZE THE GRAMMATICAL STRUCTURES IN SELECTED SAMPLES OF ADAPTED AND NATIVE WRITTEN AND ORAL ENGLISH.
  - Identify parts of speech, word forms, parts of a sentence, verb tenses, and clause structures in a variety of samples of English.
  - Explain the reason for the use of a variety of grammatical structures to convey meaning, identify time/aspect in a story, etc.

- **SLO #2:** DEMONSTRATE AN UNDERSTANDING OF GRAMMATICAL CONCEPTS TO EFFECTIVELY COMMUNICATE IDEAS BOTH ORALLY AND IN WRITING IN RESPONSE TO ACADEMIC PROMPTS.
  - Demonstrate an understanding of verb tense by choosing tense and aspect to clearly communicate about time in response to level-appropriate academic topics.
  - Build sentences to demonstrate skill in using a variety of phrase and clause structures including adjective and adverb clauses.
  - Recognize the role of modals and conditionals and use these structures correctly in writing.
  - Demonstrate the ability to manipulate word forms and use corpus information to write correct sentences with parallel forms.

ESLG 120 Advanced ESL Grammar

This course is intended for students who need to develop an understanding of English grammar to study at the college level. It continues to build competency in the English verb tense system and provides instruction in more advanced clause structures, such as noun clauses, adverb clauses, and conditionals. Students will apply these concepts in writing assignments.
This course focuses on developing control of the form and meaning of important grammar structures, especially those used in writing. Students also learn advanced-level grammar topics and develop independent editing skills. Students write extensively and apply strategies to correct both local and global grammatical errors. The course is intended for students who need to develop strong control of grammar to support their educational and career goals.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO #1: ANALYZE THE GRAMMATICAL STRUCTURES IN SAMPLES OF ADVANCED-LEVEL, ACADEMIC ENGLISH.
  - Identify parts of speech, word forms, parts of a sentence, verb tenses, clause structures, and other grammatical structures in a variety of samples of advanced-level English.

- SLO #2: DEMONSTRATE AN UNDERSTANDING OF ADVANCED GRAMMATICAL CONCEPTS TO EFFECTIVELY COMMUNICATE IDEAS BOTH ORALLY AND IN WRITING.
  - Demonstrate an understanding of verb tense, modals, and conditionals to respond to topics of varying degrees of complexity.
  - Build sentences to demonstrate skill in using an extensive variety of phrase and clause structures, including adjective, adverb, and reduced clauses.
  - Demonstrate the ability to manipulate word forms and word choice to write correct sentences with parallel forms and colloquial use of English.

- SLO #3: APPLY KNOWLEDGE OF GRAMMAR STRUCTURES AND EDITING TOOLS TO EDIT ONE'S OWN WRITING.
  - Identify and correct global errors including tense, word forms, non-colloquial forms, and clause structure.
  - Identify and correct local errors including subject/verb agreement, pluralization, article usage, and mechanics.
  - Demonstrate competence in using tools such as an English Language Learner dictionary and corpus to find grammatical information as an aid while editing one's own writing.

ESLG 310 Intermediate-High Grammar

This course focuses on further practice of the forms, meanings, and usage of grammatical structures of English. Oral and written practice reinforces the structures studied. Students practice writing extensively both in and out of class.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO #1: ANALYZE THE GRAMMATICAL STRUCTURES IN SELECTED SAMPLES OF WRITTEN AND ORAL ENGLISH.
  - Analyze the functions of word forms in sentences.
  - Assess the role and function of clauses in complex sentences.
  - Describe relationships among phrases and clauses within sentences.
  - Identify both hypothetical and probable conditions in written and oral English.

- SLO #2: SYNTHESIZE UNDERSTANDING OF, AND APPLY, GRAMMATICAL FORMS AND STRUCTURES TO EFFECTIVELY COMMUNICATE IDEAS BOTH ORALLY AND IN WRITING.
  - Choose active and passive voice verb tense and aspect structures to effectively communicate a full range of time concepts including actual and hypothetical conditions.
  - Choose appropriate present and past tense modals to communicate varying degrees of politeness, certainty and obligation in writing and oral presentations.
- Build sentences to demonstrate skill in modification using descriptive phrases and subordinate clauses for both adjectival and adverbial purposes including communication of time, purpose, contrast, concession, and condition.

- SLO #3: APPLY KNOWLEDGE OF COLLOCATIONS TO APPROPRIATELY SELECT AND EMPLOY A RANGE OF FORMS INCLUDING GERUNDS, INFINITIVES, PREPOSITIONS, AND MODAL AUXILIARIES.

- Research high frequency collocations used by native speakers via language samples found in dictionary and on line resources.

ESLG 320 Advanced-Low Grammar

Units: 3
Hours: 54 hours LEC
Prerequisite: Eligibility is determined by the assessment process, or completion of ESLG 310 with a grade of "C" or better.
Transferable: CSU
Catalog Date: June 1, 2020

This course focuses on developing control of the forms and meaning of major structures used in writing with an emphasis on aligning clause structures and writing purposes. Students write extensively and apply editing strategies introduced in the course. Assignments emphasize grammar and syntax in the context of longer written work.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO 1: RECOGNIZE AND NAME GRAMMAR AND SYNTACTIC STRUCTURES USING APPROPRIATE METALINGUISTIC TERMS.
- analyze parts of speech and phrase structure forms and functions
- analyze clause structures, forms, and functions
- distinguish among and correctly form tense and aspect structures
- SLO 2: WRITE SENTENCES APPROPRIATE TO SPECIFIC RHETORICAL PURPOSES
- employ passive and active voice appropriately
- express real and unreal conditions
- embed clauses and otherwise extend the meaning of sentences through modification
- SLO 3: REVISE AND IMPROVE THE LOGICAL ORGANIZATION AND DEVELOPMENT OF ONE’S OWN WRITING
- build clear relationships between and among ideas through appropriate use of logical connectors and transitions
- analyze the effects of word choice and sentence structure on the meaning of one’s own writing
- SLO 4: APPLY KNOWLEDGE OF GRAMMAR STRUCTURES TO EDIT ONE’S OWN WRITING
- identify and correct global errors including tense, word forms, syntax, logic and mechanics
- identify and correct local errors including subject/verb agreement, pluralization, and articles

English as a Second Language - Listening (ESLL)

ESLL 20 Novice Listening and Speaking

Units: 4
Hours: 72 hours LEC
Prerequisite: None.
Catalog Date: June 1, 2020

This course will provide an introduction to academic listening and speaking for novice level English language learners. Instruction focuses on basic listening and speaking strategies for a variety of situations, including listening for main ideas and utilizing learned phrases for class discussion. English sounds and intonation patterns are introduced.

Student Learning Outcomes
Upon completion of this course, the student will be able to:

- **SLO 1: IDENTIFY MOST OF THE PHONETIC SOUNDS OF AMERICAN ENGLISH**
  - Identify letters that are spoken clearly and produce the sounds with occasional native language interference.
  - Contrast consonant and vowel sounds and characteristics.

- **SLO 2: DEMONSTRATE ABILITY TO FUNCTION IN REHEARSED LISTENING AND SPEAKING SITUATIONS WHERE ENGLISH IS THE PRIMARY LANGUAGE**
  - Understand and respond appropriately to basic spoken instructions.
  - Recognize and orally produce words, phrases and sentences that follow basic phonetic patterns studied in contextual situations.

- **SLO 3: IDENTIFY CENTRAL MEANING IN BASIC ACADEMIC DISCOURSE**

- **SLO 4: USE A LIMITED VARIETY OF PRESENTATION AND DISCUSSION STRATEGIES EFFECTIVELY**
  - Use discussion strategies to communicate with students from other cultures in an active, respectful way.
  - Participate in group discussions about basic academic topics based on context learned in class and negotiate meaning in order to reach a desired result.
  - Plan and produce brief individual presentation and group skits or presentations on topics rehearsed in class with pronunciation comprehensible to a sympathetic listener.

- **SLO 5: FOLLOW APPROPRIATE COLLEGE BEHAVIOR GUIDELINES**
  - Use a monolingual ESL dictionary to learn vocabulary.
  - Complete out-of-class assignments in a timely manner.
  - Complete assignments and exams without the assistance of other students.

### ESLL 31 Listening and Speaking for College Readiness

**Units:** 3  
**Hours:** 54 hours LEC  
**Prerequisite:** ESLL 20 with a grade of "C" or better, or placement through the assessment process.  
**Catalog Date:** June 1, 2020

English language learners at the novice-high level develop the listening and speaking strategies necessary for college and workforce readiness. Basic listening strategies include listening for main ideas and supporting details in a variety of situations. Basic speaking strategies include the utilization of appropriate learned vocabulary and continued development of the production of English sounds, stress patterns, and intonation patterns. Students will also develop effective small group and class discussion strategies. This course is part of the ESL listening sequence, which is designed to prepare English language learners to take college courses leading to a certificate, degree, and/or transfer.

### Student Learning Outcomes

Upon completion of this course, the student will be able to:

- **SLO 1: DEMONSTRATE ABILITY TO FUNCTION IN CONTROLLED, HIGHLY SUPPORTED ACADEMIC LISTENING SITUATIONS IN ENGLISH.**
  - Develop basic note-taking skills using guided lecture outlines and demonstrate understanding by using these notes to respond to written questions.
  - Identify central meaning and important details in basic academic discourse which is supported by visual images and auditory cues.
  - Write dictated questions based on a mini lecture and respond appropriately in a timed situation.
  - Understand and respond to spoken instructions.

- **SLO 2: DEMONSTRATE ABILITY TO PARTICIPATE IN CONTROLLED, HIGHLY SUPPORTED ACADEMIC SPEAKING SITUATIONS IN ENGLISH.**
  - Use notes to respond to discussion questions with specific information from level appropriate lectures or video presentations.
  - Choose appropriate ideas and responses for meaningful discussions based on topics introduced in academic lectures.
  - Use learned expressions to participate effectively in small group and class discussions.
ESLL 41 Listening, Speaking and Presentation Skills for College

Units: 3  
 Hours: 54 hours LEC  
 Prerequisite: None.  
 Catalog Date: June 1, 2020

ESLL 41 is a course in college listening and speaking for English language learners at the intermediate-low level. Students improve their listening by learning to take notes while watching short lectures, and they develop their speaking skills through class discussions and short presentations. This course is part of the ESL listening sequence, which is designed to prepare English language learners to take college courses leading to a certificate, degree, and/or transfer.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- **SLO #1: PREPARE AND DELIVER SHORT YET ENGAGING PRESENTATIONS ON ACADEMIC TOPICS**
  - Give intelligible presentations of up to 5-6 minutes based on course topics.
  - Include an introduction and conclusion, clear transitions, complete information to explain subtopics, and engaging visuals that utilize technology.
  - Use verbal and non-verbal strategies to engage the audience during presentations.

- **SLO #2: USE INTERACTIVE SPEAKING STRATEGIES EFFECTIVELY**
  - Respond orally to listening passages by answering questions, stating opinions, or giving brief summaries.
  - Use learned strategies to engage others in group discussions.

- **SLO #3: USE NOTE-TAKING TECHNIQUES TO TAKE ORGANIZED, ACCURATE NOTES BASED ON SHORT LECTURES FROM A VARIETY OF DISCIPLINES**

ESLL 111 Academic Listening, Speaking, and Presentation Skills

Units: 3  
 Hours: 54 hours LEC  
 Prerequisite: None.  
 Catalog Date: June 1, 2020

This course is intended for English language learners who intend to study at the college level. It builds students' ability to listen and speak in the college classroom. Students improve their listening skills through academic lectures and develop strong classroom speaking skills through various types of presentations.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- **SLO #1: PREPARE AND DELIVER EFFECTIVE, ENGAGING PRESENTATIONS ON ACADEMIC TOPICS**
  - Give intelligible presentations of up to 8-10 minutes that include an appropriate introduction and conclusion, clear transitions, complete information to explain subtopics, and instructive visuals, including appropriate use of PowerPoint.
  - Use strategies to engage the audience during presentations.

- **SLO #2: USE A VARIETY OF INTERACTIVE SPEAKING STRATEGIES EFFECTIVELY**
  - Respond to lectures orally by paraphrasing, summarizing, or expressing personal reactions.
ESLL 114 Intermediate Listening and Speaking for Allied Health Careers

Units: 3
Hours: 54 hours LEC
Prerequisite: Completion of ESL 40 with a grade of "C" or better; or placement through the assessment process.
Catalog Date: June 1, 2020

ESLL 114 is a listening and speaking course at intermediate level designed for English language learners who wish to enter the allied health field. This course is designed to introduce students to the listening and speaking skills needed in both the academic and work environment. Students will continue to develop pronunciation skills and complex pronunciation strategies in the context of the allied health field. Students will expand their abilities to communicate in both familiar and unfamiliar allied health situations as they continue to refine their oral communication skills. In addition, students will develop focused listening and note-taking strategies necessary to complete course and work related activities in the field of allied health.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO 1: DEMONSTRATE ABILITY TO FUNCTION IN LISTENING AND SPEAKING SITUATIONS WHERE ENGLISH IS THE PRIMARY LANGUAGE.
- Discuss academic allied health topics in groups.
- Take notes from short academic lectures on topics related to allied health.
- Understand, follow, and restate spoken instructions.
- Demonstrate comprehension and ability to converse with emerging fluency in most allied health related situations.
- SLO 2: PRODUCE SHORT, UNREHEARSED EXAMPLES OF MOSTLY INTELLIGIBLE CONNECTED SPEECH.
- Speak clearly but with some hesitation.
- Use mostly comprehensible pronunciation while demonstrating a limited ability to correct spoken errors that lead to misunderstanding.
- Use grammar and vocabulary to convey meaning although sometimes making mistakes that disrupt communication.
- SLO 3: IDENTIFY CENTRAL MEANING IN SPOKEN DISCOURSE.
- Take notes based on short lectures on allied health related topics.
- Identify main ideas, subtopics, and important details.
- Use notes to respond in speaking and writing.
- SLO 4: USE A VARIETY OF PRESENTATION AND DISCUSSION STRATEGIES EFFECTIVELY.
- Give intelligible presentations on allied health related topics that include a clear organization with an introduction, transitions between subtopics, supporting information, informative visuals, and a conclusion.
- Participate in meaningful discussions using strategies to clarify, express opinions, agree, disagree, and ask for others' opinions.

ESLL 121 Academic Listening, Note-taking, and Discussion

Units: 3
Hours: 54 hours LEC
Prerequisite: ESLL 111 with a grade of "C" or better, or placement through the assessment process.
Advisory: ESLL 310
Catalog Date: June 1, 2020
This course prepares English language learners for the level of listening, note-taking, and discussion necessary to be successful in college classes. Students develop academic note-taking skills by listening to real academic lectures and build speaking skills by responding to lectures in class discussions. This course helps prepare ESL students for the rigor of general education courses in the sciences, social sciences, humanities, and other disciplines.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- **SLO #1: USE PRE-LISTENING STRATEGIES TO PREPARE FOR LECTURES**
  Prepare for listening by building background knowledge, learning relevant vocabulary, and predicting content.

- **SLO #2: DEMONSTRATE COMPETENCE TAKING ACCURATE NOTES BASED ON LECTURES**
  Use note-taking techniques to organize lecture content into sub-topics, main ideas, and supporting details.

- **SLO #3: FILL IN LECTURE OUTLINES**

- **SLO #4: DEMONSTRATE THE ABILITY TO APPLY INFORMATION FROM NOTES TO A VARIETY OF CLASS ASSIGNMENTS**
  Use notes to recreate lectures.
  Analyze information from notes to answer questions, write summaries, and study for tests.

- **SLO #4: ACTIVELY PARTICIPATE IN A VARIETY OF CLASS DISCUSSION ACTIVITIES**
  Use a range of academic speaking and discussion strategies to critically discuss and respond to lecture content.

ESLL 124 Advanced Listening and Speaking for Allied Health Careers

| Units: | 3 |
| Hours: | 54 hours LEC |
| Prerequisite: | ESLL 114, ESLR 114, and ESLW 114 with grades of “C” or better |
| Corequisite: | ESLR 124 and ESLW 124 |
| Catalog Date: | June 1, 2020 |

ESLL 124 is a listening and speaking course at the advanced level designed for English language learners who wish to enter the allied health field. In this course students will refine the listening and speaking skills necessary for both the academic and work environment. Students will expand their abilities to communicate in both familiar and unfamiliar allied health situations as they continue to refine their oral communication skills. In addition, students will expand their abilities to participate in focused listening situations and lectures necessary for content courses and work related situations.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- **SLO 1: USE A VARIETY OF INTERACTIVE LISTENING AND SPEAKING STRATEGIES EFFECTIVELY.**
  Demonstrate ability to apply active listening strategies to situations encountered in allied health related content courses and careers.
  Demonstrate ability to use effective speaking strategies in situations encountered in allied health related content courses and careers.

- **SLO 2: DEMONSTRATE THE ABILITY TO TAKE EFFECTIVE LECTURE NOTES AND UTILIZE THE INFORMATION ACQUIRED THROUGH THE NOTE-TAKING PROCESS ON TOPICS IN ALLIED HEALTH AND RELATED CONTENT AREAS.**
  Prepare for listening by building background knowledge, learning relevant vocabulary, and predicting content.
  Use note-taking techniques to organize lecture content into sub-topics, main idea, and supporting details.

- **SLO 3: PREPARE AND DELIVER EFFECTIVE, ENGAGING PRESENTATIONS ON TOPICS IN ALLIED HEALTH AND RELATED DISCIPLINES.**
  Give intelligible presentations of up to 8-10 minutes that include an appropriate introduction, fully developed content with clear transitions between subtopics, and a conclusion.
  Utilize presentation software effectively to enhance the presentation.

- **SLO 4: ACTIVELY PARTICIPATE IN A VARIETY OF CLASS DISCUSSION ACTIVITIES.**
Use a range of academic speaking and discussion strategies to critically discuss and respond to lectures in allied health and related disciplines.

ESLL 310 Intermediate-High Listening and Speaking

Units: 3
Hours: 54 hours LEC
Prerequisite: Completion of ESLL 50 with a grade of "C" or better; or placement through the assessment process.
Transferable: CSU
Catalog Date: June 1, 2020

ESLL 310 is an academic listening and speaking course at intermediate-high level designed for English language learners who wish to further the development of their communication skills. This is a course to further develop listening and speaking for academic purposes, including comprehension of lectures, note-taking, presentations, and classroom discussion. Further work on pronunciation is included with emphasis on understanding and producing stress, rhythm, and intonation patterns to communicate effectively. This course is part of the ESL listening sequence, which is designed to prepare English language learners to take college courses leading to a certificate, degree, and/or transfer.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO 1: DEMONSTRATE ABILITY TO FUNCTION IN MOST ACADEMIC AND NON-ACADEMIC ENGLISH-ONLY LISTENING AND SPEAKING SITUATIONS
  - discuss academic topics in groups
  - discuss two sides of an issue
  - take notes from academic lectures
  - understand spoken instructions
  - demonstrate comprehension and ability to converse fluently about level-appropriate topics

- SLO 2: PRODUCE UNREHEARSED EXAMPLES OF MOSTLY INTELLIGIBLE CONNECTED SPEECH
  - speak fluently with little hesitation
  - use clear and comprehensible pronunciation
  - use grammar and vocabulary to convey meaning while rarely making mistakes that disrupt meaning

- SLO 3: IDENTIFY CENTRAL MEANING IN ACADEMIC SPOKEN DISCOURSE OF MORE THAN 5 MINUTES IN LENGTH
  - take notes based on lectures using note-taking techniques including abbreviations and key words
  - identify organization including main ideas, subtopics, and important details
  - use notes to respond in speaking and writing

- SLO 4: USE A LIMITED VARIETY OF INTERACTIVE SPEAKING/LISTENING AND PRESENTATION STRATEGIES EFFECTIVELY
  - give an intelligible presentation that includes an introduction, conclusion, transitions between subtopics, clear supporting information, and informative visuals
  - use discussion strategies effectively, including clarifying, expressing opinions, agreeing, disagreeing and asking others’ opinions

- SLO 5: DEVELOP THE ABILITY TO CONTRIBUTE TO A DIVERSE DEMOCRATIC SOCIETY WITH A PLURALISTIC PERSPECTIVE OF THE WORLD
  - examine topics from more than one perspective and understand the reasoning behind both sides
  - engage oneself in out-of-class events or other situations that present diverse perspectives
  - participate in group activities appropriately and respectfully with people of different backgrounds

- SLO 6: MAKE PROGRESS TOWARD BECOMING INDEPENDENT LEARNERS
  - demonstrate ability to correct most spoken errors that lead to misunderstanding
  - conduct basic research to gather information, then paraphrase and organize the information into a presentation
  - demonstrate respect for academic integrity at all times
ESLL 320 Advanced-Low Listening and Speaking

This is a course with intensive practice in listening and active participation strategies that are appropriate for American college courses. Students will listen to extended lectures from various subject areas, refine note-taking skills, be able to participate in in-depth discussions, and give oral presentations. Students will continue to improve pronunciation skills.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO 1: DEMONSTRATE ABILITY TO FUNCTION IN LISTENING AND SPEAKING SITUATIONS WHERE ENGLISH IS THE PRIMARY LANGUAGE
  - analyze selected issues and prepare to support multiple viewpoints
  - take notes on challenging, lengthy academic lectures
  - participate in discussions and interviews with confidence
  - understand spoken questions, instructions, and announcements
  - demonstrate comprehension of main points of news videos or other excerpts of native speech
  - demonstrate comprehension and ability to converse fluently in everyday conversation

- SLO 2: PRODUCE LENGTHY, UNREHEARSED EXAMPLES OF INTELLIGIBLE CONNECTED SPEECH
  - speak fluently at an appropriate speed with very little or no hesitation
  - use clear and comprehensible pronunciation
  - use correct grammar and vocabulary correctly so that meaning is not disrupted

- SLO 3: IDENTIFY CENTRAL MEANING IN CONCEPTUALLY AND LINGUISTICALLY CHALLENGING SPOKEN DISCOURSE
  - take organized and accurate notes based on lectures using note-taking techniques
  - identify main ideas, subtopics, and important supporting facts
  - use notes to respond in speaking and writing and to recreate the lecture

- SLO 4: USE A VARIETY OF INTERACTIVE SPEAKING/LISTENING AND PRESENTATION STRATEGIES EFFECTIVELY
  - give an intelligible presentation of 8-10 minutes that includes an appropriate introduction and conclusion, clear transitions, complete information to explain subtopics, and instructive visuals, including appropriate use of PowerPoint
  - interact with group members to delegate tasks and come to consensus
  - use a variety of discussion strategies effectively, including clarifying, expressing opinions, agreeing, disagreeing and eliciting others' input
  - critically discuss, analyze, and summarize relevant content of lectures, videos, or other listening material

- SLO 5: ENHANCE ABILITY TO CONTRIBUTE TO A DIVERSE DEMOCRATIC SOCIETY WITH A PLURALISTIC PERSPECTIVE OF THE WORLD
  - examine topics from more than one perspective and summarize the reasoning behind both sides
  - attend campus events related to cultural pluralism
  - participate in group activities appropriately and respectfully with people of different backgrounds

- SLO 6: MAKE PROGRESS TOWARD BECOMING SELF-RELIANT AND INDEPENDENT LEARNERS
  - demonstrate ability to correct spoken errors that lead to misunderstanding
  - conduct basic research for presentations and paraphrase and organize relevant information
  - use the Internet and e-mail to research topics, watch videos, and/or complete web-based listening exercises
English as a Second Language - Pronunciation (ESLP)

ESLP 41 The Basics of English Pronunciation

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Catalog Date: June 1, 2020

This course introduces the phonetic alphabet and focuses on the identification and production of the sounds of English. Students use basic pronunciation rules to begin to control pronunciation of words and sentences and add expression to their speech.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO 1: IDENTIFY ALL THE SOUNDS OF ENGLISH WITH OCCASIONAL ERRORS.
- Be able to write sounds and transcribe level-appropriate words using the International Phonetic Alphabet.
- Use transcriptions in the International Phonetic Alphabet to pronounce words with occasional errors.
- Identify vowel characteristics: front, central, and back, tense and lax, and vowel length. Identify the place and manner of articulation used to produce most consonant sounds.
- Distinguish minimal pairs with emerging consistency.
- SLO 2: DEMONSTRATE AN EMERGING ABILITY TO PRONOUNCE ALL THE SOUNDS OF ENGLISH IN CONTROLLED SPEECH.
- SLO 3: USE BASIC WORD STRESS RULES TO IDENTIFY AND PRONOUNCE STRESSED SYLLABLES.
- Use rules of word stress to predict the stressed syllables in two-syllable nouns, verbs, and adjectives.
- Use rules of word stress to predict the stressed syllables in words with common suffixes.
- Pronounce level-appropriate vocabulary words with correct word stress.
- SLO 4: USE BASIC RULES OF SUPRASEGMENTAL STRESS TO IDENTIFY AND PRONOUNCE SENTENCE STRESS AND INTONATION.
- Identify intonation patterns of statements and questions.
- Use voice to add expression to one's speech and to use English rhythm and intonation with emerging accuracy.

ESLP 51 Building English Fluency and Comprehensibility

Units: 3
Hours: 54 hours LEC
Prerequisite: ESLP 41 with a grade of "C" or better
Catalog Date: June 1, 2020

This course builds on the skills learned in ESLP 41 while adding increased focus on sentence stress, rhythm, and intonation. Students use pronunciation rules to increase their ability to control pronunciation in a variety of situations and to make their speech more comprehensible and engaging.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO 1: IDENTIFY ALL THE SOUNDS OF ENGLISH.
- Be able to transcribe the sounds of English using the International Phonetic Alphabet.
- Distinguish minimal pairs, including vowel characteristics and differences in articulation and voicing of consonants, with occasional errors.
ESLP 310 Intermediate-High Pronunciation

Units: 4
Hours: 54 hours LEC; 54 hours LAB
Prerequisite: None.
Transferable: CSU
Catalog Date: June 1, 2020

This course is designed to further enhance intelligible speech in English language learners. In addition to review of the International Phonetic Alphabet and standard American speech sounds, students will receive intensive training in the phonology of English including common contractions, reductions, deletions, and the effects of specific phonetic environments. Participants record speech production exercises and receive personal analysis and suggestions for improvement. Students will be responsible for writing and presenting dialogs, skits, and brief other oral presentations.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO #1: independently investigate, discover, and produce the pronunciation of English words, including variations conditioned by adjacent phonological environments.
- Utilize a dictionary and the International Phonetic Alphabet to determine the pronunciation of unfamiliar English words.
- Recognize phonemic environments and invoke applicable phonological rules.
- Analyze texts to select and apply both standard stress and intonation patterns as well as alternative realizations to vary meaning.
- SLO #2: perform memorized passages, skits, or dialogs with control of practiced pronunciation skills.
- Produce effectively all the phonemic inventory of standard American English.
- Work independently with recording devices to self-monitor speech production.

ESLP 320 Advanced-Low Pronunciation

Units: 4
Hours: 54 hours LEC; 54 hours LAB
Prerequisite: ESLP 310 with a grade of "C" or better
Transferable: CSU
Catalog Date: June 1, 2020

In this course, students focus on refining English pronunciation skills with an emphasis on eliminating production errors in spontaneous spoken English. Students will review and expand their understanding of phonological principles. Skill mastery will be demonstrated through lengthy impromptu presentations on prepared or familiar topics.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO #1: Produce lengthy, unrehearsed examples of intelligible connected speech.
- Organize and practice prepared material for a spoken presentation without reading or reciting from memory.
- Analyze speech production and effectively self-monitor to correct errors while speaking.
- Modulate the voice to achieve various rhetorical effects.
- Critique impromptu speech samples through independent work with a recording device.

English as a Second Language - Reading (ESLR)

ESLR 20 Novice Reading

Upon completion of this course, the student will be able to:

- **SLO #1:** DEMONSTRATE UNDERSTANDING OF THE ALPHABETIC PRINCIPLE.
  - recognize and write all letters of the English alphabet.
  - associate speech sounds and spoken words to their alphabetic equivalents.
  - analyze the syllabic structure of spoken and written words.
  - apply the alphabetic principle to vocalize printed words having regular spellings.

- **SLO #2:** EMPLOY BASIC VOCABULARY BUILDING RESOURCES AND STRATEGIES.
  - use a basic English language learner dictionary
  - infer meanings of new words given visual and contextual clues.

- **SLO #3:** DISTINGUISH THE MEANING OF FUNDAMENTAL ENGLISH SYNTAX.
  - identify basic parts of speech.
  - interpret the information conveyed by punctuation and capitalization.
  - discriminate the phrase structure of simple and compound sentences.
  - discriminate the word forms used in noun, verb, and prepositional phrases.
  - relate meanings of logical connectors and negation.

- **SLO #4:** DEMONSTRATE EMERGING UNDERSTANDING OF THE INFORMATION CONVEYED BY VERB FORM, TENSE AND ASPECT.
  - differentiate between time orientations signaled by simple present, present progressive, simple past, and simple future.
  - recognize the significance of -ed and -s suffixes on verbs.
  - explain the information conveyed by the modal auxiliary verbs ‘will’, ‘can’, and ‘might’.

- **SLO #5:** DEMONSTRATE EXPLICIT COMPREHENSION OF BASIC TEXTS.
  - interpret and answer simple questions about the literal content of beginning-level texts.
  - employ rudimentary scanning to locate explicit information in assigned texts.

- **SLO #6:** DEMONSTRATE APPROPRIATE PARTICIPATION BEHAVIORS IN SMALL AND LARGE GROUP ACTIVITIES.
ESLR 51 Building Vocabulary Skills

Upon completion of this course, the student will be able to:

- SLO #1: DEMONSTRATE COMPETENCE USING AN ENGLISH-ENGLISH DICTIONARY.
  - Use basic dictionary skills, including the use of head words and alphabetical order, to locate words.
  - Distinguish multiple meanings of words.
  - Find basic information about words, including part of speech, definition, synonyms, and examples.

- SLO #2: USE WORD ATTACK SKILLS TO PREDICT INFORMATION ABOUT NEW VOCABULARY.
  - Identify part of speech based on word parts and the syntax of the sentence in which the word was found.
  - Identify basic prefixes and suffixes, demonstrate knowledge of how affixes can affect the meaning of a word, and use affixes and roots to predict meanings of new words.

- SLO #3: USE VOCABULARY STUDY STRATEGIES TO INCREASE VOCABULARY.
  - Identify useful vocabulary for independent study.
  - Gather complete information about a new word and organize it into a word journal, word map, or other vocabulary organizer for independent study.

- SLO #4: SHOW KNOWLEDGE OF LEVEL-APPROPRIATE VOCABULARY FROM THE ACADEMIC WORD LIST.
  - Use learned vocabulary correctly in speaking and writing with occasional errors.

ESLR 111 Academic Vocabulary

This course is intended to prepare English language learners for the sophisticated vocabulary needed for higher-level study or work. Students will engage with the Academic Word List while continuing to develop vocabulary building skills. The course teaches more complex vocabulary study strategies, word attack skills, and academic vocabulary from the Academic Word List.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO 1: DEMONSTRATE COMPETENCE USING AN ENGLISH-ENGLISH DICTIONARY.
  - Use dictionary skills to quickly locate words, distinguish multiple meanings of words, and find relevant grammatical information.
  - Use transcriptions to identify the pronunciation of words with occasional errors.
  - Locate the word family and additional information, such as examples, synonyms, collocations, and connotation.

- SLO 2: USE WORD ATTACK SKILLS TO PREDICT INFORMATION ABOUT NEW ACADEMIC VOCABULARY.
  - Use affixes and roots to predict the part of speech and meaning of a word in the context of an academic text.
ESLR 114 Intermediate Reading for Allied Health Careers

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Catalog Date: June 1, 2020

ESLR 114 is a reading skills course at the intermediate level designed for English language learners who wish to enter the allied health field. In this course, students build on the reading and vocabulary skills necessary for both the academic and work environment. This course focuses on the further development of academic reading skills, with an emphasis on vocabulary development, literal comprehension, and dictionary skills. Students will continue to develop critical thinking skills to understand, analyze, discuss, and write responses to ideas expressed in readings related to the field of allied health.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO 1: DEMONSTRATE IMPLICIT AND EXPLICIT COMPREHENSION OF LEVEL-APPROPRIATE TEXTS.
  - Derive main ideas and supporting details from new text that isn't highly complex or sophisticated.
  - Distinguish fact and opinion and draw conclusions.
  - Select the appropriate meaning of words from contextual clues
  - Recognize patterns of organization in expository writing.
  - Demonstrate comprehension after reading under the pressure of time.

- SLO 2: ANALYZE READINGS FOR SPECIFIC PURPOSES.
  - Identify main idea, supporting ideas, and conclusions.
  - Outline or otherwise demonstrate awareness of the organizational patterns of readings.
  - Identify authors' points-of-view.
  - Synthesize new and previous information to reach appropriate conclusions.
  - Demonstrate some competence in critical analysis through personal reactions
  - Read and respond to a short timed reading that is clearly organized and related to a familiar topic.

- SLO 3: EMPLOY VOCABULARY BUILDING STRATEGIES
  - Infer meanings of unfamiliar words through recognition of context clues.
  - Demonstrate emerging ability to analyze word roots and affixes.
  - Integrate context clues and word-attack skills in building vocabulary.
  - Employ new vocabulary in a variety of tasks including discussion, journals, and/or summaries.

ESLR 124 Advanced Reading and Vocabulary for Allied Health Careers
ESLR 124 is a reading and vocabulary development course at the advanced level designed for English language learners who wish to enter the allied health field. In this course students will refine their academic reading skills with a focus on comprehension of academic text, reading fluency, and annotation in disciplines related to allied health. Students will also develop vocabulary building strategies necessary for allied health related disciplines. In addition, students will use their reading and writing skills to provide critical analysis of materials read. Students who complete this course will be prepared for the reading demands of both the academic and work environment in allied health related fields.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO 1: DEMONSTRATE ACADEMIC READING SKILLS IN COLLEGE LEVEL READINGS ON TOPICS RELATED TO THE ALLIED HEALTH FIELD.
  - Use a variety of pre-reading techniques to enhance reading comprehension.
  - Distinguish between main ideas and supporting details through the use of outlining and/or graphic organizers.
  - Identify author's use of organizational patterns within a reading.
  - Adjust reading strategies to fit the task and complexity of the reading including skimming, scanning, and the use of in text clues such as headings, pictures, graphs, diagrams, captions, etc. to improve understanding.

- SLO 2: CRITICALLY ANALYZE ACADEMIC TEXTS ON TOPICS RELATED TO ALLIED HEALTH.
  - Demonstrate ability to summarize, paraphrase, and infer meaning from a reading.
  - Synthesize information from a multiple text to draw conclusions and support one's opinion orally and in writing.
  - Present critical analysis of text through oral and written personal responses.

- SLO 3: EMPLOY ACADEMIC VOCABULARY BUILDING STRATEGIES IN ACADEMIC READINGS RELATED TO ALLIED HEALTH.
  - Use knowledge of prefixes, suffixes, and roots to enhance understanding of medical terminology.
  - Employ new vocabulary in a variety of tasks including discussion, journals, and written responses.

---

ESLW 20 is a writing course for English language learners at the novice level. This course is an introduction to English writing at the sentence and paragraph level. Students will write about familiar topics focusing on the structure of English including word form, parts of speech, verb tense and word order. Students will learn to construct affirmative and negative statements, and yes/no and information questions in simple present, simple past, present continuous and simple future tenses. This course is part of the ESL writing sequence which is designed to prepare English language learners to take college courses leading to a certificate, degree, and/or transfer.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO 1: WRITE A BASIC PARAGRAPH OF ABOUT 10 SENTENCES
  - Respond to a prompt by writing sentences that are related or tell a story
  - Use correct paragraph format

- SLO 2: CONSTRUCT SIMPLE AFFIRMATIVE AND NEGATIVE STATEMENTS AND QUESTIONS
  - Use the simple present, past, and future and the present progressive tenses
ESLW 114 Intermediate Writing for Allied Health Careers

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Catalog Date: June 1, 2020

ESLW 114 is a writing course at the intermediate level designed for English language learners who wish to enter the allied health field. This course introduces students to the writing skills needed in both the academic and work environment. Students build an understanding of the writing process and types of writing necessary in the allied health field. Students continue to build confidence in using correct sentence structure, grammar, and editing skills.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO 1: EMPLOY THE WRITING PROCESS TO COMPLETE MULTIPLE PARAGRAPH ASSIGNMENTS FOR SPECIFIC PURPOSES.
  - Identify and utilize the appropriate rhetorical structures for a given task.
  - Use a variety of prewriting, organizational, writing, and revising strategies to complete writing assignments which reflect the types of writing necessary for academic and workplace writing in the allied health field.
  - Produce a written response appropriate to the task in a timed setting.

- SLO 2: DEMONSTRATE ABILITY TO USE A VARIETY OF ENGLISH SENTENCE PATTERNS WITH CORRECT PUNCTUATION.
  - Use simple, compound, and complex sentences with correct punctuation and a variety of coordinators.
  - Use sentence combining strategies to create adjective, adverb, noun, and conditional clauses with correct punctuation.

- SLO 3: RECOGNIZE AND UTILIZE GRAMMAR STRUCTURES, VERB TENSE & ASPECT, AND VERB FORMS WITH MINIMAL ERRORS.
  - Identify and correct grammatical errors through proofreading.
  - Use teacher feedback to edit and improve writing.

ESLW 124 Advanced-Low Writing for Allied Health Careers

Units: 3
Hours: 54 hours LEC
Prerequisite: ESLL 114, ESLR 114, and ESLW 114 with grades of “C” or better
Corequisite: ESL 124 and ESLR 124
Catalog Date: June 1, 2020

ESLW 124 is a writing course at the advanced level designed for English language learners who wish to enter the allied health field. In this course students will refine the writing skills needed in both the academic and work environment. Students will expand their understanding of the writing process and types of writing necessary in the allied health field. Students will build fluency and accuracy with the English language including grammar, sentence structure, and style.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO 1: EMPLOY THE WRITING PROCESS TO COMPLETE MULTIPLE DRAFT ASSIGNMENTS FOR SPECIFIC AUDIENCES PURPOSES.
  - Use a variety of prewriting strategies, conduct basic research, write multiple drafts, and revise writing in assignments which reflect the types of writing necessary for academic and technical writing in the allied health field.
Produce a written response appropriate to the task in a timed setting.
SLO 2: RESEARCH, EVALUATE, AND SYNTHESIZE SOURCES TO SUPPORT A POSITION IN VARIOUS TYPES OF TECHNICAL
WRITING USED IN THE ALLIED HEALTH FIELDS.
Collect and evaluate information from a variety of sources.
Incorporate research into one's own writing using summary, paraphrase, and direct quotation.
Cite sources using the appropriate format (MLA, APA, etc).
SLO 3: DEMONSTRATE THE ABILITY TO USE A VARIETY OF LINGUISTICALLY COMPLEX SENTENCE PATTERNS TO COMMUNICATE
EFFECTIVELY.
Construct effective simple, compound, complex and compound-complex sentences.
SLO 4: PRODUCE WRITING ASSIGNMENTS THAT ARE RELATIVELY FREE FROM ERROR.
Use instructor feedback and independent proofreading skills to complete final drafts with few grammatical errors.


Ethnic Studies | Cosumnes River College

Ethnic Studies is an interdisciplinary and diverse field that gives voice to historically marginalized peoples and their perspectives by challenging systems of injustice and valuing diversity. This program seeks to educate students on progressive social change, reflect on the dynamics of power and knowledge, and promote multiple approaches to social justice issues while encouraging students to be informed and active citizens. Ethnic Studies allows students a particular focus on marginalized and disadvantaged populations while also de-centering the dominant cultural, political, and social ideals that have shaped western societies.

Dean

 (916) 691-7359

 WilliaL3@crc.losrios.edu

Ethnic Studies (ETHNS)

ETHNS 300 Introduction to Ethnic Studies

<table>
<thead>
<tr>
<th>Units:</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hours:</td>
<td>54 hours LEC</td>
</tr>
<tr>
<td>Prerequisite:</td>
<td>Completion of ENGWR 101 with a grade of &quot;C&quot; or better, or completion of ESLW 340 with a grade of &quot;C&quot; or better</td>
</tr>
<tr>
<td>Advisory:</td>
<td>None</td>
</tr>
<tr>
<td>Transferable:</td>
<td>CSU; UC</td>
</tr>
<tr>
<td>General Education:</td>
<td>AA/AS Area V(b); AA/AS Area V; CSU Area D; IGETC Area 4</td>
</tr>
<tr>
<td>Catalog Date:</td>
<td>June 1, 2020</td>
</tr>
</tbody>
</table>

This interdisciplinary course examines the social, political, economic, and cultural experience of racial and ethnic minority groups in the United States using concepts, theories, and terminology from distinct disciplines within the social sciences. As an ethnic studies course, it has a culturally relativistic approach. Specifically, this course examines and redefines the lives of racial and ethnic minority groups through their own experiences: from the inside looking out at the world. This course was formerly SOCSC 300.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- Introduce interdisciplinary terms, concepts, and theories to minority racial and ethnic group experiences in the U.S.
- Apply the interdisciplinary vocabulary to understand the developing historical, cultural, and psychological conditions under which minority groups have lived in the U.S.
- Interpret and summarize various aspects of racial and ethnic minority group experiences in the U.S.
- EXAMINE THE CULTURAL AND RACIAL STRUCTURE OF AMERICAN SOCIETY. (SLO 2).
- Explain the ideology of white supremacy as a means to understanding it (White Supremacy) as the organizing system of race relations in the U.S.
- Discuss the social, cultural, and structural conditions that compelled the social movements and organizations of minority racial and ethnic groups in the U.S.
- DESCRIBE THE DIRECT LINK BETWEEN THE SOCIAL CONDITIONS EXPERIENCED BY MINORITY RACIAL AND ETHNIC GROUPS AND MINORITY GROUP IDENTITY FORMATION. (SLO 3).
- Explore and apply Social Identity Theory and Ethnic Identity theory to describe the experiences of minority racial and ethnic groups in the U.S.
- Explore and apply Cultural Capital Theory as it relates to racial and ethnic minority group experiences in the U.S.
• Explore and apply the term stereotype threat to describe the unique experiences of minority racial and ethnic groups in the U.S.

• CRITICALLY EXAMINE THE ECONOMIC, PSYCHOLOGICAL, POLITICAL, AND CULTURAL PROGRESS OF MINORITY RACIAL AND ETHNIC GROUPS IN THE U.S (SLO 4).

• Use a historical comparative approach to explain the dimensions of progress for minority racial and ethnic groups.

• List and describe contemporary social issues facing minority racial and ethnic groups in the U.S.

• Use the learned vocabulary to discuss the likelihood of developing concrete solutions to address the contemporary issues uniquely facing minority racial and ethnic groups in the U.S.

ETHNS 320 The African American Experience

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Advisory: Completion of ENGWR 101 with a grade of "C" or better, or completion of ESLW 340 with a grade of "C" or better
Transferable: CSU; UC
General Education: AA/AS Area V(b); AA/AS Area VI; CSU Area D; IGETC Area 4
Catalog Date: June 1, 2020

This interdisciplinary course examines the social, political, economic, and cultural experience of racial and ethnic minority groups in the United States using concepts, theories, and terminology from distinct disciplines within the social sciences. As an ethnic studies course, it has a culturally relativistic approach. Specifically, this course redefines the lives of African Americans through their own experiences: from the inside looking out at the world. This course was formerly SOCSC 320.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• DEVELOP A VOCABULARY THAT DESCRIBES THE UNIQUE EXPERIENCES OF AFRICAN AMERICANS IN THE U.S. (SLO 1).

• Introduce interdisciplinary terms, concepts and theories to minority racial and ethnic group experiences in the U.S.

• Apply the interdisciplinary vocabulary to understand the developing historical, political, cultural, psychological conditions under which African Americans have lived in the U.S.

• Interpret and summarize various aspects of the African American experience in the U.S.

• EXAMINE THE CULTURAL AND RACIAL STRUCTURE OF AMERICAN SOCIETY. (SLO 2).

• Explain the ideology of white supremacy as a means to understanding it (White Supremacy) as the organizing system of race relations in the U.S.

• Discuss the social, cultural and structural conditions that compelled the African American social movements (collective action) and organizations in the U.S.

• EXAMINE THE RELATIONSHIP BETWEEN THE SOCIAL CONDITIONS EXPERIENCED BY AFRICAN AMERICANS AND AFRICAN AMERICAN GROUP IDENTITY FORMATION. (SLO 3).

• Describe the role of the institution of slavery in the development of the dominant group's perception of African Americans in the U.S.

• Describe the era of scientific racism and its role in the development of the dominant group's perception of African Americans in the U.S.

• Explore and apply Social Identity Theory to describe identity formation for African Americans.

• Explore and apply Ethnic Identity Theory to describe identity formation for African Americans.

• Explore and apply Stereotype Threat to describe its impact in the unique experiences of African Americans brought on by dominant group perception in the U.S.

• CRITICALLY EXAMINE THE ECONOMIC, PSYCHOLOGICAL, POLITICAL, AND CULTURAL PROGRESS OF AFRICAN AMERICANS IN THE U.S (SLO 4).

• Use a historical comparative approach to explain the dimensions of progress for African Americans in the U.S.

• List and describe contemporary social issues facing African Americans in the U.S.

• Use the vocabulary developed throughout the course to discuss the likelihood of developing concrete solutions to address the contemporary issues uniquely facing African Americans in the U.S.
ETHNS 330 The Asian American Experience in America

This interdisciplinary course examines the social, political, economic, and cultural experience of Asian Americans in the United States. As an Ethnic Studies course, it has a culturally relativistic approach. Specifically, this course examines and redefines the lives of Asian Americans through their own experiences: from the inside looking out at the world. This course was formerly SOCSC 325.

Upon completion of this course, the student will be able to:

- Introduce interdisciplinary terms, concepts and theories.
- Apply the interdisciplinary vocabulary to understand the developing historical, political, cultural, psychological conditions under which Asian Americans have lived in the U.S.
- Interpret and summarize various aspects of the Asian American experience in the U.S.
- EXAMINE THE CULTURAL AND RACIAL STRUCTURE OF AMERICAN SOCIETY. (SLO 2).
- Explain the ideology of white supremacy as a means to understanding it (White Supremacy) as the organizing system of race relations in the U.S.
- Discuss the social, cultural and structural conditions that compelled the Asian American social movements (collective action) and organizations in the U.S.
- DESCRIBE THE RELATIONSHIP BETWEEN THE SOCIAL CONDITIONS EXPERIENCED BY ASIAN AMERICANS AND ASIAN AMERICAN GROUP IDENTITY FORMATION. (SLO 3).
- Describe the role of the institution of slavery in the development of the dominant group's social perception of Asian and Asian American subgroups in the U.S.
- Describe the era of scientific racism and its role in the development of the dominant group's perception of Asian and Asian American subgroups in the U.S.
- Explore and apply Social Identity Theory to describe identity formation for Asian Americans.
- Explore and apply Ethnic Identity Theory to describe identity formation for Asian Americans.
- Explore and apply stereotype threat to describe its impact in the unique experiences of Asian Americans brought on by dominant group perception in the U.S.
- Use a historical comparative approach to explain the dimensions of progress for Asian Americans in the U.S.
- List and describe contemporary social issues facing Asian Americans in the U.S.
- Use the vocabulary developed throughout the course to discuss the likelihood of developing concrete solutions to address the contemporary issues uniquely facing Asian Americans in the U.S.

ETHNS 340 Chicanos/Mexican Americans in the U.S.
This is an interdisciplinary course in which terms, concepts, and theories from distinct disciplines within the social sciences will be utilized to examine the social, political, economic, and cultural experience of Mexican Americans in the United States. As an Ethnic Studies course, it has a culturally relativistic approach. Specifically, this course examines and redefines the lives of Mexican Americans through their own experiences: from the inside looking out at the world. This course was formerly SOCSC 330.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- Introduce interdisciplinary terms, concepts and theories as they relate to Mexican American experience in the U.S.
- Apply the interdisciplinary vocabulary to understand the developing historical, political, cultural, psychological conditions under which Mexican Americans have lived in the U.S.
- Interpret and summarize various aspects of the Mexican American experience in the U.S.
- EXAMINE THE CULTURAL AND RACIAL STRUCTURE OF AMERICAN SOCIETY. (SLO 2).
- Explain the ideology of white supremacy as a means to understanding it (White Supremacy) as the organizing system of race relations in the U.S.
- Discuss the social, cultural and structural conditions that compelled the Mexican American social movements (collective action) and organizations in the U.S.
- DESCRIBE THE RELATIONSHIP BETWEEN THE SOCIAL CONDITIONS EXPERIENCED BY MEXICAN AMERICANS AND MEXICAN AMERICAN GROUP IDENTITY FORMATION. (SLO 3).
- Describe the role of the institution of slavery in the development of the dominant group's social perception of Mexican and Mexican Americans in the U.S.
- Describe the era of scientific racism and its role in the development of the dominant group's perception of Mexican and Mexican Americans in the U.S.
- Explore and apply Social Identity Theory to describe identity formation for Mexican Americans sociocultural mobility and progress.
- Explore and apply Ethnic Identity Theory to describe identity formation for Mexican Americans.
- Explore and apply the term stereotype threat to describe its impact in the unique experiences of Mexican Americans brought on by dominant group perception in the U.S.
- Use a historical comparative approach to explain the dimensions of progress for Mexican Americans in the U.S.
- List and describe contemporary social issues facing Mexican Americans in the U.S.
- Use the vocabulary developed throughout the course to discuss the likelihood of developing concrete solutions to address the contemporary issues uniquely facing Mexican Americans in the U.S.

ETHNS 344 The Latino Experience in America

<table>
<thead>
<tr>
<th>Units:</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hours:</td>
<td>54 hours LEC</td>
</tr>
<tr>
<td>Prerequisite:</td>
<td>None.</td>
</tr>
<tr>
<td>Advisory:</td>
<td>Completion of ENGWR 101 or ESLW 340 with a grade of &quot;C&quot; or better</td>
</tr>
<tr>
<td>Transferable:</td>
<td>CSU; UC</td>
</tr>
<tr>
<td>General Education:</td>
<td>CSU Area D; IGETC Area 4</td>
</tr>
<tr>
<td>Catalog Date:</td>
<td>June 1, 2020</td>
</tr>
</tbody>
</table>
This interdisciplinary course examines the social, political, economic, and cultural experience of racial and ethnic minority groups in the United States using concepts, theories, and terminology from distinct disciplines within the social sciences. As an ethnic studies course, it has a culturally relativistic approach. Specifically, this course redefines the lives of Latino American subgroups through their own experiences: from the inside looking out at the world.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- DEVELOP A VOCABULARY THAT DESCRIBES THE UNIQUE EXPERIENCES OF LATINO AMERICAN SUBGROUPS IN THE U.S. (SLO 1).
  - Apply interdisciplinary vocabulary to understand the developing historical, political, cultural, psychological conditions under which Latino American subgroups have lived in the U.S.
  - Describe the push and pull factors that lead to both immigration and emigration for Latino subgroups.
  - Describe the various forms of nativism experienced by Latino subgroups as they settled in the U.S.

- EXAMINE THE CULTURAL AND RACIAL STRUCTURE OF AMERICAN SOCIETY. (SLO 2).
  - Explain the ideological development of white supremacy as a means to understanding it (white supremacy) as the organizing social system of race relations in the U.S.
  - Understand the relationship between institutional power and social power within a social system.
  - Explain the relationship between the ideological development of white supremacy and its effect on Latino subgroups' agency in the U.S.

- UNDERSTAND THE CONDITIONS UNDER WHICH LATINO SUBGROUPS BOTH ASSIMILATE AND ACCULTURATE AND FORM A LATINO AMERICAN IDENTITY. (SLO 3).
  - Explore and apply Social Identity Theory to describe identity formation for Latino American subgroups.
  - Explore and apply Ethnic Identity Theory to describe identity formation for Latino American subgroups.
  - Explore and apply stereotype threat to describe its impact in the unique experiences of Latino American subgroups brought on by dominant group perception in the U.S.
  - Describe the role of the institution of slavery in the development of the dominant group's social perception of Latino subgroups in the U.S.
  - Describe the role of Native American land encroachment in the development of the dominant group's social perception of Latino subgroups.
  - Describe the era of scientific racism and its role in the development of the dominant group's perception of Latino subgroups in the U.S.
  - Describe the role and process of ethnogenesis undertaken by Latino subgroups as they develop a Latino American identity in the U.S.

  - Use a historical comparative approach to explain the dimensions of progress for Latino American subgroups in the U.S.
  - List and describe contemporary social issues facing Latino American subgroups in the U.S.
  - Use the vocabulary developed throughout the course to discuss the likelihood of developing concrete solutions to address the contemporary issues uniquely facing Latino American subgroups in the U.S.
Family and Consumer Science | Cosumnes River College

CRC's course offerings in Family and Consumer Science are designed primarily to provide knowledge and skills in the areas of human development.

Dean
Collin Pregliasco

| (916) 691-7261 |

| PregliC@crc.losrios.edu |

Family and Consumer Science (FCS)

FCS 324 Human Development: A Life Span

| Units: | 3 |
| Hours: | 54 hours LEC |
| Prerequisite: | None. |
| Transferable: | CSU; UC (FCS 312, 324 and PSYC 372 combined: maximum transfer credit is two courses) |
| General Education: | AA/AS Area III(b); CSU Area E1 |
| Catalog Date: | June 1, 2020 |

This course will provide an overview of the physical, cognitive, social, and emotional development from conception through the life span. The emphasis will be on the practical application of developmental principles. The course is designed as a foundation course of careers in educational, social, psychological, and medical fields. An optional field study unit may be offered to provide opportunities for observation and experience with various age groups.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO #1: Analyze developmental theories and current research on life span in the biosocial, psychosocial, and cognitive domains.
- Assess the history of the life span perspective and address contemporary concerns.
- Define and distinguish between biological processes, cognitive processes, and socio-emotional processes.
- Appraise the major developmental periods from conception to death.
- Evaluate the three major developmental issues (nature and nurture, continuity and discontinuity, stability and change).
- Understand normative cognitive changes across the life span as suggested by the different theories.
- SLO #2: Analyze, compare, and contrast the key development theories.
- Define and distinguish between biological processes, cognitive processes, and socioemotional processes.
- Appraise and distinguish between theory, hypotheses, and the scientific method.
- Evaluate the different research measures used by developmental psychologists, and developmental theorists.
- SLO #3: Assess the developmental stages and growth processes across the biosocial, psychosocial, and cognitive domains of development, from the prenatal period through the end of life.
- Differentiate and analyze typical and atypical behavior, experiences, growth and development throughout the life span.
- Demonstrate knowledge of specific growth processes and analyze the interplay of genes and the environment on human growth and development.
• Assess the genetic foundations of life.
• Evaluate normative cognitive changes across the life span as suggested by the different theories.
• SLO #4: Analyze the six stages of the family life cycle, from leaving home and becoming a single adult to the family in later life.
• Appraise how research on temperament, personality, and attachment illustrate both stability and change in development.
• Demonstrate knowledge of specific growth processes and analyze the interplay of genes and the environment on human growth and development.
• Critique the various aspects of marriage, cohabitation, and committed relationships.
• Analyze the links between attachment and intimate relationships in adolescence and adulthood.
• Assess the current research on parenting children.
• Evaluate aspects of parent-adolescent relationships, seeing that while conflict with parents may increase in adolescence, it is usually moderate, not severe, and while adolescents seek to be independent, secure attachment to parents is positive for development.
• Appraise grandparenting and intergenerational relationships.
• Assess the changing family dynamics throughout the life span.
• SLO #5: Define death and life/death issues.
• Explore the developmental and cultural perspective on death and dying across the life span.
• Describe how individuals experience and view death, loss, and bereavement.

FCS 495 Independent Studies in Family and Consumer Science

| Units: | 1 - 3 |
| Hours: | 54 - 162 hours LAB |
| Prerequisite: | None. |
| Transferable: | CSU |
| Catalog Date: | June 1, 2020 |

An independent studies project involves an individual student or small group of students in study, research, or activities beyond the scope of regularly offered courses. See the current catalog section of "Special Studies" for full details of Independent Studies.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• SLO #1: Actively engage in intellectual inquiry beyond that required in order to pass a course of study (College Wide Learning Outcome – Area 4).
• Discuss and outline a proposal of study (that can be accomplished within one semester term) with a supervising instructor qualified within the discipline.
• Design an independent study (to be completed individually or by collaboration of a small group) to foster special knowledge, skills, and experience that are not available in any one regularly scheduled course.
• Use information resources to gather discipline-specific information.
• SLO #2: Utilize modes of analysis and critical thinking to apply theoretical perspectives and/or concepts in the major discipline of study to significant problems and/or educational activities (College Wide Learning Outcome – Area 3).
• Analyze and apply the knowledge, skills and experience that are involved in the independent study to theoretical perspectives and/or concepts in the major discipline of study.
• Explain the importance of the major discipline of study in the broader picture of society.
• SLO #3: Communicate a complex understanding of content matter of the major discipline of study (College Wide Outcome – Area 3).
• Demonstrate competence in the skills essential to mastery of the major discipline of study that are necessary to accomplish the independent study.
• SLO #4: Identify personal goals and pursue these goals effectively (College Wide Outcome – Area 4).
Utilize skills from the "academic tool kit" including time management, study skills, etc., to accomplish the independent study within one semester term.
Film and Media Studies
Cosumnes River College

Film and Media Studies is designed to develop critical thinking and screenwriting skills while fostering a humanistic and social scientific understanding of the media. Students combine hands-on courses in scriptwriting, with critical studies of the visual media as an art form and social force. This major is particularly encouraged for students who intend to transfer to university film and media programs or pursue careers that demand a high level of visual literacy, analytic and writing skills. The production of digital film and broadcast television are taught through the Radio, Television and Film Production program.

Briand Bedford
(916) 691-7170
BedforB@crc.losrios.edu

Associate Degree

A.A. in Film and Media Studies

Film and Media Studies is designed to develop critical thinking and screenwriting skills while fostering a humanistic and social scientific understanding of the media. Students combine hands-on courses in scriptwriting, with critical studies of the visual media as an art form and social force. This major is particularly encouraged for students who intend to transfer to university film and media programs or pursue careers that demand a high level of visual literacy, analytic and writing skills. The production of digital film and broadcast television are taught through the Radio, Television and Film production program.

Highlights include:
* State-of-the-art 32-station computer lab for graphics and non-linear editing including Apple's Final Cut Pro, DVD Studio Pro, Adobe Photoshop, Illustrator, After Effects.
* Hand-on courses in film and video production and editing
* Screening room with rear screen projector and advanced sound system

Note to Transfer Students:
If you are interested in transferring to a four-year college or university to pursue a bachelor's degree in this major, it is critical that you meet with a CRC counselor to select and plan the courses for your major. Schools vary widely in terms of the required preparation. The courses that CRC requires for an Associate's degree in this major may be different from the requirements needed for the Bachelor's degree.

Catalog Date: June 1, 2020

Degree Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>FMS 300</td>
<td>Introduction to Film Studies</td>
<td>3</td>
</tr>
<tr>
<td>FMS 305</td>
<td>Film History</td>
<td>3</td>
</tr>
<tr>
<td>FMS 320</td>
<td>Film Genre</td>
<td>3</td>
</tr>
<tr>
<td>JOUR 310</td>
<td>Mass Media and Society (3)</td>
<td>3</td>
</tr>
<tr>
<td>or RTVF 300</td>
<td>Mass Media and Society (3)</td>
<td></td>
</tr>
<tr>
<td>RTVF 330</td>
<td>Beginning Single Camera Production</td>
<td>3</td>
</tr>
<tr>
<td>A minimum of 3 units from the following:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FMS 310</td>
<td>Basic Screenwriting (3)</td>
<td>3</td>
</tr>
</tbody>
</table>
COURSE CODE | COURSE TITLE | UNITS
--- | --- | ---
RTVF 362 | Digital Non-Linear Video Editing (3) | 
Total Units: | | 18

The Film and Media Studies Associate in Arts (A.A.) degree may be obtained by completion of the required program, plus general education requirements, plus sufficient electives to meet a 60-unit total. See CRC graduation requirements.

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- Analyze, interpret, and exercise critical judgment in the evaluation of film and media forms and cultures. (SLO-1)
- Recognize, articulate, and judge the visual, verbal, and audio conventions through which images, words, and sounds make meaning in film and media texts. (SLO-2)
- Write clear, concise, and well-developed analyses of film and media texts. (SLO-3)
- Demonstrate an understanding of the professional, technical, and formal choices that realize, develop, or challenge existing practices and traditions in film. (SLO-4)
- Determine what type of information is needed for a research question, problem, or issue and identify, evaluate and effectively apply this information in scholarly or visual projects. (SLO-5)
- Articulate the history, development, genre, and movements of the film medium and recognize the contributions of national, minority, diasporic, and subaltern filmmakers. (SLO-6)
- Explain the processes, current structure, and ethical norms of American media. (SLO-7)
- Evaluate research on and popular claims of the media's social, political, and individual effects. (SLO-8)
- Produce videos that demonstrate an understanding of camera coverage, frame composition and mise-en-scene, camera perspective and blocking, editorial rhythm, pace, structure and style. (SLO-9)

Career Information

Career Options Director, Entertainment Writer or Editor, Producer, Screenwriter, Script Supervisor, Story Editor Some career options may require more than two years of college study. Classes beyond the associate degree may be required to fulfill some career options or for preparation for transfer to a university program.

Film and Media Studies (FMS)

FMS 300 Introduction to Film Studies

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Transferable: CSU; UC
General Education: AA/AS Area I; CSU Area C1; IGETC Area 3A
Catalog Date: June 1, 2020

This course offers an introduction to the film medium with emphasis on aesthetics, theory and methods of critical analysis. Students will examine film as an art form, as a medium for communicating ideas and as a social and cultural force.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- identify, analyze and evaluate the use and role of shots, angles, lighting, color, movement, editing, mise en scene and sound in cinema.
- explain and evaluate the contributions of the cinematographer, writer, director, editor and actor to cinematic art.
- explain and examine the codes and the conventions of film genre, myth, narrative, rhetoric.
- compose a film scene and construct a storyboard by employing cinematic language.
• recognize, discuss and examine the nature of culture, class, gender, and ethnicity in Hollywood mythologies and oppositional films.

• identify, explain, and understand contemporary film theories and use these theories to analyze, interpret, and criticize motion pictures.

FMS 305 Film History

Same As: RTVF 305
Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Transferable: CSU; UC
General Education: AA/AS Area I; CSU Area Ct; IGETC Area 3A
Catalog Date: June 1, 2020

This course is an introduction to the art of motion pictures, using lectures and films. Students will study the history and development of motion pictures and will view, evaluate, and critique landmarks in the art of movie making. This course is the same as RTVF 305 and only one may be taken for credit.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• analyze, interpret, and exercise critical judgment in the evaluation of film and media forms and cultures (SLO-1).

• analyze film critically through stylistic, narrative, and thematic analyzes.

• critique and understand films as art, literature, and communication.

• recognize, articulate, and judge the visual, verbal, and audio conventions through which images, words, and sounds make meaning in film and media texts (SLO-2).

• critique the stylistic, narrative, and thematic concerns in major works of film art.

• identify, understand, and evaluate the language of film narration, editing, and cinematography.

• develop and apply the technical language of film art and industry in evaluating film production and direction.

• demonstrate an understanding of the professional, technical, and formal choices that realize, develop, or challenge existing practices and traditions in film (SLO-3).

• employ basic critical approaches (formalistic, psychological, socio-political, and generic) in analyzing films and their cultural implications.

• evaluate the role of technologies in the development of film art.

• assess what type of information is needed for a research question, problem, or issue and identify, evaluate and effectively apply this information in scholarly or visual projects (SLO-4).

• describe the history, development, genre, and movements of the film medium and recognize the contributions of national, minority, diasporic, and subaltern filmmakers (SLO-5).

• classify and critique the periods, movements, major figures, landmark films, genres, and codes of film.

• compare and contrast the work of different directors and the concerns of different national cinema.

• recognize and evaluate the contributions of women and minorities to film.

FMS 310 Basic Screenwriting

Units: 3
Hours: 54 hours LEC
Prerequisite: ENGWR 300
Advisory: CSU
Transferable: AA/AS Area I
General Education: AA/AS Area I
Catalog Date: June 1, 2020
This course is a study of the creativity and techniques of screenwriting for short films, feature films, and television. Students will view and analyze exemplary films, participate in writing exercises and workshops, and complete a treatment and master scenes of a full-length project.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- understand and apply the elements of story structure and film narrative.
- critically analyze produced scripts. Write film dialogue.
- identify successful scenes. Develop three-dimensional characters.
- apply concepts from mythology to plot and character development.
- understand and apply literary techniques for sub-text to symbolism to create multi-layered narratives. Plot a feature film.
- create proposals and treatments for film projects.
- compose a short film or the first third of a feature-length film.

FMS 320 Film Genre

| Units: | 3 |
| Hours: | 54 hours LEC |
| Prerequisites: | None. |
| Transferable: | CSU; UC |
| General Education: | AA/AS Area I; CSU Area C2; IGETC Area 3B |
| Catalog Date: | June 1, 2020 |

This course examines the structure, mythology, style, themes and critical theory of one or more film genre, such as the comedy, the thriller and the film noir.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- understand genre theory, genre's relationship to popular culture, its role in fostering ideology and images of gender and ethnicity.
- explain and examine the codes, conventions, myths and transformations of film genre.
- apply current film theory to the analysis and criticism of genre films.
- identify and analyze the relationship of cinematic aesthetics and visual motifs to a genre or genres.
- write critical papers on film genre.
- apply semiotics to the study of film genre.

FMS 488 Honors Seminar: Introduction to Critical Theory

| Same As: | HONOR 350 |
| Units: | 3 |
| Hours: | 54 hours LEC |
| Prerequisites: | None. |
| Transferable: | CSU; UC |
| General Education: | AA/AS Area I; CSU Area C2; IGETC Area 3B |
| Catalog Date: | June 1, 2020 |

This course investigates questions of interpretation and representation in film, literature, media, and culture. Students examine contemporary critical and cultural theory, then apply these theories in analyzing a variety of texts from the Shakespearean play to the sciencefiction horror film. Theories introduced include, but are not limited to, semiotics, psychoanalysis, rhetorical criticism, gender theory, and postmodernism. Students intending to transfer into arts, film, literature, humanities, and cultural studies programs will find this course particularly useful in understanding the critical language of the university. Enrollment is limited to Honors Program students.

Details about the Honors Program can be found in the front of the Catalog and on the CRC website. This course is the same as HONOR 350, and only one may be taken for credit.
Upon completion of this course, the student will be able to:

- EXPRESS IDEAS CLEARLY IN WELL-ORGANIZED WRITTEN MESSAGES (SLO #1, College Wide SLO – Area 1, and General Education SLO C5a – English Composition). This includes the ability to:
  - Express ideas clearly and completely in a variety of written formats.
  - Utilize correct and appropriate conventions of mechanics, usage, and style in written communication.
  - Comprehend main ideas and reasonably interpret written information.
  - Compose and apply properly documented sources of information.

- UTILIZE MODES OF ANALYSIS AND CRITICAL THINKING IN A DISCIPLINE OF STUDY AS APPLIED TO SIGNIFICANT ISSUES AND/OR PROBLEMS (SLO #2; College Wide SLO Area 3). This includes the ability to:
  - Construct an accurate and/or logical interpretation of reasoning while applying a framework of analytic concepts.

- ACTIVELY ENGAGE IN INTELLECTUAL INQUIRY BEYOND THAT REQUIRED IN ORDER TO PASS A COURSE OF STUDY (SLO #3, College Wide SLO – Area 4). This includes the ability to:
  - Apply information and resources necessary to develop academically and personally.
  - Utilize skills from one’s “academic tool kit” including time management, study skills, etc.

- RECOGNIZE THE ETHICAL DIMENSIONS OF DECISIONS AND ACTIONS (SLO #4, College Wide SLO – Area 5). This includes the ability to:
  - Demonstrate the ability to engage in ethical reasoning necessary to exercise responsibility as an ethical individual, professional, local and global citizen.

- ARTICULATE AN AWARENESS OF A VARIETY OF PERSPECTIVES WITHIN A DISCIPLINE AND THE RELEVANCE OF THESE PERSPECTIVES TO ONE’S OWN LIFE (SLO #5, College Wide SLO – Area 2). This includes the ability to:
  - Understand, evaluate, and apply critical theory, theory’s relationship to art and culture, its role in interpreting literary and visual arts, and examining ideology and representations of gender and ethnicity.
  - Apply current theory to the analysis and criticism of film, literature, and media.
  - Understand, evaluate and apply the basic concepts of semiotics, post-structuralism, psychoanalysis, gender theory, and postmodernism and their relationship to/influence on art and politics.

FMS 489 Honors Seminar: The Films of Alfred Hitchcock

This seminar studies the work of Alfred Hitchcock from the perspective of the key concepts in film theory. Students will investigate the films and criticism of one of the greatest and strangest directors, the self-styled master of suspense. This seminar takes a close reading of Hitchcock’s most important films and the most significant writing on the director’s work. For students interested in film, media, art, literature, and the humanities, the course examines Hitchcock’s visual style, thematic concerns, and directorial techniques, and introduces the major critical approaches to cinema studies. Enrollment is limited to Honors Program students. Details about the Honors Program can be found in the front of the Catalog and on the CRC website. This course is the same as HONOR 352, and only one may be taken for credit.

Upon completion of this course, the student will be able to:

- EXPRESS IDEAS CLEARLY IN WELL-ORGANIZED WRITTEN MESSAGES (SLO #1, College Wide SLO – Area 1, and General Education SLO C5a – English Composition). This includes the ability to:
  - Express ideas clearly and completely in a variety of written formats.
  - Utilize correct and appropriate conventions of mechanics, usage, and style in written communication.
• Comprehend main ideas and reasonably interpret written information.

• Compose and apply properly documented sources of information.

• UTILIZE MODES OF ANALYSIS AND CRITICAL THINKING IN A DISCIPLINE OF STUDY AS APPLIED TO SIGNIFICANT ISSUES AND/OR PROBLEMS (SLO #2; College Wide SLO Area 3). This includes the ability to:

  • Construct an accurate and/or logical interpretation of reasoning while applying a framework of analytic concepts.

  • ACTIVELY ENGAGE IN INTELLECTUAL INQUIRY BEYOND THAT REQUIRED IN ORDER TO PASS A COURSE OF STUDY (SLO #3, College Wide SLO – Area 4). This includes the ability to:

  • Apply information and resources necessary to develop academically and personally.

  • Utilize skills from one’s “academic tool kit” including time management, study skills, etc.

  • ARTICULATE AN AWARENESS OF A VARIETY OF PERSPECTIVES WITHIN A DISCIPLINE AND THE RELEVANCE OF THESE PERSPECTIVES TO ONE’S OWN LIFE (SLO #4, College Wide SLO – Area 2). This includes the ability to:

  • Identify the stylistic, narrative, and thematic concerns in the director’s work.

  • Understand Hitchcock’s contribution to the cinematic language (pure cinema, point of view, montage, mise-en-scene) and genre (the melodrama and the thriller).

  • Read, understand, evaluate, and compare the key critical appraisals of the director by Modelski, Wood, Spoto, Truffaut and others.

  • Apply critical theory (auteur, feminist, psychoanalytic, semiotic) in the analysis of the films and their cultural implications.

  • Participate in the seminar mode of learning, including seminar discussion and presentation of a creative and original paper of critical value to the study of Hitchcock.

FMS 495 Independent Studies in Film and Media Studies

Units: 1 - 3
Hours: 54 - 162 hours LAB
Prerequisite: None.
Transferable: CSU
Catalog Date: June 1, 2020

An independent studies project involves an individual student or small group of students in study, research, or activities beyond the scope of regularly offered courses. See the current catalog section of “Special Studies” for full details of Independent Studies.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• SLO #1: Actively engage in intellectual inquiry beyond that required in order to pass a course of study (College Wide Learning Outcome – Area 4).

• Discuss and outline a proposal of study (that can be accomplished within one semester term) with a supervising instructor qualified within the discipline.

• Design an independent study (to be completed individually or by collaboration of a small group) to foster special knowledge, skills, and experience that are not available in any one regularly scheduled course.

• Use information resources to gather discipline-specific information.

• SLO #2: Utilize modes of analysis and critical thinking to apply theoretical perspectives and/or concepts in the major discipline of study to significant problems and/or educational activities (College Wide Learning Outcome – Area 3).

• Analyze and apply the knowledge, skills and experience that are involved in the independent study to theoretical perspectives and/or concepts in the major discipline of study.

• Explain the importance of the major discipline of study in the broader picture of society.

• SLO #3: Communicate a complex understanding of content matter of the major discipline of study (College Wide Outcome – Area 3).

• Demonstrate competence in the skills essential to mastery of the major discipline of study that are necessary to accomplish the independent study.

• SLO #4: Identify personal goals and pursue these goals effectively (College Wide Outcome – Area 4).
Utilize skills from the "academic tool kit" including time management, study skills, etc., to accomplish the independent study within one semester term.
Film/Digital Cinema Production  
Cosumnes River College

This Associate of Arts degree program is designed to provide skills in film production, digital cinema, and television through the preparation of projects for viewing on campus, cable TV, the Internet and new technologies. Given the expansion of new media distribution opportunities and the production convergence of High-Definition video and film, students will gain a broad exposure to visual storytelling in a professional environment, including dramatic narrative, documentary and experimental styles.

Dean

 (916) 691-7170

BedforB@crc.losrios.edu

Associate Degree

A.A. in Film / Digital Cinema Production

This Associate of Arts degree program is designed to provide skills in film production, digital cinema, and television through the preparation of projects for viewing on campus, cable TV, the Internet and new technologies. Given the expansion of new media distribution opportunities and the production convergence of High-Definition video and film, students will gain a broad exposure to visual storytelling in a professional environment, including dramatic narrative, documentary and experimental styles. This option can lead to entry-level jobs in the film industry, post-production, television, new media, business and industry. Some of the courses in this major also transfer to a four year university program. Please see a counselor for more information.

Highlights include:
* Practical experience working with school equipment on productions for viewing on campus, on cable TV and the Internet.
* Working in teams to build projects using a professional approach.
* State-of-the-art digital computer lab for graphics and non-linear editing, including Apple’s Final Cut Pro, DVD production, Adobe Photoshop, Adobe Illustrator, and Adobe After Effects.
* Internship opportunities working in local independent film-makers, post-production facilities and at local television stations.
* Industry guest speakers provide real world examples of how to be successful in the film industry.

Note to Transfer Students:
If you are interested in transferring to a four-year college or university to pursue a bachelor’s degree in this major, it is critical that you meet with a CRC counselor to select and plan the courses for your major. Schools vary widely in terms of the required preparation. The courses that CRC requires for an Associate’s degree in this major may be different from the requirements needed for the Bachelor’s degree.

Catalog Date: June 1, 2020

Degree Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>RTVF 305</td>
<td>Film History (3)</td>
<td>3</td>
</tr>
<tr>
<td>or FMS 305</td>
<td>Film History (3)</td>
<td></td>
</tr>
<tr>
<td>RTVF 306</td>
<td>Introduction to Media Aesthetics and Cinematic Arts</td>
<td>3</td>
</tr>
<tr>
<td>RTVF 319</td>
<td>Beginning Audio Production</td>
<td>3</td>
</tr>
<tr>
<td>RTVF 330</td>
<td>Beginning Single Camera Production</td>
<td>3</td>
</tr>
<tr>
<td>RTVF 350</td>
<td>Intermediate Film / Digital Cinema Production</td>
<td>3</td>
</tr>
<tr>
<td>COURSE CODE</td>
<td>COURSE TITLE</td>
<td>UNITS</td>
</tr>
<tr>
<td>-------------</td>
<td>--------------</td>
<td>-------</td>
</tr>
<tr>
<td>RTVF 360</td>
<td>Introduction to Motion Graphics: Adobe After Effects</td>
<td>3</td>
</tr>
<tr>
<td>RTVF 362</td>
<td>Digital Non-Linear Video Editing</td>
<td>3</td>
</tr>
<tr>
<td>PHOTO 301</td>
<td>Beginning Photography (3)</td>
<td>3</td>
</tr>
<tr>
<td>or PHOTO 302</td>
<td>Beginning Digital Photography (3)</td>
<td></td>
</tr>
<tr>
<td>A minimum of 6 units from the following:</td>
<td></td>
<td>6</td>
</tr>
<tr>
<td>RTVF 304</td>
<td>Introduction to Multimedia (3)</td>
<td></td>
</tr>
<tr>
<td>RTVF 354</td>
<td>Audio Editing for Film &amp; Video Post Production (3)</td>
<td></td>
</tr>
<tr>
<td>RTVF 365</td>
<td>Intermediate Film &amp; Video Editing (3)</td>
<td></td>
</tr>
<tr>
<td>RTVF 368</td>
<td>Scriptwriting for Film, Video &amp; Multimedia (3)</td>
<td></td>
</tr>
<tr>
<td>RTVF 371</td>
<td>Hollywood TV and Film Studios: A Behind the Scenes Experience (1)</td>
<td></td>
</tr>
<tr>
<td>RTVF 378</td>
<td>Acting for the Camera (3)</td>
<td></td>
</tr>
<tr>
<td>RTVF 498</td>
<td>Work Experience in Radio, Television and Film (1 - 4)</td>
<td></td>
</tr>
<tr>
<td>FMS 300</td>
<td>Introduction to Film Studies (3)</td>
<td></td>
</tr>
<tr>
<td>FMS 310</td>
<td>Basic Screenwriting (3)</td>
<td></td>
</tr>
<tr>
<td>FMS 320</td>
<td>Film Genre (3)</td>
<td></td>
</tr>
<tr>
<td>Total Units:</td>
<td></td>
<td>30</td>
</tr>
</tbody>
</table>

The Film / Digital Cinema Production Associate in Arts (A.A.) degree may be obtained by completion of the required program, plus general education requirements, plus sufficient electives to meet a 60-unit total. See CRC graduation requirements.

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- Write in clear, concise English. (PSLO-1)
- Research critically, filter the results and present them in a cogent manner. (PSLO-2)
- Resolve and execute standard pre-production skills including planning, script, script breakdown, budgeting, storyboard creation, and crew and equipment selection. (PSLO-3)
- Utilize basic field production equipment correctly, safely and creatively, including cameras, lights and audio. (PSLO-4)
- Operate essential post production equipment for audio and film/video editing and distribution in a variety of contemporary and emerging methods. (PSLO-5)
- Analyze, interpret, and exercise critical judgment in the evaluation of media productions. (PSLO-6)
- Demonstrate through projects that with the power of a communicator, comes moral and ethical responsibility. (PSLO-7)
- Demonstrate a hands-on ability to perform the professional level critical thinking needed for successful teamwork in media employment. (PSLO-8)

Career Information

Camera Operator; Cinematographer; Director of Photography; Lighting Director; Computer Graphic Artist; Non-Linear Video Editor; Audio Engineer; Broadcast Technician; Gaffer; Production Coordinator; Production Assistant; TV, Film, DVD, or Internet Producer/Director; Personal or Corporate Video. Some career options may require more than two years of college study. Classes beyond the associate degree may be required to fulfill some career options or for preparation for transfer to a university program.
Fire Technology
| Cosumnes River College

The fire service is one of the most dynamic employers in the country. This CRC program is designed to provide the student with updated skills and knowledge necessary to complete and successfully apply for fire service positions. The curriculum serves as an inservice program as well as a pre-employment program for students seeking employment or advancement in the profession of urban firefighting and fire suppression.

Dean: Collin Pregliasco

Phone: (916) 691-7261
Email: PregliC@crc.losrios.edu

Associate Degrees

A.S. in Fire Prevention

The fire service is one of the most dynamic employers in the country. This CRC program is designed to provide the student with updated skills and knowledge necessary to complete and successfully apply for fire service positions. The curriculum serves as an in-service program as well as a pre-employment program for students seeking employment or advancement in the profession of fire prevention.

Catalog Date: June 1, 2020

Degree Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>FT 300</td>
<td>Fire Protection Organization</td>
<td>3</td>
</tr>
<tr>
<td>FT 301</td>
<td>Fire Prevention Technology</td>
<td>3</td>
</tr>
<tr>
<td>FT 302</td>
<td>Fire Protection Equipment and Systems</td>
<td>3</td>
</tr>
<tr>
<td>FT 303</td>
<td>Building Construction for Fire Protection</td>
<td>3</td>
</tr>
<tr>
<td>FT 304</td>
<td>Fire Behavior and Combustion</td>
<td>3</td>
</tr>
<tr>
<td>FT 498</td>
<td>Work Experience in Fire Technology</td>
<td>1 - 4</td>
</tr>
</tbody>
</table>

A minimum of 9 units from the following:

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIT 100</td>
<td>Introduction to the International Building Code (3)</td>
<td></td>
</tr>
<tr>
<td>BIT 102</td>
<td>Plan Reading and Non-Structural Plan Review (3)</td>
<td></td>
</tr>
<tr>
<td>BIT 104</td>
<td>International Building Code - Fire &amp; Life Safety (3)</td>
<td></td>
</tr>
<tr>
<td>BIT 130</td>
<td>Introduction to Inspection of Wood Frame Construction (3)</td>
<td></td>
</tr>
</tbody>
</table>

Total Units: 25 - 28

1The student must have 1-4 units of work experience in Fire Prevention to receive a degree.

The Fire Prevention Associate in Science (A.S.) degree may be obtained by completion of the required program, plus general education requirements, plus sufficient electives to meet a 60-unit total. See CRC graduation requirements.
Student Learning Outcomes

Upon completion of this program, the student will be able to:

- PSLO #1: Comprehend the qualifications for entry level skills, the discipline and evaluation process, fire service structure, history, and culture for the field of fire prevention.
- PSLO #2: Identify and comprehend laws, regulations, codes, standards and the regulatory and advisory organizations that influence fire prevention operations.
- PSLO #3: Analyze and determine the causes of fire, extinguishing agents, stages of fire, fire development, and methods of heat transfer.
- PSLO #4: Identify and describe the common types of building construction and conditions associated with structural collapse.
- PSLO #5: Differentiate between fire detection and fire suppression systems.

Career Information

Fire Inspector, Fire Investigator, Plans Examiner, Building Inspector, Fire Prevention Specialist/Officer, Public Education Specialist/Officer, Manager, Firefighter Some Career Opportunities may require more than two years of college study. Classes beyond the associate degree may be required to fulfill some career opportunities for preparation for transfer to a university program.

A.S. in Fire Technology

The fire service is one of the most dynamic employers in the country. This CRC program is designed to provide the student with updated skills and knowledge necessary to complete and successfully apply for fire service positions. The curriculum serves as an inservice program as well as a pre-employment program for students seeking employment or advancement in the profession of urban fire fighting and fire suppression.

HIGHLIGHTS

*Up-to-date technical information
*Field trips to a variety of fire service locations
*Networking with other fire service members
*Fire Technology work experience internships
(Fire Technology 498 for on-the-job experience)

NOTE TO TRANSFER STUDENTS: If you are interested in transferring to a four-year college or university to pursue a bachelor's degree in this major, it is critical that you meet with a CRC counselor to select and plan the courses for your major. Schools vary widely in terms of the required preparation. The courses that CRC requires for an Associate's degree in this major may be different from the requirements needed for the Bachelor's degree.

Catalog Date: June 1, 2020

Degree Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>FT 300</td>
<td>Fire Protection Organization</td>
<td>3</td>
</tr>
<tr>
<td>FT 301</td>
<td>Fire Prevention Technology</td>
<td>3</td>
</tr>
<tr>
<td>FT 302</td>
<td>Fire Protection Equipment and Systems</td>
<td>3</td>
</tr>
<tr>
<td>FT 303</td>
<td>Building Construction for Fire Protection</td>
<td>3</td>
</tr>
<tr>
<td>FT 304</td>
<td>Fire Behavior and Combustion</td>
<td>3</td>
</tr>
<tr>
<td>FT 305</td>
<td>Firefighter Safety and Survival</td>
<td>3</td>
</tr>
<tr>
<td>FT 320</td>
<td>Hazardous Materials</td>
<td>3</td>
</tr>
<tr>
<td>EMT 100</td>
<td>Emergency Medical Technician</td>
<td>7.5¹</td>
</tr>
<tr>
<td>FT 498</td>
<td>Work Experience in Fire Technology (1 - 4)</td>
<td>1 - 4²</td>
</tr>
</tbody>
</table>

A minimum of 9 units from the following:

9
<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>FT 110</td>
<td>Fire Apparatus (3)</td>
<td></td>
</tr>
<tr>
<td>FT 130</td>
<td>Fire Company Organization and Management (3)</td>
<td></td>
</tr>
<tr>
<td>FT 170</td>
<td>Fire Investigation (3)</td>
<td></td>
</tr>
<tr>
<td>FT 180</td>
<td>Rescue Practices (3)</td>
<td></td>
</tr>
<tr>
<td>FT 190</td>
<td>Fire Tactics and Strategy (3)</td>
<td></td>
</tr>
<tr>
<td>FT 210</td>
<td>Firefighter Academy for the Internship Program (7.5)</td>
<td></td>
</tr>
<tr>
<td>Total Units</td>
<td></td>
<td>38.5 - 41.5</td>
</tr>
</tbody>
</table>

1 A current California EMT certificate or Paramedic license will be accepted as satisfactory completion of the EMT 100 requirement.

2 The student must have 1-4 units of work experience in Firefighting or Emergency Medical Services to receive a degree.

The Fire Technology Associate in Science (A.S.) degree may be obtained by completion of the required program, plus general education requirements, plus sufficient electives to meet a 60-unit total. See CRC graduation requirements.

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- PSLO #1: Comprehend the qualifications for entry level skills, the discipline and evaluation process, fire service structure, history, and culture for the field of fire technology.
- Analyze, appraise, and evaluate fire incidents and components of emergency management and firefighter safety.
- PSLO #2: Comprehend laws, regulations, codes, standards and the regulatory and advisory organizations that influence fire department operations.
- PSLO #3: Analyze and determine the causes of fire, extinguishing agents, stages of fire, fire development, and methods of heat transfer.
- Synthesize and determine the appropriate use and flow requirement of hydraulic fire apparatus.
- Describe the appropriate uses and maintenance for apparatus and equipment used in the fire service.
- PSLO #4: Evaluate the common types of building construction and conditions associated with structural collapse and firefighter safety.
- Evaluate fire detection and fire suppression systems.

Career Information

Firefighter; Inspector; Investigator; Supervisor; Manager Some career options may require more than two years of college study. Classes beyond the associate degree may be required to fulfill some career options or for preparation for transfer to a university program.

Certificate of Achievement

Firefighter Suppression Specialist Certificate

The fire service is one of the most dynamic employers in the country. This CRC program is designed to provide students with updated skills and knowledge necessary to complete and successfully apply for fire service positions. The purpose of the Fire Suppression Specialist Certificate is to recognize, through certification, qualified individuals who are dedicated to curtailing fire loss, both physical and financial, and who have acquired a level of professionalism through applied work experiences and related education opportunities, and through successful completion of a certification examination.

The curriculum serves as an in-service program as well as a pre-employment program for students seeking employment or advancement in the profession of urban fire fighting, fire prevention, and public and private fire suppression.
Certificate Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>FT 300</td>
<td>Fire Protection Organization</td>
<td>3</td>
</tr>
<tr>
<td>EMT 100</td>
<td>Emergency Medical Technician</td>
<td>7.5</td>
</tr>
<tr>
<td>FT 210</td>
<td>Firefighter Academy for the Internship Program</td>
<td>7.5</td>
</tr>
<tr>
<td>FT 320</td>
<td>Hazardous Materials</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>A minimum of 16 units from the following:</td>
<td></td>
</tr>
<tr>
<td>FT 498</td>
<td>Work Experience in Fire Technology (1 - 4)</td>
<td>16</td>
</tr>
<tr>
<td></td>
<td>Total Units:</td>
<td>37</td>
</tr>
</tbody>
</table>

1A current California EMT certificate or Paramedic license will be accepted as satisfactory completion of the EMT 100 requirement.

Students should take 4 units of Fire Technology Work Experience (FT 498) each semester for 4 semesters, earning a total of 16 units of work experience through FT 498.

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- PSLO 1: Comprehend the qualifications for entry level skills, the discipline and evaluation process, fire service structure, history, and culture for the field of fire technology.
- PSLO 2: Analyze, appraise, and evaluate fire incidents and components of emergency management and firefighter safety.
- Comprehend laws, regulations, codes, standards, and the regulatory and advisory organizations that influence fire department operations.
- PSLO 3: Develop policies, procedures, and training programs to inform and educate population in fire prevention principles and fire and life safety practices; understand proper design, installation, and maintenance of electrical systems and appliances while identifying the components that, alone or in combination, form emergency and standby power systems; analyze the dynamics of heating systems; identify basic components of and the hazards associated with ‘hot work’ and the manufacturing processes necessary for effective fire prevention.
- PSLO 4: Analyze facility fire hazard management to include capturing knowledge of property fire insurance, building construction and/or field experience; performing fire/property surveys involving detailed analyses; observation, examination, inspection, and gathering of data to describe all aspects of a property/building and business; conducting complex inspection surveys of commercial and residential properties to evaluate physical characteristics of a property and business.
- PSLO 5: Recognize system approaches to property classes; assessing life safety as it relates to fire protection in special occupancies and understanding fire protection in warehouse and storage operations.
- Evaluate fire detection and fire suppression systems.
- PSLO 6: Define organizations for fire and rescue services; perform pre-incident planning for industrial and commercial facilities, interpret operations of fire loss prevention and emergency organizations, understand operations of emergency medical services, describe municipal fire prevention and code enforcement operations; train fire and emergency services; understand the use and function of fire and emergency services protective clothing and protective equipment; and evaluate fire department resources and the placement thereof.

Career Information

Firefighter; Fire Inspector; Investigator; Supervisor; Manager, Plans Examiner; Building Inspector; Fire Prevention Specialist/Officer; Public Education Specialist/Officer
FT 110 Fire Apparatus

This course covers various aspects of fire apparatus. Topics include design, typing, specifications, construction, performance capabilities, and maintenance. This course includes principles and techniques for maintaining and operating fire service pumping and other mobile apparatus. The course includes fire service equipment and apparatus troubleshooting; principles and techniques of preventive maintenance; construction and operation of fire service pumps and pump accessories; basic highway operating techniques for fire apparatus; fire apparatus specifications and testing procedures. Also included are warning devices and the utilization of apparatus in fire service emergencies. Effective utilization of equipment on the fireground will be the focus with emphasis on practical applications.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO 1: Analyze, appraise, and evaluate fire incidents and components of emergency management and firefighter safety.
- analyze fire case study scenarios and formulate solutions.
- SLO 2: Synthesize and determine the appropriate use and flow requirement of hydraulic fire apparatus.
- list and explain the principles of pumping operations.
- SLO 3: Describe the appropriate uses and maintenance for apparatus and equipment used in the fire service.
- compare and contrast the design characteristics of aerial ladder trucks.
- describe operating principles of fully-hydraulic aerial, hydro-mechanical aerial, and manual-emergency operational procedures.
- explain the types of fire ground scenarios in which elevating platform apparatus would be used.
- describe types of platform apparatus; explain their comparative use under different kinds of conditions.
- analyze the hazards associated with the use of fire apparatus under emergency conditions.
- describe the use of specialized equipment such as fireboats, airport apparatus, etc.
- describe the components and the importance of systems checks for the maintenance of fire apparatus.
- prepare apparatus inspection records.
- describe safety procedures and records to be kept for safe use of all fire apparatus.

FT 130 Fire Company Organization and Management

An in-depth review of the operation, organization and planning concepts of today's fire departments. Emphasizes the functions of management including budgeting, time management, delegation, motivation, and discipline. Explores concepts of continuous improvement, team-building, and principles of quality management, relative to fire service operations.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO 1: Comprehend the qualifications for entry level skills, the discipline and evaluation process, fire service structure, history, and culture for the field of fire technology.
FT 170 Fire Investigation

**Units:** 3
**Hours:** 54 hours LEC
**Prerequisite:** None.
**Advisory:** FT 300 or employment as a firefighter
**Catalog Date:** June 1, 2020

This course focuses on determining causes of fires (accidental, suspicious and incendiary), the types of fires, related laws, an introduction to arson and incendiarism, recognizing and preserving evidence, the interviewing of witnesses and suspects, arrest and detention procedures, court procedures and giving court testimony.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- SLO 1: Comprehend laws, regulations, codes, standards and the regulatory and advisory organizations that influence fire department operations.
- describe the proper arrest and detention procedures for adults and juveniles.
- SLO 2: Analyze and determine the causes of fire, extinguishing agents, states of fire, fire development, and method of heat transfer.
- diagnose the point of origin at a fire scene
- recognize, protect, and preserve evidence of fire cause; in proper techniques relating to court testimony; in proper techniques for interviewing witnesses and suspects; in laws relating to fire investigation.
- relate the responsibilities of determining the cause of fire to fire and police personnel.
- describe the scientific method of fire investigation

FT 180 Rescue Practices
This course focuses on the identification and management of rescue situations, such as proper utilization and awareness of equipment, tools, and techniques to handle various rescue situations. Topics include vehicle extrication, water rescue, vertical rescue, building collapse, radiation hazards, hazardous materials rescue, fire situations including rapid intervention awareness, and other emergency situations.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO 1: Analyze, appraise, and evaluate fire incidents and components of emergency management and fire fighter safety.
- develop an overall understanding of emergency rescue technicians.
- develop an interest in the Rescue Service.
- develop an understanding of specific rescue problems and procedures.
- SLO 2: Describe techniques for dealing with various rescue situations and obtain a working knowledge of how to set-up emergency rescue equipment
- describe confined space rescue operations
- improvise treatments for common medical injuries, using minimal equipment
- SLO 3: Identify next steps towards receiving technical rescue certifications applicable toward firefighter career enhancement and advanced mobility

FT 190 Fire Tactics and Strategy

This course provides the study of fundamental principles of fire tactics and strategy under fireground conditions and procedures for effective development and application of pre-fire plans. Fire emergency problems are critically analyzed and definitive coping strategies are examined as it relates to staffing resources, equipment and extinguishing agents available during the emergency incident. This course meets the National Fire Academy, Fire and Emergency Services Higher Education (FESHE) curriculum model for the Strategy and Tactics Course. This course is also aligned with the State of California Fire Marshal "All Risk Command for Company Officers" (2D) certification track series.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO 1: Comprehend the qualifications for entry level skills, the discipline and evaluation process, fire service structure, history, and culture for the field of fire technology.
- explain the primary functions of engine and truck companies.
- describe methods for dealing with the personal stress accompanies fire command.
- SLO 2: Comprehend laws, regulations, codes, standards and the regulatory and advisory organizations that influence fire department operations.
- describe the goal of the nation's fire service.
- identify common fireground safety practices, safety violations, and fire fighter injury rates.
- SLO 3: Analyze, appraise, and evaluate fire incidents and components of emergency management and fire fighter safety.
- identify the essential data that should be gathered and recorded on pre-fire plans.
- define "size-up" and describe the factors of size-up, which must be considered for control of an emergency situation.
- identify and describe the seven strategic and tactical priorities.
- describe tactical plans for rescue, exposure protection, confinement, extinguishments, overhaul, ventilation, and salvage.
- identify the factors to consider when writing a report of conditions at an emergency scene.
- describe the role and responsibilities of first-in officer at the scene of an emergency.
- SLO 4: Analyze and determine the causes of fire, extinguishing agents, stages of fire, fire development, and methods of heat transfer.
- identify the four components of the fire Tetrahedron and their relationship to the combustion process.
- compare the four classes of fire and the process of fire behavior and growth.
- identify the four levels of emergencies and provide examples.
- identify the four leading causes of fire.
- identify methods of heat transfer and describe fire spread within structures.
- describe special circumstances to be considered in fireground operations.
- SLO 5: Synthesize and determine the appropriate use and flow requirement of hydraulic fire apparatus.
- describe and compare the general methods of water application to fireground situation and the manpower requirements necessary to deploy hose lines and develop fire streams.
- determine the manpower requirements necessary to deploy hose lines and develop fire streams.
- SLO 6: Describe the appropriate uses and maintenance for apparatus and equipment used in the fire service.
- identify the six categories of extinguishing agents and provide examples of each.
- compare the effectiveness of extinguishing agent type on the four classifications of fuel.
- discuss the four variable factors that may affect basic positioning of apparatus in an emergency.
- SLO 7: Evaluate the common types of building construction and conditions associated with structural collapse and firefighter safety.
- describe firefighting hazards and conditions associated with: remodeled structures, balloon construction, arch truss roofs, light weight construction, and poke-through construction.
- evaluate the risks associated with discovering remodeled work done without appropriate local permitting.
- identify the roles of the National Incident Management System (NIMS) and Incident Management System (ICS) as it relates to strategy and tactics;
- demonstrate the various roles and responsibilities in ICS/NIMS

FT 210 Firefighter Academy for the Internship Program

- **Units:** 7.5
- **Hours:** 90 hours LEC; 135 hours LAB
- **Prerequisite:** FT 300 with a grade of "C" or better; Current EMT Certification in the State of California. BLS Provider or BLS for the Healthcare Provider from American Heart Association; or current American Red Cross CPR for Professional Rescuer). CPR must stay current for the entire internship. The student must meet other Academy requirements including but not limited to: drug screening, background check, purchasing firefighting personal protective equipment, college GPA of 2.5, physical, physical ability test, respirator fit testing, and a valid driver's license. current Candidate Physical Ability Test (CPAT) card. The students applying for FT 210 must pass a fire interview board to be accepted into the course.
- **Corequisite:** FT 498
- **Enrollment Limitation:** All students must be enrolled in FT 498 to sign up for FT 210.
- **Catalog Date:** June 1, 2020

FT 210 is a Firefighter Academy to provide the techniques and skills to work effectively and safely within the fire environment as well as in the fire department. This Firefighter Academy is CSD Fire Department’s Academy (NOT a State Certified Regional Fire Academy). Students that successfully complete this course along with the CSD/CRC Firefighter work experience program (FT 498) are allowed to apply for the State of California Fire Fighter I certification. Topics include indoctrination into the fire service, general maintenance, apparatus and equipment operations, fire control, salvage, fire prevention and public education, fire and arson investigation, rapid intervention crew tactics, physical fitness/wellness, emergency care, and forcible entry. Students may be charged a lab fee for personal protective equipment (PPE) in the use of and maintenance of structural firefighter turnouts and equipment in this course. Students will also be responsible for purchasing other equipment, liability insurance and uniforms. Pass/no pass only.
Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO #1: Understand the core values of the fire service and the duty to provide service to the public.
- Describe the history, development, structure, organization, and responsibility of the fire service.
- Demonstrate basic skills in public education procedures and instruction.
- Understand and performs preventative maintenance to fire station, apparatus, and equipment.
- Explain and apply the basic concept of fire control, fire and arson investigation, and fire communication systems.
- SLO #2: Understand and apply national standards to firefighting techniques and operations.
- Use fire department apparatus and tools within the scope of assignment.
- Identify and demonstrate first responder responsibilities for handling medical emergencies.
- Demonstrate firefighter rescue and survival skills.
- Demonstrate fire suppression tactics and strategies.
- SLO #3: Demonstrate professional values and standards for fire service personnel that the industry requires
- Apply workplace rules and laws regarding harassment/discrimination policies and mandated reporting procedures.
- Comprehend the need to maintain both physical and mental health fitness to work in the field of Fire Service.

---

FT 295 Independent Studies in Fire Technology

Units: 1 - 3
Hours: 54 - 162 hours LAB
Prerequisite: None.
Catalog Date: June 1, 2020

An independent studies project involves an individual student or small group of students in study, research, or activities beyond the scope of regularly offered courses. See the current catalog section of “Special Studies” for full details of Independent Studies.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO #1: Actively engage in intellectual inquiry beyond that required in order to pass a course of study (College Wide Learning Outcome – Area 4).
- Discuss and outline a proposal of study (that can be accomplished within one semester term) with a supervising instructor qualified within the discipline.
- Design an independent study (to be completed individually or by collaboration of a small group) to foster special knowledge, skills, and experience that are not available in any one regularly scheduled course.
- Use information resources to gather discipline-specific information.
- SLO #2: Utilize modes of analysis and critical thinking to apply theoretical perspectives and/or concepts in the major discipline of study to significant problems and/or educational activities (College Wide Learning Outcome – Area 3).
- Analyze and apply the knowledge, skills and experience that are involved in the independent study to theoretical perspectives and/or concepts in the major discipline of study.
- Explain the importance of the major discipline of study in the broader picture of society.
- SLO #3: Communicate a complex understanding of content matter of the major discipline of study (College Wide Outcome – Area 3).
- Demonstrate competence in the skills essential to mastery of the major discipline of study that are necessary to accomplish the independent study.
- SLO #4: Identify personal goals and pursue these goals effectively (College Wide Outcome – Area 4).
- Utilize skills from the “academic tool kit” including time management, study skills, etc., to accomplish the independent study within one semester term.
FT 300 Fire Protection Organization

This course provides an introduction to fire protection and emergency services. Fire Protection Organization is recommended as the first course in the series of fire technology courses. Topics covered include: career opportunities in fire protection and related fields; culture and history of emergency services; philosophy and history of fire protection; fire loss analysis; organization and function of public and private fire protection services; fire departments as part of local government; laws and regulations affecting the fire service; fire service nomenclature; specific fire protection functions; basic fire chemistry and physics; an introduction to fire protection systems; and an introduction to fire strategy and tactics; life safety initiatives. This course meets the National Fire Academy, Fire and Emergency Services Higher Education (FESHE) curriculum model for the Principles of Emergency Services.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO 1: Comprehend the qualifications for entry level skills, the discipline and evaluation process, fire service structure, history, and culture for the field of the fire service.
  - analyze and describe the differences between the certificate, two-year, four-year degree programs and state certification.
  - define the educational requirements, duties and information sources for various occupations in fire protection and explain the value of higher education to the professionalization of the fire service.
- SLO 2: Comprehend laws, regulations, codes, standards and the regulatory and advisory organizations that influence fire department and emergency operations.
  - list and describe the major organizations that provide emergency response service and illustrate how they interrelate.
  - describe the effects of fire on the environment and the historical efforts made to protect society.
  - identify the major organizations that contribute to fire protection.
  - define and describe the scope, purpose, and organizational structure of fire and emergency services.
  - identify the various codes, standards, ordinances and regulations that affect fire protection.
  - Identify the primary responsibilities of fire prevention personnel including, code enforcement, public information, and public and private protection systems.
- SLO 3: Analyze the basic components of fire; determine the causes of fire, extinguishing agents, stages of fire, fire development, and method of heat transfer.
  - describe firefighting strategy and tactics.
  - demonstrate the basic elements of firefighting safety and survival.
- SLO 4: Describe the common types of fire and emergency service facilities, equipment, and apparatus along with its appropriate uses and maintenance.
  - summarize the basic components of fire as a chemical reaction, the major phases of fire and examine the main factors that influence fire spread and fire behavior.
  - examine the types of common fire department apparatus, equipment and personal safety equipment used for firefighting.
  - identify the various applications of computers in the fire service.
- SLO 5: Define command structure utilized at all fire and emergency incidents.
  - define the role of national, State and local support organizations in the fire and emergency services.
  - compare and contrast effective management concepts for various emergency situations.
- SLO 6: Recognize the components of career preparation and goal setting.
  - identify fire protection and emergency-service careers in both the public and private sector.
  - describe the importance of wellness and fitness as it relates to all fire and emergency services.
  - demonstrate a working knowledge of basic culinary etiquette appropriate for shift work.
FT 301 Fire Prevention Technology

This course provides fundamental knowledge relating to the field of fire prevention, history and philosophy of fire prevention, organization and operation of a fire prevention bureau, use and application of codes and standards, plans review, fire inspection practices with identification and correction of fire hazards, fire and life safety education, and fire investigation. This course meets the National Fire Academy, Fire and Emergency Services Higher Education (FESHE) curriculum model for Fire Prevention.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO 1: Comprehend the qualifications for entry level skills, the discipline and evaluation process, fire service structure, history, philosophy of fire prevention.
- define the national fire problem and role of fire prevention, its origin and history within the United States.
- define all functions of a fire prevention bureau and explain the basic fire prevention functions of a fire department.
- describe inspection practices and procedures and list opportunities in professional development for fire prevention personnel.
- identify fire prevention organizations and associations.
- Identify and describe the standards for professional qualifications for Fire Marshal, Plans Examiner, Fire Inspector, Fire and Life Safety Educator, and Fire Investigator.
- SLO 2: Analyze, appraise, and evaluate fire incidents and components of emergency management and fire fighter safety.
- summarize the relationship between fire safety education and fire prevention.
- describe the importance of report preparation and records management in fire prevention efforts.
- identify the responsibility and authority for fire prevention inspections and related activities.
- SLO 3: Comprehend laws, regulations, codes, standards and the regulatory and advisory organizations that influence fire department operations.
- identify the plan review function of a fire prevention bureau.
- define laws, rules, regulations, and codes and identify those relevant to fire prevention of the authority having jurisdiction
- SLO 4: Analyze and determine the causes of fire, extinguishing agents, stages of fire, fire development, and methods of heat transfer.
- identify hazards of use, storage and transfer of flammable liquids and gases and other hazardous materials.
- identify basic electrical fire hazards.
- identify the responsibility and authority for fire prevention inspections and related activities.
- SLO 5: Evaluate fire detection and fire suppression systems.
- identify principles and procedures used to correct fire hazards.
- define operational deficiencies in sprinkler systems and special fixed fire protection systems.
- define operating deficiencies of standpipe systems.
- define operational deficiencies of detection alarm systems.
- identify principles of fire cause determination as they relate to fire prevention and fire investigation.
- define basic principles of fire cause determination as they relate to fire prevention and fire investigation.
- SLO 6: Evaluate the common types of building construction and conditions associated with structural collapse and firefighter safety.
- identify occupancies and building construction types.
- define basic exiting requirements.
FT 302 Fire Protection Equipment and Systems

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO 1: Comprehend laws, regulations, codes, standards, and the regulatory and advisory organizations that influence fire department operations at the national, state, and local level.
- identify and describe various types and uses of fire protection systems.
- explain the basic components of a fire alarm system
- identify the different types of detectors and explain how they detect fire
- discuss the appropriate application of fire protection systems
- SLO 2: Evaluate the common types of building construction and conditions associated with structural collapse and firefighter safety.
- explain the benefits of fire protection systems in various types of structures
- compare smoke and fire movements in various types of construction and the relationship to systems and equipment.
- SLO 3: Describe the basic elements of a public water supply system as it relates to fire protection, the basic elements including sources, distribution networks, piping and hydrants
- synthesize and determine the appropriate use and flow requirement of hydraulic fire apparatus.
- calculate water supply requirements, distribution system and testing for public and private fire protection and explain why water is a commonly used extinguishing agent.
- identify the different types of non-water based fire suppression systems
- analyze the application of hydraulic theory for fire protection.
- identify the different types and components of a sprinkler, standpipe, and foam systems
- examine the components and operation of automatic and special sprinkler systems.
- examine the types of standpipe systems and water supply requirements.
- review residential and commercial sprinkler legislation
- SLO 4: Describe the appropriate uses and maintenance for apparatus and equipment used in the fire service
- explain the operation and appropriate application for the different types of portable fire protection systems
- examine types, classifications, and effectiveness ratings of fire extinguishers.
- classify distribution, installation and test requirements for fire extinguishers
- examine the types, components and operation of fire protection systems and equipment for special hazards.
- compare detection, alarm and supervisory devices and systems.
- compare heat and smoke control devices and hardware and describe the hazards of smoke
- list the four factors that can influence smoke movement in a building.
This course is the study of the components of building construction that relate to firefighter and life safety. The elements of construction and design of structures are shown to be key factors when inspecting buildings, pre-planning fire operations and operating at fires and other emergencies. The development and evolution of building and fire codes will be studied in relationship to past fires in residential, commercial land industrial occupancies. This course meets the National Fire Academy, Fire and Emergency Services Higher Education (FESHE) curriculum model for Building Construction for Fire Protection.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO 1: Analyze, appraise, and evaluate fire incidents and components of emergency management and firefighter safety.
  - analyze safety concerns presented by the following loads: designed, wind, snow, concentrated, distributed, dead, alive, fire, static, impact, suspended, axial, eccentric and torsional.
  - apply consequences of fire exposure on compressive or tensile members composed of common building materials.

- SLO 2: Identify various classifications of building construction and understand theoretical concepts of how fire impacts major types of building construction
  - evaluate the common types of building construction and conditions associated with structural collapse and firefighter safety.
  - evaluate fire stability for the following structural members: column, wall, arch, beam, truss.
  - define the key factors in fire performance of three common floors and four ceilings commonly found in wood and ordinary construction.
  - identify the key features of a wood frame building and their implications for fire stability.
  - identify the function of each principal structural component in typical building design
  - explain the different loads and stresses that are placed on a building and their interrelationships
  - describe building construction as it relates to firefighter safety, building codes, fire prevention, code inspection, firefighting strategy and tactics
  - classify major types of building construction in accordance with a local/model building code
  - define ordinary construction and factors in fire stability and fire spread.
  - analyze the hazards and tactical considerations associated with the various types of building construction along with indicators of collapse in ordinary construction.
  - apply the probable fire reaction of alterations, additions, vernacular construction, or faulty construction. detection systems, and spatial characteristics.
  - identify key factors that may be expected to lessen or increase the resistance of steel to stress and fire.
  - differentiate between fire resistance, flame spread, and describe the testing procedures used to establish ratings for each
  - identify key factors that increase or lessen concrete's resistance to stress and fire.
  - evaluate the implications for fire growth in modern building design by applying basic principles of fire growth analysis.
  - identify fire concerns related to interior finish.
  - evaluate the probable impact of the following factors on smoke spread within buildings, buoyancy, expansion, stack effect, wind, HVAC, smoke control systems, fire protection systems, detection systems, and spatial characteristics.
  - analyze features that may adversely affect effectiveness of safety of emergency operations in buildings under construction.
  - classify occupancy designations of the building code
  - identify the indicators of potential structural failure as they relate to firefighter safety
  - identify the role of GIS as it relates to building construction.
FT 304 Fire Behavior and Combustion

This course provides the student with theories and fundamentals of how and why fires start, spread and are controlled; an in-depth study of fire chemistry and physics, fire characteristics of materials, extinguishing agents and fire control techniques. This course meets the National Fire Academy, Fire and Emergency Services Higher Education (FESHE) curriculum model for Fire Behavior and Combustion.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- **SLO 1:** Analyze, appraise, and evaluate fire incidents and components of emergency management and fire fighter safety.
- identify the fundamental theories of fire behavior and combustion
- explain the basic laws differentiating matter and energy.
- identify physical properties of the three states of matter
- **SLO 2:** Comprehend laws, regulations, codes, standards and the regulatory and advisory organizations that influence fire department operations.
- describe the Department of Transportation warning placards and labeling systems.
- define the Department of Transportation Hazard Class System
- **SLO 3:** Analyze and determine the causes of fire, extinguishing agents, stages of fire, fire development, and methods of heat transfer.
- define basic terminology, definitions and terms associated with basic fire chemistry and the dynamics of fire
- categorize the components of fire
- examine some of the basic chemical symbols used in chemical formula writing.
- explain the importance of the various physical properties of the three physical states of matter as it relates to the process of burning
- examine how physical forces caused by fire can affect the changes in the physical states of matter.
- discuss various materials and their relationship to fires as fuel
- **SLO 4:** Describe the appropriate uses and maintenance for apparatus and equipment used in the fire service.
- demonstrate knowledge of the characteristics of water as a fire suppression agent
- differentiate the various types of extinguishing agents and identify various methods and techniques to the theory of fire extinguishment.
- articulate other suppression agents and strategies

FT 305 Firefighter Safety and Survival

The course introduces the principles and history related to the national firefighter life safety initiatives, focusing on the need for cultural and behavioral changes throughout the emergency services profession. Emphasis is placed on occupational health and safety of firefighters as well as their personal and organizational accountability. Topics include safety, risk management, medical and fitness standards, industry standards relating to vehicle operation and road scene safety as well as firefighter fatality case studies and analysis. The course emphasizes best safety practices before, during, and after the emergency incident. This course meets the National Fire Academy, Fire and Emergency Services Higher Education (FESHE) curriculum model for Principles of Fire and Emergency Services Safety and Survival.
Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO #1: Define and describe the need for cultural and behavioral change within the emergency services relating to safety, incorporating leadership, supervision, accountability and personal responsibility.
- explain the need for enhancements of personal and organizational accountability for health and safety.
- define how the concepts of risk management affect strategic and tactical decision-making.
- SLO #2: Describe and evaluate circumstances that might constitute an unsafe act.
- explain the concept of empowering all emergency services personnel to stop unsafe acts.
- SLO #3: Validate the need for national training standards as they correlate to professional development inclusive of qualifications, certifications, and re-certifications.
- defend the need for annual medical evaluations and the establishment of physical fitness criteria for emergency services personnel throughout their careers.
- explain the vital role of local departments in national research and data collection systems.
- illustrate how technological advancements can produce higher levels of emergency services safety and survival.
- explain the importance of investigating all near-misses, injuries and fatalities.
- SLO #4: Discuss how incorporating the lessons learned from investigations can support cultural change throughout the emergency services.
- describe how obtaining grants can support safety and survival initiatives.
- formulate an awareness of how adopting standardized policies for responding to emergency scenes can minimize near-misses, injuries and deaths.
- SLO #5: Explain how the increase in violent incidents impacts safety for emergency services personnel when responding to emergency scenes.
- recognize the need for counseling and psychological support for emergency services personnel, their families, as well as, identify access to local resources and services.
- describe the importance of public education as a critical component of life safety programs.
- discuss the importance of fire sprinklers and code enforcement.
- explain the importance of safety in the design of apparatus and equipment.

FT 320 Hazardous Materials

This course provides a study of the fire fighting practices related to hazardous chemicals, including their physical properties, uses in industry, and characteristics when involved in spills, fires, and accidents. Basic information regarding health effects and treatment, and fire department protocols and responsibilities.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO 1: Analyze, appraise, and evaluate fire incidents and components of emergency management and fire fighter safety.
- evaluate the various Dept. of Transportation Hazard classes.
- evaluate the United Nations Placarding and Labeling System.
- examine the basic physical properties and burning characteristics of the various classes of hazardous materials.
- SLO 2: Comprehend laws, regulations, codes, standards, and the regulatory and advisory organizations that influence fire department operations.
compare the safety considerations encumbered by the fire department to ensure compliance with State and Federal guidelines.

describe the legislature and legal authority controlling the actions of all activities conducted on scene by all agencies involved.

SLO 3: Analyze and determine the causes of fire, extinguishing agents, stages of fire, fire development, and methods of heat transfer.

explain the need for scene isolation, scene stabilization, and incident control.

compare various acceptable methods of incident control measures depending upon the dangers of the chemicals.

describe the importance of evacuation, noncommitment by the fire department, and total withdrawal procedures.

analyze the effects of such modifying conditions as wind, temperature, and other weather and terrain-related factors in dealing with a hazardous material spill.

explain the health dangers of chemical classes, and describe their resultant symptoms during physical human contact.

SLO 4: Evaluate fire detection and fire suppression systems.

analyze hazardous materials emergency case studies and develop management procedures and plans.

FT 495 Independent Studies in Fire Technology

Units: 1 - 3
Hours: 54 - 162 hours LAB
Prerequisite: None.
Transferable: CSU
Catalog Date: June 1, 2020

An independent studies project involves an individual student or small group of students in study, research, or activities beyond the scope of regularly offered courses. See the current catalog section of “Special Studies” for full details of Independent Studies.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO #1: Actively engage in intellectual inquiry beyond that required in order to pass a course of study (College Wide Learning Outcome – Area 4).

- Discuss and outline a proposal of study (that can be accomplished within one semester term) with a supervising instructor qualified within the discipline.

- Design an independent study (to be completed individually or by collaboration of a small group) to foster special knowledge, skills, and experience that are not available in any one regularly scheduled course.

- Use information resources to gather discipline-specific information.

- SLO #2: Utilize modes of analysis and critical thinking to apply theoretical perspectives and/or concepts in the major discipline of study to significant problems and/or educational activities (College Wide Learning Outcome – Area 3).

- Analyze and apply the knowledge, skills and experience that are involved in the independent study to theoretical perspectives and/or concepts in the major discipline of study.

- Explain the importance of the major discipline of study in the broader picture of society.

- SLO #3: Communicate a complex understanding of content matter of the major discipline of study (College Wide Outcome – Area 3).

- Demonstrate competence in the skills essential to mastery of the major discipline of study that are necessary to accomplish the independent study.

- SLO #4: Identify personal goals and pursue these goals effectively (College Wide Outcome – Area 4).

- Utilize skills from the “academic tool kit” including time management, study skills, etc., to accomplish the independent study within one semester term.

FT 498 Work Experience in Fire Technology
This course provides students with opportunities to develop marketable skills in preparation for employment in their major field of study or advancement within their career. It is designed for students interested in work experience and/or internships in transfer level degree occupational programs. Course content includes understanding the application of education to the workforce; completion of required forms which document the student’s progress and hours spent at the work site; and developing workplace skills and competencies. Appropriate level learning objectives are established by the student and the employer. During the semester, the student is required to participate in a weekly orientation and 75 hours of related paid work experience, or 60 hours of unpaid work experience for one unit. An additional 75 or 60 hours of related work experience is required for each additional unit. Work Experience may be taken for a total of 16 units when there are new or expanded learning objectives. Only one Work Experience course may be taken per semester.

### Student Learning Outcomes

Upon completion of this course, the student will be able to:

- **DEMONSTRATE AN UNDERSTANDING AND APPLICATION OF PROFESSIONAL WORKPLACE BEHAVIOR IN A FIELD OF STUDY RELATED ONE’S CAREER. (SLO 1)**
  - Understand the effects time, stress, and organizational management have on performance.
  - Demonstrate an understanding of consistently practicing ethics and confidentiality in a workplace.
  - Examine the career/life planning process and relate its relevancy to the student.
  - Demonstrate an understanding of basic communication tools and their appropriate use.
  - Demonstrate an understanding of workplace etiquette.

- **DESCRIBE THE CAREER/LIFE PLANNING PROCESS AND RELATE ITS RELEVANCY TO ONE’S CAREER. (SLO 2)**
  - Link personal goals to long term achievement.
  - Display an understanding of creating a professional first impression.
  - Understand how networking is a powerful job search tool.
  - Understand necessary elements of a résumé.
  - Understand the importance of interview preparation.
  - Identify how continual learning increases career success.

- **DEMONSTRATE APPLICATION OF INDUSTRY KNOWLEDGE AND THEORETICAL CONCEPTS AS WRITTEN IN LEARNING OBJECTIVES IN PARTNERSHIP WITH THE EMPLOYER WORK SITE SUPERVISOR. (SLO 3)**

<table>
<thead>
<tr>
<th>Units:</th>
<th>1 - 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hours:</td>
<td>60 - 300 hours LAB</td>
</tr>
<tr>
<td>Prerequisite:</td>
<td>None.</td>
</tr>
<tr>
<td>Enrollment Limitation:</td>
<td>Students must be in a paid or unpaid internship, volunteer position or job related to career goals in Fire Technology.</td>
</tr>
<tr>
<td>Transferable:</td>
<td>CSU</td>
</tr>
<tr>
<td>General Education:</td>
<td>AA/AS Area III(b)</td>
</tr>
<tr>
<td>Catalog Date:</td>
<td>June 1, 2020</td>
</tr>
</tbody>
</table>
Geography | Cosumnes River College

Geography is the science of place and space. Geographers study the relationships among geographic places, natural systems, society, cultural activities, and the interdependence of all these over space.

Dean

(916) 691-7537
CoxR@crc.losrios.edu

Associate Degrees for Transfer

A.A.-T. in Geography

Geography is the science of place and space. Geographers study the relationships among geographic places, natural systems, society, cultural activities, and the interdependence of all these over space.

There are two main branches of geography: human geography and physical geography. Human geography is concerned with the spatial aspects of human existence – how people and their activities are distributed in space, how people use and perceive space, and how people create and sustain the places that make up Earth’s surface. Physical geographers study the physical elements and spatial processes that make up and shape the environment, including energy, air, water, weather, climate, landforms, soils, animals, plants, etc. Many human and physical geographers have skills in cartography and Geographic Information Systems (GIS).

Geographers also study the linkages between human activity and natural systems. Geographers were, in fact, among the first scientists to sound the alarm that human-induced changes to the environment were beginning to threaten the balance of life itself. Geographers today are active in the study of global warming, desertification, deforestation, loss of biodiversity, groundwater pollution, flooding, and more.

The Associate in Arts in Geography for Transfer Degree (AA-T) is designed to provide a seamless transfer pathway for students interested in pursuing a Geography degree in the California State University (CSU) system. The required and elective coursework surveys a broad spectrum of physical geography, human geography, geospatial technologies (e.g. GIS, the Global Positioning System, remote sensing), and related disciplines. The degree is comprised of lower division coursework typically required by CSU institutions. Students must complete a total of 60 transferable semester units with a minimum 2.0 GPA, to include either the California State University General Education Breadth pattern or the Intersegmental General Education Transfer Curriculum; students must also earn a grade of C or better in all the courses for the major as described in the Required Program. Upon successful completion of the degree requirements, students will be guaranteed admission to the CSU system with junior status and will not have to repeat lower division coursework. Students are encouraged to meet with a counselor to develop their educational plans as degree options and general education requirements vary for each university.

Catalog Date: June 1, 2020

Degree Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Core:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GEOG 300</td>
<td>Physical Geography: Exploring Earth's Environmental Systems</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 301</td>
<td>Physical Geography Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>GEOG 310</td>
<td>Human Geography: Exploring Earth's Cultural Landscapes</td>
<td>3</td>
</tr>
<tr>
<td>Elective List A:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A minimum of 6 units from the following:</td>
<td></td>
<td>6</td>
</tr>
<tr>
<td>GEOG 306</td>
<td>Weather and Climate (3)</td>
<td></td>
</tr>
<tr>
<td>COURSE CODE</td>
<td>COURSE TITLE</td>
<td>UNITS</td>
</tr>
<tr>
<td>-------------</td>
<td>------------------------------------------------------------</td>
<td>-------</td>
</tr>
<tr>
<td>GEOG 320</td>
<td>World Regional Geography (3)</td>
<td></td>
</tr>
<tr>
<td>GEOG 322</td>
<td>Geography of California (3)</td>
<td></td>
</tr>
<tr>
<td>GEOG 331</td>
<td>Exploring Maps and Geographic Technologies (3)</td>
<td></td>
</tr>
<tr>
<td>GEOG 335</td>
<td>Introduction to Geographic Information Systems Applications (3)</td>
<td></td>
</tr>
<tr>
<td>GEOG 391</td>
<td>Field Studies in Geography: Mountain Landscapes (1 - 4)</td>
<td></td>
</tr>
<tr>
<td>GEOG 392</td>
<td>Field Studies in Geography: Coastal Landscapes (1 - 4)</td>
<td></td>
</tr>
<tr>
<td>GEOG 393</td>
<td>Field Studies in Geography: Arid Landscapes (1 - 4)</td>
<td></td>
</tr>
<tr>
<td>GEOG 394</td>
<td>Field Studies in Geography: Volcanic Landscapes (1 - 4)</td>
<td></td>
</tr>
</tbody>
</table>

**Elective List B:**

A minimum of 6 units from the following:

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>GEOG 302</td>
<td>Environmental Studies &amp; Sustainability (3)</td>
<td>6</td>
</tr>
<tr>
<td>GEOG 305</td>
<td>Global Climate Change (3)</td>
<td></td>
</tr>
<tr>
<td>ANTH 310</td>
<td>Cultural Anthropology (3)</td>
<td></td>
</tr>
<tr>
<td>GEOL 300</td>
<td>Physical Geology (3)</td>
<td></td>
</tr>
<tr>
<td>POLS 310</td>
<td>Introduction to International Relations (3)</td>
<td></td>
</tr>
<tr>
<td>STAT 300</td>
<td>Introduction to Probability and Statistics (4)</td>
<td></td>
</tr>
<tr>
<td>or PSYC 330</td>
<td>Introductory Statistics for the Behavioral Sciences (3)</td>
<td></td>
</tr>
<tr>
<td>or ECON 310</td>
<td>Statistics for Business and Economics (3)</td>
<td></td>
</tr>
</tbody>
</table>

Total Units: 19

1Students may also substitute courses from Elective List A not already counted toward the degree.

The Associate in Arts in Geography for Transfer (AA-T) degree may be obtained by completion of 60 transferable, semester units with a minimum 2.0 GPA, including (a) the major or area of emphasis described in the Required Program, and (b) either the Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education-Breadth Requirements.

**Student Learning Outcomes**

Upon completion of this program, the student will be able to:

- **demonstrate understanding of the global natural and cultural environments and the geographic methods by which they are studied. (PSLO1)**
- **compare and contrast the general biophysical and socio-cultural differences and similarities among world regions that operate through time and over space. (PSLO2)**
- **evaluate and analyze critical geographic issues facing the world today. (PSLO3)**
- **recognize the diversity of peoples, places, and events globally as well as within specific geographic regions. (PSLO4)**
- **interpret maps and mapped data utilizing basic map elements, including scales, common coordinate systems, and map symbols. (PSLO5)**
- **use a computer effectively to research, map and analyze geographic information. (PSLO6)**
- **compare and contrast common geographic technologies such as geographic information systems (GIS) and the global positioning system (GPS). (PSLO7)**
- **communicate geographic information effectively in oral, written, and graphic form. (PSLO8)**

**Career Information**
The AA-T in Geography provides students with the foundational knowledge necessary for transfer to a 4-year Bachelor of Arts (BA) degree program. Career opportunities for geographers are as varied as the scope of geography itself. Geographers are found throughout the public and private sector, though rarely in positions with the title of “Geographer.” When combined with appropriate internships and/or other work experience, a baccalaureate degree in geography is excellent preparation for careers in Natural Resource Management; Environmental Conservation; International Development; Urban and Regional Planning; Education (K-12 through University); Tourism; International Business; Cartography; Climatology; Transportation Planning; Real Estate; International Business; Marketing; Land Surveying; Demography; and many other fields (please contact the program for additional information). Some careers may require additional training.

NOTE TO TRANSFER STUDENTS: The Associate Degree for Transfer program is designed for students who plan to transfer to a campus of the California State University (CSU). Other than the required core, the courses you choose to complete this degree will depend to some extent on the selected CSU for transfer. In addition, some CSU-GE Breadth or IGETC requirements can also be completed using courses required for this associate degree for transfer major (known as “double-counting”). Meeting with a counselor to determine the most appropriate course choices will facilitate efficient completion of your transfer requirements. For students wishing to transfer to other universities (UC System, private, or out-of-state), the Associate Degree for Transfer may not provide adequate preparation for upper-division transfer admissions; it is critical that you meet with a CRC counselor to select and plan the courses for the major, as programs vary widely in terms of the required preparation. Students planning to transfer to a CSU are strongly advised to take GEOG 331 (Exploring Maps and Geographic Technologies) because it is a required lower-division course at many campuses, including CSU Sacramento.

Associate Degrees

A.S. in Environmental Studies & Sustainability

The Environmental Studies & Sustainability Associate of Science degree is an interdisciplinary and multidisciplinary program of study that presents a broad overview of ecological issues from a variety of perspectives in the natural, physical, and social sciences. The coursework examines the interplay between natural and social systems, and the ideological foundations of humankind's attitudes and behaviors with respect to their ever-changing environment. This program is designed to prepare students to research, analyze, and propose solutions to the myriad environmental challenges facing the world today.

This degree is designed to correlate with the lower division courses required to transfer into an Environmental Studies program at many four-year institutions as well as provide broad-based environmental education for transfer in related disciplines.

The disciplines of environmental studies and geography are complementary fields, both focused on aspects of human-environment interaction. This complementarity is reflected in the many 4-year institutions that house combined Geography and Environmental Study programs. Students interested in double-majoring in these two closely-related disciplines, and/or simultaneously earning a Certificate in Geographic Information Systems, are encouraged to examine the required coursework and plan their program of study accordingly.

Students should use PROJECT ASSIST (http://www.assist.org) to research lower division major requirements at the transfer institution of their choice and should also work with the program adviser and a counselor to determine the appropriate transfer coursework.

Students interested in pursuing an Environmental Science major should consult with science faculty and counselors to tailor the specific coursework necessary to transfer to the 4-year institution of their choice.

Catalog Date: June 1, 2020

Degree Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Core Courses:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GEOG 302</td>
<td>Environmental Studies &amp; Sustainability</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 350</td>
<td>Environmental Biology (3)</td>
<td>3</td>
</tr>
<tr>
<td>or BIOL 352</td>
<td>Conservation Biology (3)</td>
<td></td>
</tr>
<tr>
<td>ECON 306</td>
<td>Environmental Economics</td>
<td>3</td>
</tr>
<tr>
<td><strong>Field/Applied Courses:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A minimum of 3 units from the following:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BIOL 390</td>
<td>Natural History Field Study (0.5 - 4)</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 391</td>
<td>Field Studies in Geography: Mountain Landscapes (1 - 4)</td>
<td></td>
</tr>
<tr>
<td>GEOG 392</td>
<td>Field Studies in Geography: Coastal Landscapes (1 - 4)</td>
<td></td>
</tr>
<tr>
<td>GEOG 393</td>
<td>Field Studies in Geography: Arid Landscapes (1 - 4)</td>
<td></td>
</tr>
<tr>
<td>GEOG 394</td>
<td>Field Studies in Geography: Volcanic Landscapes (1 - 4)</td>
<td></td>
</tr>
<tr>
<td>GEOL 390</td>
<td>Field Studies in Geology (1 - 4)</td>
<td></td>
</tr>
<tr>
<td>COURSE CODE</td>
<td>COURSE TITLE</td>
<td>UNITS</td>
</tr>
<tr>
<td>-------------</td>
<td>--------------</td>
<td>-------</td>
</tr>
<tr>
<td>GEOG 331</td>
<td>Exploring Maps and Geographic Technologies (3)</td>
<td></td>
</tr>
<tr>
<td>GEOG 335</td>
<td>Introduction to Geographic Information Systems Applications (3)</td>
<td></td>
</tr>
</tbody>
</table>

**Natural Science/Ecology Courses:**
- A minimum of 3 units from the following: 3
  - BIOL 300 The Foundations of Biology (3)
  - BIOL 307 Biology of Organisms (4)
  - BIOL 310 General Biology (4)
  - BIOL 400 Principles of Biology (5)

**Chemistry Courses:**
- A minimum of 4 units from the following: 4
  - CHEM 305 Introduction to Chemistry (5)
  - CHEM 321 Environmental Chemistry (3)
  - CHEM 322 Environmental Chemistry Laboratory (1)
  - CHEM 400 General Chemistry I (5)

**Earth Science Courses:**
- A minimum of 3 units from the following: 3
  - GEOG 300 Physical Geography: Exploring Earth's Environmental Systems (3)
  - GEOG 301 Physical Geography Laboratory (1)
  - GEOG 305 Global Climate Change (3)
  - GEOL 300 Physical Geology (3)
  - GEOL 301 Physical Geology Laboratory (1)

**Quantitative Courses:**
- A minimum of 3 units from the following: 3
  - ECON 310 Statistics for Business and Economics (3)
  - PSYC 330 Introductory Statistics for the Behavioral Sciences (3)
  - STAT 300 Introduction to Probability and Statistics (4)
  - MATH 350 Calculus for the Life and Social Sciences I (3)
  - MATH 400 Calculus I (5)

**Social Science Courses:**
- ECON 304 Principles of Microeconomics 3
- GEOG 310 Human Geography: Exploring Earth's Cultural Landscapes 3

**Total Units:** 31

The Environmental Studies & Sustainability Associate in Science (A.S.) degree may be obtained by completion of the required program, plus general education requirements, plus sufficient electives to meet a 60-unit total. See CRC graduation requirements.

**Student Learning Outcomes**

Upon completion of this program, the student will be able to:
PSLO-1: Articulate an understanding of the natural environment and human societies’ relationship to it. This includes the ability to:

1. Communicate effectively about environmental issues and sustainability, correctly utilizing vocabulary while indicating a complex understanding of disciplines in the program.
2. Articulate an awareness of the relevance of environmental studies to the student’s life and wider community at both local and global scales.
3. Recognize the importance of interdisciplinary and multidisciplinary approaches to solving environmental problems.

PSLO-2: Evaluate and analyze environmental processes and human impacts on the natural environment. This includes the ability to:

1. Use logical and quantitative reasoning to solve environmental problems.
2. Analyze critical environmental problems facing the world today.
3. Evaluate data and draw reasonable conclusions.
4. Utilize the scientific method.
5. Employ information-gathering tools to investigate environmental ideas.

PSLO-3: Recognize the ethical dimensions of decisions and actions and engage in the ethical reasoning necessary to be a responsible local and global citizen. This includes the ability to:

1. Recognize the ethical implications of research and the responsibility to use knowledge wisely.
2. Articulate the value of understanding environmental systems.

PSLO-4: Transfer to a 4-year program and further prepare for employment in an environmental career.

Career Information

Natural Resource Management; Forestry; Range Management; Park Ranger; Wildlife Biology; Agriculture; Soil and Water Conservation; Land Use Planning; Waste Management; Environmental Education; Environmental Policy And Planning; Environmental Law; Environmental Consulting; Environmental Lobbying; Environmental Planning; Environmental Protection; Environmental Compliance; Environmental Engineering; Air Quality Control; Landscape Architecture; Urban and Regional Planning; Alternative Energy Development; Risk Analysis; Contaminated Lands Reclamation; Research; Consulting

A.S. in General Science

Areas of Study include:
• Physical Anthropology
• Astronomy
• Biology
• Chemistry
• Engineering
• Physical Geography
• Geology
• Physics

Eighteen (18) units of transfer level course work in science is required. Two laboratory courses must be included: one in the physical sciences and one in the biological sciences. Courses may be selected from astronomy, biology, chemistry, geology, physical geography, physical anthropology, and physics. The student, in consultation with a counselor, should choose science courses to meet his or her program, transfer, or general education requirements.

Students interested in transferring to a four-year university with a science major are encouraged to complete a science AS or AS-T degree such as Anthropology, Biology, Chemistry, Engineering, Geography, Geology, or Physics. This General Science degree may not include the majors-level transfer courses needed for many science majors. Students are strongly recommended to see a counselor for guidance.

Catalog Data: June 1, 2020

Degree Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Life Science with Lab:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>COURSE CODE</td>
<td>COURSE TITLE</td>
<td>UNITS</td>
</tr>
<tr>
<td>-------------</td>
<td>--------------</td>
<td>-------</td>
</tr>
<tr>
<td>ANTH 300</td>
<td>Biological Anthropology (3)</td>
<td></td>
</tr>
<tr>
<td>and ANTH 301</td>
<td>Biological Anthropology Laboratory (1)</td>
<td></td>
</tr>
<tr>
<td>BIOL 307</td>
<td>Biology of Organisms (4)</td>
<td></td>
</tr>
<tr>
<td>BIOL 310</td>
<td>General Biology (4)</td>
<td></td>
</tr>
<tr>
<td>BIOL 400</td>
<td>Principles of Biology (5)</td>
<td></td>
</tr>
<tr>
<td>BIOL 410</td>
<td>Principles of Botany (5)</td>
<td></td>
</tr>
<tr>
<td>BIOL 420</td>
<td>Principles of Zoology (5)</td>
<td></td>
</tr>
<tr>
<td>BIOL 430</td>
<td>Anatomy and Physiology (5)</td>
<td></td>
</tr>
<tr>
<td>BIOL 431</td>
<td>Anatomy and Physiology (5)</td>
<td></td>
</tr>
<tr>
<td>BIOL 440</td>
<td>General Microbiology (4)</td>
<td></td>
</tr>
</tbody>
</table>

**B. Physical Science with Lab:**

A minimum of 3 units from the following:

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASTR 400</td>
<td>Astronomy Laboratory (1)</td>
<td></td>
</tr>
<tr>
<td>and ASTR 300</td>
<td>Introduction to Astronomy (3)</td>
<td></td>
</tr>
<tr>
<td>CHEM 300</td>
<td>Beginning Chemistry (4)</td>
<td></td>
</tr>
<tr>
<td>CHEM 305</td>
<td>Introduction to Chemistry (5)</td>
<td></td>
</tr>
<tr>
<td>CHEM 306</td>
<td>Introduction to Organic and Biological Chemistry (5)</td>
<td></td>
</tr>
<tr>
<td>CHEM 309</td>
<td>Integrated General, Organic, and Biological Chemistry (5)</td>
<td></td>
</tr>
<tr>
<td>CHEM 322</td>
<td>Environmental Chemistry Laboratory (1)</td>
<td></td>
</tr>
<tr>
<td>and CHEM 321</td>
<td>Environmental Chemistry (3)</td>
<td></td>
</tr>
<tr>
<td>CHEM 400</td>
<td>General Chemistry I (5)</td>
<td></td>
</tr>
<tr>
<td>CHEM 401</td>
<td>General Chemistry II (5)</td>
<td></td>
</tr>
<tr>
<td>CHEM 420</td>
<td>Organic Chemistry I (5)</td>
<td></td>
</tr>
<tr>
<td>CHEM 421</td>
<td>Organic Chemistry II (5)</td>
<td></td>
</tr>
<tr>
<td>GEOG 301</td>
<td>Physical Geography Laboratory (1)</td>
<td></td>
</tr>
<tr>
<td>and GEOG 300</td>
<td>Physical Geography: Exploring Earth's Environmental Systems (3)</td>
<td></td>
</tr>
<tr>
<td>GEOL 301</td>
<td>Physical Geology Laboratory (1)</td>
<td></td>
</tr>
<tr>
<td>and GEOL 300</td>
<td>Physical Geology (3)</td>
<td></td>
</tr>
<tr>
<td>GEOL 306</td>
<td>Earth Science Laboratory (1)</td>
<td></td>
</tr>
<tr>
<td>and GEOL 305</td>
<td>Earth Science (3)</td>
<td></td>
</tr>
<tr>
<td>GEOL 311</td>
<td>Historical Geology Laboratory (1)</td>
<td></td>
</tr>
<tr>
<td>and GEOL 310</td>
<td>Historical Geology (3)</td>
<td></td>
</tr>
<tr>
<td>ENGR 304</td>
<td>How Things Work (3)</td>
<td></td>
</tr>
<tr>
<td>PHYS 350</td>
<td>General Physics (4)</td>
<td></td>
</tr>
<tr>
<td>PHYS 360</td>
<td>General Physics (4)</td>
<td></td>
</tr>
<tr>
<td>PHYS 370</td>
<td>Introductory Physics - Mechanics and Thermodynamics (5)</td>
<td></td>
</tr>
<tr>
<td>COURSE CODE</td>
<td>COURSE TITLE</td>
<td></td>
</tr>
<tr>
<td>-------------</td>
<td>--------------</td>
<td></td>
</tr>
<tr>
<td>PHYS 380</td>
<td>Introductory Physics - Electricity and Magnetism, Light and Modern Physics (5)</td>
<td></td>
</tr>
<tr>
<td>PHYS 411</td>
<td>Mechanics of Solids and Fluids (4)</td>
<td></td>
</tr>
<tr>
<td>PHYS 421</td>
<td>Electricity and Magnetism (4)</td>
<td></td>
</tr>
<tr>
<td>PHYS 431</td>
<td>Heat, Waves, Light and Modern Physics (4)</td>
<td></td>
</tr>
</tbody>
</table>

**C. Additional Science Courses:**

A minimum of 11 units from the following:

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANTH 300</td>
<td>Biological Anthropology (3)</td>
</tr>
<tr>
<td>ANTH 301</td>
<td>Biological Anthropology Laboratory (1)</td>
</tr>
<tr>
<td>ASTR 300</td>
<td>Introduction to Astronomy (3)</td>
</tr>
<tr>
<td>ASTR 400</td>
<td>Astronomy Laboratory (1)</td>
</tr>
<tr>
<td>BIOL 300</td>
<td>The Foundations of Biology (3)</td>
</tr>
<tr>
<td>BIOL 307</td>
<td>Biology of Organisms (4)</td>
</tr>
<tr>
<td>BIOL 310</td>
<td>General Biology (4)</td>
</tr>
<tr>
<td>BIOL 342</td>
<td>The New Plagues: New and Ancient Infectious Diseases Threatening World Health (3)</td>
</tr>
<tr>
<td>BIOL 350</td>
<td>Environmental Biology (3)</td>
</tr>
<tr>
<td>BIOL 352</td>
<td>Conservation Biology (3)</td>
</tr>
<tr>
<td>BIOL 390</td>
<td>Natural History Field Study (0.5 - 4)</td>
</tr>
<tr>
<td>BIOL 400</td>
<td>Principles of Biology (5)</td>
</tr>
<tr>
<td>BIOL 410</td>
<td>Principles of Botany (5)</td>
</tr>
<tr>
<td>BIOL 420</td>
<td>Principles of Zoology (5)</td>
</tr>
<tr>
<td>BIOL 430</td>
<td>Anatomy and Physiology (5)</td>
</tr>
<tr>
<td>BIOL 431</td>
<td>Anatomy and Physiology (5)</td>
</tr>
<tr>
<td>BIOL 440</td>
<td>General Microbiology (4)</td>
</tr>
<tr>
<td>BIOL 462</td>
<td>Genetics in Contemporary Human Society (3)</td>
</tr>
<tr>
<td>CHEM 300</td>
<td>Beginning Chemistry (4)</td>
</tr>
<tr>
<td>CHEM 305</td>
<td>Introduction to Chemistry (5)</td>
</tr>
<tr>
<td>CHEM 306</td>
<td>Introduction to Organic and Biological Chemistry (5)</td>
</tr>
<tr>
<td>CHEM 309</td>
<td>Integrated General, Organic, and Biological Chemistry (5)</td>
</tr>
<tr>
<td>CHEM 321</td>
<td>Environmental Chemistry (3)</td>
</tr>
<tr>
<td>CHEM 322</td>
<td>Environmental Chemistry Laboratory (1)</td>
</tr>
<tr>
<td>CHEM 400</td>
<td>General Chemistry I (5)</td>
</tr>
<tr>
<td>CHEM 401</td>
<td>General Chemistry II (5)</td>
</tr>
<tr>
<td>CHEM 420</td>
<td>Organic Chemistry I (5)</td>
</tr>
<tr>
<td>CHEM 421</td>
<td>Organic Chemistry II (5)</td>
</tr>
<tr>
<td>ENGR 304</td>
<td>How Things Work (3)</td>
</tr>
<tr>
<td>GEOG 300</td>
<td>Physical Geography: Exploring Earth's Environmental Systems (3)</td>
</tr>
<tr>
<td>COURSE CODE</td>
<td>COURSE TITLE</td>
</tr>
<tr>
<td>-------------</td>
<td>-----------------------------------------------------</td>
</tr>
<tr>
<td>GEOG 301</td>
<td>Physical Geography Laboratory (1)</td>
</tr>
<tr>
<td>GEOG 305</td>
<td>Global Climate Change (3)</td>
</tr>
<tr>
<td>GEOG 306</td>
<td>Weather and Climate (3)</td>
</tr>
<tr>
<td>GEOL 300</td>
<td>Physical Geology (3)</td>
</tr>
<tr>
<td>GEOL 301</td>
<td>Physical Geology Laboratory (1)</td>
</tr>
<tr>
<td>GEOL 305</td>
<td>Earth Science (3)</td>
</tr>
<tr>
<td>GEOL 306</td>
<td>Earth Science Laboratory (1)</td>
</tr>
<tr>
<td>GEOL 310</td>
<td>Historical Geology (3)</td>
</tr>
<tr>
<td>GEOL 311</td>
<td>Historical Geology Laboratory (1)</td>
</tr>
<tr>
<td>GEOL 330</td>
<td>Introduction to Oceanography (3)</td>
</tr>
<tr>
<td>GEOL 390</td>
<td>Field Studies in Geology (1 - 4)</td>
</tr>
<tr>
<td>PHYS 310</td>
<td>Conceptual Physics (3)</td>
</tr>
<tr>
<td>PHYS 350</td>
<td>General Physics (4)</td>
</tr>
<tr>
<td>PHYS 360</td>
<td>General Physics (4)</td>
</tr>
<tr>
<td>PHYS 370</td>
<td>Introductory Physics - Mechanics and Thermodynamics (5)</td>
</tr>
<tr>
<td>PHYS 380</td>
<td>Introductory Physics - Electricity and Magnetism, Light and Modern Physics (5)</td>
</tr>
<tr>
<td>PHYS 411</td>
<td>Mechanics of Solids and Fluids (4)</td>
</tr>
<tr>
<td>PHYS 421</td>
<td>Electricity and Magnetism (4)</td>
</tr>
<tr>
<td>PHYS 431</td>
<td>Heat, Waves, Light and Modern Physics (4)</td>
</tr>
<tr>
<td><strong>Total Units:</strong></td>
<td></td>
</tr>
</tbody>
</table>

¹Courses used in A or B above will not count towards C, except units exceeding the 4 or 3 unit minimum in A and B. For example, a student completing the 5 unit CHEM 309 under B could apply 2 of those units towards C. A total of 18 science units is required.

The General Science Associate in Science (A.S.) degree may be obtained by completion of the required program, plus general education requirements, plus sufficient electives to meet a 60-unit total. See CRC graduation requirements.

**Student Learning Outcomes**

Upon completion of this program, the student will be able to:

- explain the core perspectives of the scientific method and apply it to at least one scientific discipline. (SLO 1)
- solve introductory problems of a conceptual and/or numerical nature of at least one scientific discipline. (SLO 2)
- accurately apply the basic vocabulary and concepts of at least one scientific discipline verbally and in writing. (SLO 3)
- recognize the use and misuse of scientific concepts in society including politics and the media. (SLO 4)

**A.S. in Geography**

Geography is the science of place and space. Geographers study the relationships among geographic places, natural systems, society, cultural activities, and the interdependence of all these over space.

There are two main branches of geography: human geography and physical geography. Human geography is concerned with the spatial aspects of human existence—how people and their activities are distributed in space, how people use and perceive space, and how people create and sustain the places that make up Earth's surface. Physical geographers study the physical elements and spatial processes that make up and shape the environment, including energy, air, water, weather, climate, landforms, soils, animals, plants, etc. Many human and physical geographers have skills in cartography and Geographic Information Systems (GIS).
Geographers also study the linkages between human activity and natural systems. Geographers were, in fact, among the first scientists to sound the alarm that human-induced changes to the environment were beginning to threaten the balance of life itself. Geographers today are active in the study of global warming, desertification, deforestation, loss of biodiversity, groundwater pollution, flooding, and more.

The CRC Geography program offers courses that satisfy lower division General Education requirements in both the physical and social sciences. In addition, the program offers an Associate Degree in Geography that provides students with a solid foundation in geography as well as the standard prerequisites for upper-division coursework leading to the baccalaureate degree. Students may also earn a certificate in Geographic Information Systems (GIS). Students planning to transfer to a four-year school with a major in Geography should consult the lower division requirements at the university they plan to attend.

Note to Transfer Students:
If you are interested in transferring to a four-year college or university to pursue a bachelor's degree in this major, it is critical that you meet with a CRC counselor to select and plan the courses for your major. Schools vary widely in terms of the required preparation. The courses that CRC requires for an Associate's degree in this major may be different from the requirements needed for the Bachelor's degree.

Highlights include:
* Comprehensive course offerings including a Physical Laboratory as well as specialized training in Geographic Information Systems (GIS)
* Program's students have won top awards at state-level competitions annually since 1999
* Field study courses to Yosemite, Pt. Reyes, Monterey/Big Sur, Tahoe, and the Eastern Sierra
* Internships available with State of California, County of Sacramento, and Federal Land Management Agencies
* Three courses fulfill the CRC and CSU multicultural requirement
* Day, evening, and online sections

Catalog Date: June 1, 2020

## Degree Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>GEOG 300</td>
<td>Physical Geography: Exploring Earth's Environmental Systems</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 301</td>
<td>Physical Geography Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>GEOG 310</td>
<td>Human Geography: Exploring Earth's Cultural Landscapes</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 331</td>
<td>Exploring Maps and Geographic Technologies (3)</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 330</td>
<td>Introductory Statistics for the Behavioral Sciences (3)</td>
<td>3 - 4</td>
</tr>
<tr>
<td>or STAT 300</td>
<td>Introduction to Probability and Statistics (4)</td>
<td></td>
</tr>
<tr>
<td>or ECON 310</td>
<td>Statistics for Business and Economics (3)</td>
<td></td>
</tr>
</tbody>
</table>

A minimum of 6 units from the following:

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>ANTH 310</td>
<td>Cultural Anthropology (3)</td>
<td></td>
</tr>
<tr>
<td>BIOL 350</td>
<td>Environmental Biology (3)</td>
<td></td>
</tr>
<tr>
<td>or BIOL 310</td>
<td>General Biology (4)</td>
<td></td>
</tr>
<tr>
<td>or BIOL 307</td>
<td>Biology of Organisms (4)</td>
<td></td>
</tr>
<tr>
<td>ECON 304</td>
<td>Principles of Microeconomics (3)</td>
<td></td>
</tr>
<tr>
<td>or ECON 302</td>
<td>Principles of Macroeconomics (3)</td>
<td></td>
</tr>
<tr>
<td>GEOG 302</td>
<td>Environmental Studies &amp; Sustainability (3)</td>
<td></td>
</tr>
<tr>
<td>GEOG 305</td>
<td>Global Climate Change (3)</td>
<td></td>
</tr>
<tr>
<td>COURSE CODE</td>
<td>COURSE TITLE</td>
<td>UNITS</td>
</tr>
<tr>
<td>-------------</td>
<td>--------------</td>
<td>-------</td>
</tr>
<tr>
<td>GEOG 306</td>
<td>Weather and Climate (3)</td>
<td></td>
</tr>
<tr>
<td>GEOG 320</td>
<td>World Regional Geography (3)</td>
<td></td>
</tr>
<tr>
<td>GEOG 322</td>
<td>Geography of California (3)</td>
<td></td>
</tr>
<tr>
<td>GEOG 335</td>
<td>Introduction to Geographic Information Systems Applications (3)</td>
<td></td>
</tr>
<tr>
<td>GEOG 391</td>
<td>Field Studies in Geography: Mountain Landscapes (1 - 4)</td>
<td></td>
</tr>
<tr>
<td>GEOG 392</td>
<td>Field Studies in Geography: Coastal Landscapes (1 - 4)</td>
<td></td>
</tr>
<tr>
<td>GEOG 393</td>
<td>Field Studies in Geography: Arid Landscapes (1 - 4)</td>
<td></td>
</tr>
<tr>
<td>GEOG 394</td>
<td>Field Studies in Geography: Volcanic Landscapes (1 - 4)</td>
<td></td>
</tr>
<tr>
<td>GEOL 300</td>
<td>Physical Geology (3)</td>
<td></td>
</tr>
<tr>
<td>GEOL 301</td>
<td>Physical Geology Laboratory (1)</td>
<td></td>
</tr>
<tr>
<td>GEOL 330</td>
<td>Introduction to Oceanography (3)</td>
<td></td>
</tr>
<tr>
<td>HIST 371</td>
<td>History of the Americas from the 19th Century Wars of Independence to the Present (3)</td>
<td></td>
</tr>
<tr>
<td>or HIST 370</td>
<td>History of the Americas through the 19th Century Wars of Independence (3)</td>
<td></td>
</tr>
<tr>
<td>or HIST 360</td>
<td>History of African Civilizations (3)</td>
<td></td>
</tr>
<tr>
<td>or HIST 308</td>
<td>History of World Civilizations, 1500 to Present (3)</td>
<td></td>
</tr>
<tr>
<td>or HIST 307</td>
<td>History of World Civilizations to 1500 (3)</td>
<td></td>
</tr>
<tr>
<td>HUM 332</td>
<td>American Humanities (3)</td>
<td></td>
</tr>
<tr>
<td>or HUM 324</td>
<td>Global Islam: Culture and Civilization (3)</td>
<td></td>
</tr>
<tr>
<td>or HUM 320</td>
<td>Asian Humanities (3)</td>
<td></td>
</tr>
<tr>
<td>PHIL 352</td>
<td>Introduction to World Religions (3)</td>
<td></td>
</tr>
<tr>
<td>POLS 310</td>
<td>Introduction to International Relations (3)</td>
<td></td>
</tr>
<tr>
<td>SOC 300</td>
<td>Introductory Sociology (3)</td>
<td></td>
</tr>
<tr>
<td>Total Units:</td>
<td>19 - 20</td>
<td></td>
</tr>
</tbody>
</table>

1A minimum of 60 units is required for the A.S. degree which includes core courses, electives, and general education (GE) graduation requirements. Geography majors are encouraged to complete additional GE requirements from a list of suggested courses on file in the Geography Department and at the Counseling Center. Students should use PROJECT ASSIST (http://www.assist.org) to research lower division major requirements at the transfer institution of their choice and also work with a counselor to determine the most appropriate transfer coursework.

The Geography Associate in Science (A.S.) degree may be obtained by completion of the required program, plus general education requirements, plus sufficient electives to meet a 60-unit total. See CRC graduation requirements.

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- **SLO#1:** demonstrate understanding of the global natural and cultural environments and the geographic methods by which they are studied.
- **SLO#2:** compare and contrast the general biophysical and socio-cultural differences and similarities among world regions that operate through time and over space.
- **SLO#3:** evaluate and analyze critical geographic issues facing the world today.
- **SLO#4:** recognize the diversity of peoples, places, and events globally as well as within specific geographic regions.
Career Information
Natural Resource Management; Environmental Conservation; International Development; Urban and Regional Planning; Education (K-12 through University); Tourism; Cartographer; Climatologist; Park Ranger; Transportation Specialist; Real Estate Analyst; International Business; Marketing Analyst; Land Surveyor; Research Scientist; Remote Sensing Specialist; Demographer; GIS Analyst; and many more (please contact the program for additional information). Some career options may require more than two years of college study.

Certificates of Achievement

Field Data Mapping and Geographic Information Systems (GIS) Certificate

Students interested in research related to field data collection and analysis will need certain skills to correctly find locations in the field, identify locations, map sites, and integrate collected data into a Geographic Information System (GIS) for display and analysis. This interdisciplinary certificate program provides students with the tools needed to collect, map, display, and analyze data collected in a field-based setting and coordinate this with other mapping data and sources.

Catalog Date: June 1, 2020

Certificate Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>GEOG 335</td>
<td>Introduction to Geographic Information Systems Applications</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 331</td>
<td>Exploring Maps and Geographic Technologies</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>A minimum of 6 units from the following:</td>
<td>6</td>
</tr>
<tr>
<td>GEOG 300</td>
<td>Physical Geography: Exploring Earth's Environmental Systems (3)</td>
<td></td>
</tr>
<tr>
<td>GEOG 302</td>
<td>Environmental Studies &amp; Sustainability (3)</td>
<td></td>
</tr>
<tr>
<td>GEOG 310</td>
<td>Human Geography: Exploring Earth's Cultural Landscapes (3)</td>
<td></td>
</tr>
<tr>
<td>ANTH 300</td>
<td>Biological Anthropology (3)</td>
<td></td>
</tr>
<tr>
<td>ANTH 310</td>
<td>Cultural Anthropology (3)</td>
<td></td>
</tr>
<tr>
<td>ANTH 323</td>
<td>Introduction to Archaeology (3)</td>
<td></td>
</tr>
<tr>
<td>BIOL 350</td>
<td>Environmental Biology (3)</td>
<td></td>
</tr>
<tr>
<td>BIOL 352</td>
<td>Conservation Biology (3)</td>
<td></td>
</tr>
<tr>
<td>GEOL 300</td>
<td>Physical Geology (3)</td>
<td></td>
</tr>
<tr>
<td>Total Units:</td>
<td></td>
<td>12</td>
</tr>
</tbody>
</table>

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- SLO #1: DEMONSTRATE AN UNDERSTANDING OF THE MAJOR MODES OF GEOGRAPHIC INQUIRY.
- SLO #2: DEMONSTRATE AN UNDERSTANDING OF MAPPING CONCEPTS, GIS, AND THE ABILITY TO INTERPRET MAPS AND MAPPED DATA.
SLO #3: DEMONSTRATE AN UNDERSTANDING OF COMMON GEOGRAPHIC TECHNOLOGIES AND THE ABILITY TO USE THEM TO COLLECT, ANALYZE, AND DISPLAY GEOSPATIAL DATA.

SLO #4: ORGANIZE, MANIPULATE, ANALYZE AND DISPLAY TABULAR DATA INTO SPATIAL VISUALIZATIONS.

SLO #5: EXHIBIT SKILLS LEARNED THROUGH MAPPING AND GIS PROJECT DEVELOPMENT.

Sustainability Certificate

This certificate advances student's understanding of the principles of sustainability and sustainable practices with respect to ecosystems, green buildings, business, agriculture, nutrition, natural resource management and conservation, waste management, energy, transportation systems, urban planning and design, and more. Theoretical and practical aspects of sustainability are explored including social, economic, and environmental dimensions.

Catalog Date: June 1, 2020

Certificate Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>GEOG 302</td>
<td>Environmental Studies &amp; Sustainability</td>
<td>3</td>
</tr>
<tr>
<td>ARCH 342</td>
<td>Introduction to Green Buildings (3)</td>
<td></td>
</tr>
<tr>
<td>BIOL 350</td>
<td>Environmental Biology (3)</td>
<td></td>
</tr>
<tr>
<td>BIOL 352</td>
<td>Conservation Biology (3)</td>
<td></td>
</tr>
<tr>
<td>ECON 306</td>
<td>Environmental Economics (3)</td>
<td></td>
</tr>
<tr>
<td>GEOG 300</td>
<td>Physical Geography: Exploring Earth's Environmental Systems (3)</td>
<td></td>
</tr>
<tr>
<td>GEOG 305</td>
<td>Global Climate Change (3)</td>
<td></td>
</tr>
<tr>
<td>HORT 300</td>
<td>Introduction to Horticulture (3)</td>
<td></td>
</tr>
<tr>
<td>PLTS 310</td>
<td>Soils, Soil Management, and Plant Nutrition (3)</td>
<td></td>
</tr>
<tr>
<td>or HORT 302</td>
<td>Soils, Soil Management, and Plant Nutrition (3)</td>
<td></td>
</tr>
<tr>
<td>HORT 313</td>
<td>Sustainable Agriculture (3)</td>
<td></td>
</tr>
<tr>
<td>NUTRI 303</td>
<td>Plant-Based Nutrition (3)</td>
<td></td>
</tr>
<tr>
<td>NUTRI 331</td>
<td>Plant-Based Food Principles and Preparation (3)</td>
<td></td>
</tr>
</tbody>
</table>

Total Units: 12

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- PSLO#1: Communicate effectively about environmental issues and sustainability, utilizing correct vocabulary.
- PSLO#2: Articulate an awareness of the relevance of sustainability to the student's life and wider community at both local and global scales.
- PSLO#3: Evaluate and analyze environmental problems facing the world today and propose sustainable solutions.
- PSLO#4: Employ information-gathering tools to investigate theoretical and practical aspects of sustainability in the context of energy consumption, transportation systems, food production, water resources, industry, the built environment, and socio-cultural institutions and practices.

Career Information
This course investigates the interrelationships between Earth and humans, with an emphasis on natural systems (solar energy balance, weather and climate, water resources, landforms, natural hazards, vegetation, and soil). Relevant application of these elements to today's world is stressed to help students better understand Earth's physical environment as well as human-environment interaction. A field trip may be required to relate class discussions to the real world.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- **SLO 1: DEMONSTRATE AN UNDERSTANDING OF THE MAJOR MODES OF GEOGRAPHIC INQUIRY AND TOOLS USED FOR GEOGRAPHIC ANALYSIS.**
  - Describe how the scientific method and spatial analysis are used to research topics in physical geography.
  - Demonstrate how to locate places on Earth using the geographic grid (latitude and longitude).
  - Discuss several methods used to collect geographic data as well as several tools used to visualize and analyze this data.
  - Demonstrate the ability to interpret maps and mapped data.

- **SLO 2: DEMONSTRATE AN UNDERSTANDING OF HOW EARTH'S FOUR MAJOR OPEN SYSTEMS WORK AND INTERACT WITH ONE ANOTHER.**
  - Explain latitudinal variation in energy receipt and how this relates to global patterns of temperature, precipitation, weather & climate, vegetation, wildlife habitat, etc.
  - Diagram important physical processes (e.g., anticyclonic and cyclonic circulation, the global atmospheric circulation model, local & regional winds, the hydrologic cycle, the rock cycle, types of plate boundaries, etc.).
  - Outline how processes in the atmosphere, hydrosphere, and lithosphere interact to create Earth's biosphere.

- **SLO 3: RECOGNIZE AND EXPLAIN THE LOCATION OF MAJOR PHYSICAL FEATURES ON EARTH.**
  - Locate and identify the major significant physical features in California and elsewhere in the world.
  - Apply knowledge of the hydrologic cycle, the rock cycle, Plate Tectonics, and other geomorphic processes to explain the location and formation of Earth's major landforms and natural hazards.

- **SLO 4: PRODUCE A RESEARCH PROJECT (E.G., ACADEMIC POSTER, TERM PAPER, OR SIMILAR PRODUCT) ON A COURSE-RELATED THEME.**
  - Research information from multiple sources (maps, books, periodicals, Internet, interviews, etc.).
  - Synthesize findings in written format and document sources using an approved in-text citation method with references listed in standard bibliographic format.

- **SLO 5: RECOGNIZE THE IMPORTANCE OF, AND THINK CRITICALLY ABOUT, GEOGRAPHIC INFORMATION RELEVANT TO LIFE ON EARTH.**
  - Analyze the role of humans in modifying Earth's physical environment as well as the environment's role in shaping human activities.
  - Evaluate the personal and societal implications of current geographic issues (e.g. climate change, ozone depletion, sea-level rise, pollution, natural hazards, etc.).
This course provides "hands-on" study of the basic principles and concepts involved in understanding Earth's environment systems. Labs feature observation, collection, analysis and display of data related to the study of Earth's energy balance, weather and climate, vegetation, tectonic processes, landforms, and natural hazards. Additionally, labs involve geographic methods and technology, including interpretation of maps and other geographic imagery, weather instrumentation, navigation equipment such as a compass and the Global Positioning System (GPS), and other relevant computer and Internet applications. A field trip may be required.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- **SLO#1:** Collect, measure, and/or analyze geographic data using common instruments.
  - Measure angular distance north/south of the Equator and east/west of the Prime Meridian in order to specify precise geographic coordinates on a map and/or globe.
  - Collect and analyze data using common meteorological instruments (e.g. thermometer, anemometer, barometer, sling psychrometer, etc.), geomorphic instruments (e.g. stereoscopic imagery), and navigational instruments (e.g. compass, Global Positioning System (GPS) unit).
  - Calculate unit conversions for various types of data (e.g. angular and linear distance, temperature, air pressure, etc.).

- **SLO #2:** Interpret and analyze geographic information using maps (thematic, regional, and topographic).
  - Define the concepts of map scale and projection and explain how these concepts affect the way that geographic information is represented on maps and/or globes.
  - Analyze global, regional, and/or local temperature, atmospheric pressure maps, and synoptic-scale weather maps and explain reasons for observed patterns.
  - Interpret elevation data shown on a topographic map and use this information to construct a topographic profile for an area.

- **SLO#3:** Analyze and describe geomorphic processes and landforms using topographic maps.
  - Explain geographic processes which act upon and shape Earth's physical environment.
  - Explain how and why the amount of solar insolation received on Earth varies by latitude and relate how this affects life processes.
  - Apply concepts related to atmospheric and geomorphic processes to predict impacts on Earth's physical and human environments.
  - Identify types of landforms created by endogenic processes (e.g. volcanic and tectonic activity) and exogenic processes (e.g. weathering, erosion, and deposition).

- **SLO#4:** Compare and contrast local geographic data with other locations at regional, national and global scales.
  - Construct climographs for Sacramento, various other locations in CA, the U.S. and the world and identify factors responsible for observed climatic differences.
  - Analyze meteorologic and geomorphic patterns in Sacramento, CA, the U.S., and the world and explain why these phenomena are observed where they are found.

**GEOG 302 Environmental Studies & Sustainability**

- **Units:** 3
- **Hours:** 54 hours LEC
- **Prerequisite:** None.
- **Transferable:** CSU; UC
- **General Education:** AA/AS Area V(b); CSU Area D5; CSU Area D7; IGETC Area 4E; IGETC Area 4G
- **Catalog Date:** June 1, 2020

This introductory course offers an interdisciplinary perspective on the major environmental problems confronting society and explores solutions directed toward producing a more sustainable future. Course topics include an introduction to environmental issues, and related values, ethics and politics; a primer on Earth system science — the interconnected nature of the atmosphere, hydrosphere, lithosphere, and biosphere; a global survey of natural resources and exploitation; changing global climates; the world water crisis; the demography of human population, and contrasts between less- and more-developed countries; agricultural and food supply challenges; renewable and nonrenewable energy resources; and land use patterns and related issues. Throughout the course, human impacts on the environment, environmental impacts on human societies, and the sustainability of economies and practices at local, regional, and global scales are investigated. A field trip may be required to relate class discussions to the real world.

Student Learning Outcomes

Upon completion of this course, the student will be able to:
GEOG 305 Global Climate Change

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Transferable: CSU; UC
General Education: AA/AS Area IV; CSU Area B1; IGETC Area 5A
Catalog Date: June 1, 2020

This interdisciplinary course explores the natural and human factors causing the Earth’s climate to change. Students will be provided with the scientific tools to analyze evidence that climate change is a looming threat. Through lectures, readings, discussions and projects, students will examine the Earth’s present and past climates as well as the influence of climate on the geographical distribution of plants, animals and human societies.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- **SLO 1: DEMONSTRATE AN UNDERSTANDING OF THE PHYSICAL FACTORS AFFECTING CLIMATE AND THE RESULTING GEOGRAPHIC VARIATION OF ENERGY RECEIPT, TEMPERATURE, PRECIPITATION, AND BIOMES.**
  - Explain the factors responsible for the latitudinal variation in energy receipt and its effects on global temperature and precipitation patterns.
  - Diagram the global energy balance, accounting for major sources of input and outputs, heat exchange and absorption.
  - Describe the various layers of the atmosphere and explain their role in producing the Greenhouse Effect and anthropogenic global warming.
  - Apply knowledge of meteorology as well as global oceanic circulation to hypothesize how terrestrial and marine biotic communities may be impacted by climate change.

- **SLO 2: DEMONSTRATE AN UNDERSTANDING OF HOW CLIMATE INFLUENCES THE DISTRIBUTION OF LIVING ORGANISMS.**
  - Explain the factors that determine the geographic distribution of the principal biomes.
  - Discuss the importance of physiological tolerance and species interactions in the structure, diversity, and stability of communities.
  - Use data from paleoclimatology to demonstrate how the geographic ranges of organisms may be affected by climate shifts.
  - Apply knowledge of the carbon cycle to explain the physical and biology factors that influence carbon dioxide levels in the atmosphere.
  - Outline how increasing atmospheric carbon dioxide levels may affect the acidity of oceans and the structure of marine communities.

- **SLO 3: APPLY SCIENTIFIC REASONING TO ASSESS THE EVIDENCE FOR HUMAN-INDUCED CLIMATE CHANGE.**
  - Describe how scientists collect data to determine the history of the earth’s climate and biogeography.
  - Outline how the study of paleoclimatology helps scientists predict future changes.
  - Present data that support and data that contradict the argument that current climate change is primarily due to human activities in contrast to natural forces.

- **SLO 4: ANALYZE THE COMPLEXITIES AND DIFFICULTIES IN CONSTRUCTING CLIMATE CHANGE MODELS.**
  - Diagram feedback loops involving atmospheric carbon dioxide and other greenhouse gases, albedo, photosynthesis, temperature, cloud cover, pollution, and other related variables.
  - Discuss the reasons why it is difficult to predict future climate change.
<b>SLO 5: UNDERSTAND HOW CLIMATE CHANGE MAY AFFECT THEIR LIVES AND THE FUTURE OF LIFE ON EARTH.</b>  
1. Describe the major principles of recent climate policies and discuss their limitations.  
2. Identify how global warming may affect weather extremes, incidence of wildfires, availability of water, agriculture, human disease patterns, settlement patterns, economic, political stability, and other aspects of human society.  
3. Outline effective short term and long term strategies for mitigating the effects of climate change.

**GEOG 306 Weather and Climate**

<table>
<thead>
<tr>
<th>Units:</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hours:</td>
<td>54 hours LEC</td>
</tr>
<tr>
<td>Prerequisites:</td>
<td>None.</td>
</tr>
<tr>
<td>Advisory:</td>
<td>MATH 30, or placement through the assessment process.</td>
</tr>
<tr>
<td>Transferable:</td>
<td>CSU; UC</td>
</tr>
<tr>
<td>General Education:</td>
<td>AA/AS Area IV; CSU Area B1; IGETC Area 5A</td>
</tr>
<tr>
<td>C-ID:</td>
<td>C-ID GEOG 130</td>
</tr>
<tr>
<td>Catalog Date:</td>
<td>June 1, 2020</td>
</tr>
</tbody>
</table>

This course is an introduction to atmospheric processes including energy and moisture exchanges, atmospheric pressure, winds, and global circulation. Severe weather conditions such as hurricanes and tornadoes are also studied. World, regional, and local climates are investigated. Student work will include weather observations and analysis of atmospheric data using charts, weather maps and radar and satellite imagery from the Internet and other sources.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- Demonstrate the ability to graph and/or map atmospheric data and explain its significance.  
- Draw a simplified diagram explaining Earth's energy balance and explain the energy flows portrayed.  
- Explain atmospheric energy exchange associated with the phase changes of water (latent heat exchange).  
- Explain the processes of energy exchange within the Earth-Atmosphere system.  
- Describe moisture sources and the steps necessary for condensation.  
- Diagram and explain atmospheric lifting mechanisms (frontal, orographic, convergent, and convectional).  
- Identify the global and regional geographic regions where precipitation is more/less likely to occur and explain why.  
- Describe moisture sources and the steps necessary for condensation.  
- Diagram and explain atmospheric lifting mechanisms (frontal, orographic, convergent, and convectional).  
- Identify the global and regional geographic regions where precipitation is more/less likely to occur and explain why.  
- Predict where cloud formation is likely to occur using knowledge of atmospheric instability and adiabatic processes.  
- Explain why and where precipitation occurs, including sources of moisture, lifting mechanisms, adiabatic processes, and cloud/precipitation formation.  
- Describe moisture sources and the steps necessary for condensation.  
- Diagram and explain atmospheric lifting mechanisms (frontal, orographic, convergent, and convectional).  
- Identify the global and regional geographic regions where precipitation is more/less likely to occur and explain why.  
- Describe moisture sources and the steps necessary for condensation.  
- Diagram and explain atmospheric lifting mechanisms (frontal, orographic, convergent, and convectional).  
- Identify the global and regional geographic regions where precipitation is more/less likely to occur and explain why.  
- Predict where cloud formation is likely to occur using knowledge of atmospheric instability and adiabatic processes.  
- Explain why and where precipitation occurs, including sources of moisture, lifting mechanisms, adiabatic processes, and cloud/precipitation formation.  
- Describe moisture sources and the steps necessary for condensation.  
- Diagram and explain atmospheric lifting mechanisms (frontal, orographic, convergent, and convectional).  
- Identify the global and regional geographic regions where precipitation is more/less likely to occur and explain why.  
- Describe moisture sources and the steps necessary for condensation.  
- Diagram and explain atmospheric lifting mechanisms (frontal, orographic, convergent, and convectional).  
- Identify the global and regional geographic regions where precipitation is more/less likely to occur and explain why.  
- Predict where cloud formation is likely to occur using knowledge of atmospheric instability and adiabatic processes.

**GEOG 310 Human Geography: Exploring Earth's Cultural Landscapes**

<table>
<thead>
<tr>
<th>Units:</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hours:</td>
<td>54 hours LEC</td>
</tr>
<tr>
<td>Prerequisites:</td>
<td>None.</td>
</tr>
<tr>
<td>Transferable:</td>
<td>CSU; UC</td>
</tr>
<tr>
<td>General Education:</td>
<td>AA/AS Area V(b); AA/AS Area VI; CSU Area D5; IGETC Area 4E</td>
</tr>
<tr>
<td>C-ID:</td>
<td>C-ID GEOG 120</td>
</tr>
<tr>
<td>Catalog Date:</td>
<td>June 1, 2020</td>
</tr>
</tbody>
</table>

This course investigates the diverse patterns of human settlement, development, and movement on earth, which evolved as a result of cultural and environmental factors. Emphasis is placed on understanding global population and migration patterns, language, religion, ethnicity, political and economic systems, development issues, agriculture and urbanization.
Upon completion of this course, the student will be able to:

- SLO1: Analyze human's role in transforming Earth's surface into a series of distinctive cultural landscapes. Explain the significance of the major stages of human cultural evolution over time (i.e. agricultural, industrial, medical, and technological revolutions).

- SLO2: Propose explanations for the geographic origin and global diffusion of key aspects of culture (e.g. technology, language, religion, ethnocentrism, racism, agriculture, urbanization). Differentiate between relocation and expansion diffusion as mechanisms for spreading cultural traits. Explain the role of globalization as an accelerator of cultural diffusion.

- SLO3: Describe broad historical and modern global socioeconomic processes such as migration, colonization, and globalization. Explain how these processes relate to spatial patterns today, such as ethnicity, unequal development, poverty, conflict, and environmental degradation.

- SLO4: Recognize and appreciate patterns of cultural diversity in California, the U.S., and the world. Describe patterns of diversity and explain how these enrich local, regional, and global culture.

- SLO5: Demonstrate understanding of key geographic concepts such as diffusion and globalization by analyzing and explaining spatial patterns represented on maps. Interpret maps of various types of socioeconomic data (e.g. demographic, linguistic, religious, ethnic, AIDS incidence, GNP per capita, etc.) and explain their significance.

- SLO6: Communicate geographic information effectively in oral, written, and/or graphic form. Produce a significant research project (e.g. academic poster, term paper, or similar product) on a course-related theme.

GEOG 320 World Regional Geography

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Transferable: CSU; UC
General Education: AA/AS Area V(b); AA/AS Area VI; CSU Area D5; IGETC Area 4E
C-ID: C-ID GEOG 125
Catalog Date: June 1, 2020

This course is a global survey of the world's major geographic realms: their physical environments, cultures and economies; their origins, interactions and global roles. Geographic concepts and ideas are used to study and compare cultures, landscapes, resources, livelihood and land use across Earth. Explanation for the globalization of culture and economy, the widening gap between rich and poor countries, and ethnic diversity in the United States and abroad is stressed throughout the course. A major goal of this course is to improve each student's 'mental map of the world.'

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO1: Recognize the diversity of peoples, places, and events globally as well as within specific geographic regions. Generalize the special combination of cultural, physical, historical, economical, and organizational qualities that characterize each of the major geographic regions of the world (such as East Asia, North America, Sub-Saharan Africa, etc.).

- SLO2: Evaluate and analyze critical geographic issues facing regions of the world today. Identify major socioeconomic, political, and/or environmental issues currently affecting Earth's major geographic regions.

- SLO3: Use and interpret maps effectively to build geographic understanding of the world. Recognize and identify the world's major geographic regions, as well as all countries located within them, on a blank outline map.

- SLO4: Communicate geographic information effectively in oral, written, and/or graphic form. Produce a significant research project (e.g. academic poster, term paper, or similar product) on a course-related theme.

GEOG 322 Geography of California

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Transferable: CSU; UC
General Education: AA/AS Area V(b); AA/AS Area VI; CSU Area D5; IGETC Area 4E
C-ID: C-ID GEOG 140
Catalog Date: June 1, 2020
This course investigates California’s physical, cultural, and economic environments, analyzing cardinal changes resulting from both natural and human interaction. The emphasis is on cultural diversity, human alteration of the landscape, and contemporary problems resulting from accelerated competition for natural, financial, and human resources. Some field trips may be required.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- **SLO #1:** demonstrate understanding of California’s physical and human environments, their interconnections, and the geographic processes that form and change them.
- **Objective 1.1:** expound of several examples of the influence of the environment on the human population and the human influence on the environment.
- **Objective 1.2:** describe the change of the environment and human population over time.
- **SLO #2:** analyze and interpret geographic information at local, regional, and/or global scales.
- **Objective 2.1:** identify and explain the influence of cultures and ideas from around the world on the State and regions within California.
- **Objective 2.2:** apply basic principles of the physical environment to interpret California’s environmental phenomena.
- **SLO #3:** analyze and evaluate critical geographic issues, their ethical dimensions, and their influence on decision-making.
- **Objective 3.1:** describe both perspectives on several ethical issues facing California and propose some solutions.
- **SLO #4:** recognize, appreciate, and understand the geographic diversity of people, places, and events specific to California.
- **SLO #5:** communicate geographic information effectively in oral, written, and graphic form.

GEOG 331 Exploring Maps and Geographic Technologies

- **Units:** 3
- **Hours:** 48 hours LEC; 18 hours LAB
- **Prerequisite:** None.
- **Transferable:** CSU; UC
- **General Education:** AA/AS Area IV
- **C-ID:** C-ID GEOG 150
- **Catalog Date:** June 1, 2020

Maps are the most effective way to communicate spatial information. This course introduces students to the quickly changing world of maps (both hardcopy and digital) and geographic techniques and technologies such as map and aerial photograph interpretation, spreadsheet operations, basic statistics, cartography, Global Positioning Systems (GPS), Internet mapping, remote sensing and Geographic Information Systems (GIS) that aid in data collection, analysis and presentation.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- **SLO #1:** DEMONSTRATE AN UNDERSTANDING OF THE MAJOR MODES OF GEOGRAPHIC INQUIRY.
- **SLO #2:** DEMONSTRATE AN UNDERSTANDING OF MAPPING CONCEPTS AND THE ABILITY TO INTERPRET MAPS AND MAPPED DATA.
- **SLO #3:** DEMONSTRATE AN UNDERSTANDING OF COMMON GEOGRAPHIC TECHNOLOGIES AND THE ABILITY TO USE THEM TO COLLECT, ANALYZE, AND DISPLAY GEOSPATIAL DATA.
**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- **SLO #1**: demonstrate an understanding of GIS technologies, theories and practices.
- **SLO #2**: apply GIS technical skills in a professional setting.
- **SLO #3**: exhibit skills learned via GIS project development.
- **SLO #4**: cultivate spatial analysis and critical thinking skills for decision-making purposes.
- **SLO #5**: understand how GIS skills are applicable in specific career fields.

**Description**

Geographic Information Systems (GIS) are computer-based mapping programs that analyze spatial data. This course provides the foundation for using desktop GIS software. A conceptual overview along with hands-on experience will be used to explore basic GIS software functionality. Emphasis will be placed on display characteristics, attribute querying, database exploration and management, spatial analysis, data creation, and cartographic presentation.

This course is not open to students who have received credit for GEOG 335.1, 335.2, and 335.3.
GEOG 353 Introduction to the Global Positioning System (GPS)

Units: 1
Hours: 16 hours LEC; 6 hours LAB
Prerequisite: None.
Transferable: CSU
Catalog Date: June 1, 2020

This course introduces the Global Positioning System (GPS). Topics include basic concepts of GPS including hands-on operation of the technology, real-world applications, computer interfaces, GIS and other mapping software. A field trip may be required.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- **SLO 1: Demonstrate competent use of GPS technology and function**
  - Evaluate GPS receiver operation for positioning and navigation
  - Design and implement field data collection for mapping
  - **SLO 2: Integrate GPS data into computer mapping applications**
  - Describe GPS in relation to basic geographic information system (GIS) concepts
  - Describe the procedure for downloading and uploading GPS data to and from a computer
  - Create maps of GPS data using computer software

GEOG 390 Field Studies in Geography

Units: 1 - 4
Hours: 6 - 24 hours LEC; 36 - 144 hours LAB
Prerequisite: None.
Transferable: CSU
C-ID: C-ID GEOG 160
Catalog Date: June 1, 2020

This course involves the study of geographic principles and processes in the field. Course content will vary by destination but may include topics in physical geography (e.g., plant and animal communities, climate and weather, geology and geomorphology, natural hazards, environmental impacts, etc.), human geography (e.g., cultural landscapes, economic activities, transportation issues, land use patterns, etc.), and/or introduction to tools and techniques used for geographic field research (e.g., map and compass use, the Global Positioning System (GPS), Geographic Information Systems (GIS), etc.). Field trip(s) are required.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- **SLO 1: APPLY BASIC PRINCIPLES OF GEOGRAPHY TO OBSERVATIONS IN THE FIELD**
  - Develop observational skills in the field.
  - Explain any evidence of human-environmental interactions observed in the field and discuss its implications.
  - Understand the roles of biotic and abiotic elements within specific ecosystems.
- **SLO 2: UTILIZE INVESTIGATIONS, OBSERVATIONS AND READINGS TO DEVELOP A GREATER DEPTH OF UNDERSTANDING OF GEOGRAPHIC PRINCIPLES.**
  - Compare knowledge gained from readings and lectures to field observations.
  - Utilize appropriate information sources to increase knowledge of one aspect of the course topic.
- **SLO 3: COMMUNICATE KNOWLEDGE GAINED IN THIS COURSE EFFECTIVELY IN ORAL, WRITTEN, AND/OR GRAPHIC FORM**
GEOG 391 Field Studies in Geography: Mountain Landscapes

This course involves the study of geographic principles and processes in mountain environments. The course content will vary by destination but may include topics in physical geography (e.g., plant and animal communities, climate and weather, geology and geomorphology, natural hazards, environmental impacts, etc.), human geography (e.g., cultural landscapes, economic activities, transportation issues, land use patterns, etc.), and introduction to tools and techniques used for geographic field research (e.g., map and compass use, the Global Positioning System (GPS), Geographic Information Systems (GIS), etc.). Field excursions are required.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO 1: demonstrate skill of gaining and applying learned material in a field experience.
- apply concepts and processes discussed in lecture to experiences in the field.
- compose field notes and collect and analyze field data.
- SLO 2: explain physical and/or cultural phenomena of a specific region.
- describe and explain physical and/or cultural phenomena of a specific region.
- integrate geographic information from various disciplines (geology, biology, ecology, urban studies, anthropology, history, economics, cultural studies, and others) in order to explain landscape patterns and processes.

GEOG 392 Field Studies in Geography: Coastal Landscapes

This is a field studies course of the geography of coastal landscapes. Physical and cultural processes, characteristics and landscapes will be observed and analyzed. Specific content will vary by geographic region. A field trip is required.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO 1: demonstrate skills of gaining and applying learned material in a field experience.
- apply concepts and processes discussed in lecture to experiences in the field.
- compose field notes and collect and analyze field data.
- SLO 2: explain physical and/or cultural phenomena of a specific region.
- describe and explain geographic phenomena related to the particular physical and/or human environments under study.
- integrate geographic information from various disciplines (geology, biology, ecology, urban studies, anthropology, history, economics, cultural studies, and others) in order to explain landscape patterns and processes.

GEOG 393 Field Studies in Geography: Arid Landscapes
This course involves the study of geographic principles and processes in arid environments. The course content will vary by destination but may include topics in physical geography (e.g., plant and animal communities, climate and weather, geology and geomorphology, natural hazards, environmental impacts, etc.), human geography (e.g., cultural landscapes, economic activities, transportation issues, land use patterns, etc.), and introduction to tools and techniques used for geographic field research (e.g., map and compass use, the Global Positioning System (GPS), Geographic Information Systems (GIS), etc.). Field excursions are required.

Upon completion of this course, the student will be able to:

- SLO 1: demonstrate skill of gaining and applying learned material in a field experience.
- apply concepts and processes discussed in lecture to experiences in the field.
- compose field notes and collect and analyze field data.
- SLO 2: explain physical and/or cultural phenomena of a specific region.
- describe and explain physical and/or cultural phenomena of a specific region.
- integrate geographic information from various disciplines (geology, biology, ecology, urban studies, anthropology, history, economics, cultural studies, and others) in order to explain landscape patterns and processes.

**GEOG 394 Field Studies in Geography: Volcanic Landscapes**

This course involves the study of geographic principles and processes in volcanic environments. The course content will vary by destination but may include topics in physical geography (e.g., plant and animal communities, climate and weather, geology and geomorphology, natural hazards, environmental impacts, etc.), human geography (e.g., cultural landscapes, economic activities, transportation issues, land use patterns, etc.), and introduction to tools and techniques used for geographic field research (e.g., map and compass use, the Global Positioning System (GPS), Geographic Information Systems (GIS), etc.). Field excursions are required.

Upon completion of this course, the student will be able to:

- SLO 1: demonstrate skills of gaining and applying learned material in a field experience.
- apply concepts and processes discussed in lecture to experiences in the field.
- compose field notes and collect and analyze field data.
- SLO 2: explain physical and/or cultural phenomena of a specific region.
- describe and explain geographic phenomena related to the particular physical and/or human environments under study.
- integrate geographic information from various disciplines (geology, biology, ecology, urban studies, anthropology, history, economics, cultural studies, and others) in order to explain landscape patterns and processes.

**GEOG 495 Independent Studies in Geography**

This course involves the study of geographic principles and processes in arid environments. The course content will vary by destination but may include topics in physical geography (e.g., plant and animal communities, climate and weather, geology and geomorphology, natural hazards, environmental impacts, etc.), human geography (e.g., cultural landscapes, economic activities, transportation issues, land use patterns, etc.), and introduction to tools and techniques used for geographic field research (e.g., map and compass use, the Global Positioning System (GPS), Geographic Information Systems (GIS), etc.). Field excursions are required.

Upon completion of this course, the student will be able to:

- SLO 1: demonstrate skills of gaining and applying learned material in a field experience.
- apply concepts and processes discussed in lecture to experiences in the field.
- compose field notes and collect and analyze field data.
- SLO 2: explain physical and/or cultural phenomena of a specific region.
- describe and explain geographic phenomena related to the particular physical and/or human environments under study.
- integrate geographic information from various disciplines (geology, biology, ecology, urban studies, anthropology, history, economics, cultural studies, and others) in order to explain landscape patterns and processes.
An independent studies project involves an individual student or small group of students in study, research, or activities beyond the scope of regularly offered courses. See the current catalog section of “Special Studies” for full details of Independent Studies.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- **SLO #1**: Actively engage in intellectual inquiry beyond that required in order to pass a course of study.
- Discuss and outline a proposal of study with a supervising instructor in Geography or Geographic Information Systems (GIS) or Environmental Studies.
- Design an independent study (to be completed individually or by collaboration of a small group) to foster special knowledge, skills, and experience that are not available in any one regularly scheduled course.
- Gather data or information needed for analysis in Geography or Geographic Information Systems (GIS) or Environmental Studies.
- **SLO #2**: Utilize modes of analysis and critical thinking to apply theoretical perspectives and/or concepts in Geography or Geographic Information Systems (GIS) or Environmental Studies to significant problems and/or educational activities.
- Analyze and apply the knowledge, skills and experience that are involved in the independent study to theoretical perspectives and/or concepts in Geography or Geographic Information Systems (GIS) or Environmental Studies.
- **SLO #3**: Communicate a complex understanding of content matter of Geography or Geographic Information Systems (GIS) or Environmental Studies.
- Demonstrate competence in the skills necessary to accomplish the independent study.
- Present the results of your research or inquiry.
Geology | Cosumnes River College

Geology is the study of the origin and evolution of the earth, utilizing the principles of mathematics, chemistry, physics and biology. The concept of geologic time and the principles of uniformitarianism help geologists to understand the processes that shape the earth and its environments. Geologists study rocks, minerals and fossils in an effort to draw conclusions about both the earth’s observable surface processes that meet the eye, and the earth’s interior.

Dean

 (916) 691-7537

 CoxR@crc.losrios.edu

Associate Degrees for Transfer

A.S.-T. in Geology

The Associate in Science in Geology for Transfer Degree (AA-T) is designed to provide a seamless transfer pathway for students interested in pursuing at least one Geology degree option in the California State University (CSU) system. Students must complete the core curriculum and electives to meet a total of 60 transferable units with a minimum 2.0 GPA, which includes the CSU General Education Breadth or the Intersegmental General Education Transfer Curriculum (IGETC) pattern. Students must also earn a grade of C or better in all the courses for the major as described in the Required Program. Upon successful completion of the degree requirements, students will be guaranteed admission to the CSU system with junior status and will not have to repeat lower division coursework. Students are encouraged to meet with a counselor to develop their educational plans as degree options and general education requirements vary for each university.

Catalog Date: June 1, 2020

Degree Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>GEOL 300</td>
<td>Physical Geology</td>
<td>3</td>
</tr>
<tr>
<td>GEOL 301</td>
<td>Physical Geology Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>GEOL 310</td>
<td>Historical Geology</td>
<td>3</td>
</tr>
<tr>
<td>GEOL 311</td>
<td>Historical Geology Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>CHEM 400</td>
<td>General Chemistry I</td>
<td>5</td>
</tr>
<tr>
<td>CHEM 401</td>
<td>General Chemistry II</td>
<td>5</td>
</tr>
<tr>
<td>MATH 400</td>
<td>Calculus I</td>
<td>5</td>
</tr>
<tr>
<td>MATH 401</td>
<td>Calculus II</td>
<td>5</td>
</tr>
<tr>
<td>Total Units:</td>
<td></td>
<td>28</td>
</tr>
</tbody>
</table>

The Associate in Science in Geology for Transfer (AS-T) degree may be obtained by completion of 60 transferable, semester units with a minimum 2.0 GPA, including (a) the major or area of emphasis described in the Required Program, and (b) either the Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education-Breadth Requirements.

Student Learning Outcomes

Upon completion of this program, the student will be able to:
Career Information

The AS-T in Geology can provide students with the foundational knowledge necessary for transfer to a 4-year Bachelor of Art or Science (BA or BS) degree program. Career opportunities for students who have earned Bachelor's degrees in Geology include but are not limited to Geologist (for private industry or the government), Environmental Planner or Consultant, Earth Science Educator (middle school through university), Paleontologist, Petrologist, Land Use and Natural Resource Management, Cartographer/Stratigrapher, Park Naturalist, Hydrologist, GIS Specialist, and Oceanographer. Some careers may require additional training. NOTE TO TRANSFER STUDENTS: The Associate Degree for Transfer program is designed for students who plan to transfer to a campus of the California State University (CSU). Other than the required core, the courses you choose to complete this degree will depend to some extent on the selected CSU for transfer. In addition, some CSU-GE Breadth or IGETC requirements can also be completed using courses required for this associate degree for transfer major (known as “double-counting”), Meeting with a counselor to determine the most appropriate course choices will facilitate efficient completion of your transfer requirements. For students wishing to transfer to other universities (UC System, private, or out-of-state), the Associate Degree for Transfer may not provide adequate preparation for upper-division transfer admissions; it is critical that you meet with a CRC counselor to select and plan the courses for the major, as programs vary widely in terms of the required preparation.

Associate Degrees

A.S. in General Science

Areas of Study include:

- Physical Anthropology
- Astronomy
- Biology
- Chemistry
- Engineering
- Physical Geography
- Geology
- Physics

Eighteen (18) units of transfer level course work in science is required. Two laboratory courses must be included: one in the physical sciences and one in the biological sciences. Courses may be selected from astronomy, biology, chemistry, geology, physical geography, physical anthropology, and physics. The student, in consultation with a counselor, should choose science courses to meet his or her program, transfer, or general education requirements.

Students interested in transferring to a four-year university with a science major are encouraged to complete a science AS or AS-T degree such as Anthropology, Biology, Chemistry, Engineering, Geography, Geology, or Physics. This General Science degree may not include the majors-level transfer courses needed for many science majors. Students are strongly recommended to see a counselor for guidance.

Catalog Date: June 1, 2020

Degree Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Life Science with Lab:</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>A minimum of 4 units from the following:</td>
<td></td>
</tr>
<tr>
<td>ANTH 300</td>
<td>Biological Anthropology (3)</td>
<td>4</td>
</tr>
<tr>
<td>and ANTH 301</td>
<td>Biological Anthropology Laboratory (1)</td>
<td></td>
</tr>
<tr>
<td>BIOL 307</td>
<td>Biology of Organisms (4)</td>
<td></td>
</tr>
<tr>
<td>BIOL 310</td>
<td>General Biology (4)</td>
<td></td>
</tr>
<tr>
<td>COURSE CODE</td>
<td>COURSE TITLE</td>
<td>UNITS</td>
</tr>
<tr>
<td>-------------</td>
<td>--------------</td>
<td>-------</td>
</tr>
<tr>
<td>BIOL 400</td>
<td>Principles of Biology (5)</td>
<td></td>
</tr>
<tr>
<td>BIOL 410</td>
<td>Principles of Botany (5)</td>
<td></td>
</tr>
<tr>
<td>BIOL 420</td>
<td>Principles of Zoology (5)</td>
<td></td>
</tr>
<tr>
<td>BIOL 430</td>
<td>Anatomy and Physiology (5)</td>
<td></td>
</tr>
<tr>
<td>BIOL 431</td>
<td>Anatomy and Physiology (5)</td>
<td></td>
</tr>
<tr>
<td>BIOL 440</td>
<td>General Microbiology (4)</td>
<td></td>
</tr>
</tbody>
</table>

**B. Physical Science with Lab:**

A minimum of 3 units from the following:

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASTR 400</td>
<td>Astronomy Laboratory (1)</td>
<td></td>
</tr>
<tr>
<td>and ASTR 300</td>
<td>Introduction to Astronomy (3)</td>
<td></td>
</tr>
<tr>
<td>CHEM 300</td>
<td>Beginning Chemistry (4)</td>
<td></td>
</tr>
<tr>
<td>CHEM 305</td>
<td>Introduction to Chemistry (5)</td>
<td></td>
</tr>
<tr>
<td>CHEM 306</td>
<td>Introduction to Organic and Biological Chemistry (5)</td>
<td></td>
</tr>
<tr>
<td>CHEM 309</td>
<td>Integrated General, Organic, and Biological Chemistry (5)</td>
<td></td>
</tr>
<tr>
<td>CHEM 322</td>
<td>Environmental Chemistry Laboratory (1)</td>
<td></td>
</tr>
<tr>
<td>and CHEM 321</td>
<td>Environmental Chemistry (3)</td>
<td></td>
</tr>
<tr>
<td>CHEM 400</td>
<td>General Chemistry I (5)</td>
<td></td>
</tr>
<tr>
<td>CHEM 401</td>
<td>General Chemistry II (5)</td>
<td></td>
</tr>
<tr>
<td>CHEM 420</td>
<td>Organic Chemistry I (5)</td>
<td></td>
</tr>
<tr>
<td>CHEM 421</td>
<td>Organic Chemistry II (5)</td>
<td></td>
</tr>
<tr>
<td>GEOG 301</td>
<td>Physical Geography Laboratory (1)</td>
<td></td>
</tr>
<tr>
<td>and GEOG 300</td>
<td>Physical Geography: Exploring Earth's Environmental Systems (3)</td>
<td></td>
</tr>
<tr>
<td>GEOL 301</td>
<td>Physical Geology Laboratory (1)</td>
<td></td>
</tr>
<tr>
<td>and GEOL 300</td>
<td>Physical Geology (3)</td>
<td></td>
</tr>
<tr>
<td>GEOL 306</td>
<td>Earth Science Laboratory (1)</td>
<td></td>
</tr>
<tr>
<td>and GEOL 305</td>
<td>Earth Science (3)</td>
<td></td>
</tr>
<tr>
<td>GEOL 311</td>
<td>Historical Geology Laboratory (1)</td>
<td></td>
</tr>
<tr>
<td>and GEOL 310</td>
<td>Historical Geology (3)</td>
<td></td>
</tr>
<tr>
<td>ENGR 304</td>
<td>How Things Work (3)</td>
<td></td>
</tr>
<tr>
<td>PHYS 350</td>
<td>General Physics (4)</td>
<td></td>
</tr>
<tr>
<td>PHYS 360</td>
<td>General Physics (4)</td>
<td></td>
</tr>
<tr>
<td>PHYS 370</td>
<td>Introductory Physics - Mechanics and Thermodynamics (5)</td>
<td></td>
</tr>
<tr>
<td>PHYS 380</td>
<td>Introductory Physics - Electricity and Magnetism, Light and Modern Physics (5)</td>
<td></td>
</tr>
<tr>
<td>PHYS 411</td>
<td>Mechanics of Solids and Fluids (4)</td>
<td></td>
</tr>
<tr>
<td>PHYS 421</td>
<td>Electricity and Magnetism (4)</td>
<td></td>
</tr>
<tr>
<td>PHYS 431</td>
<td>Heat, Waves, Light and Modern Physics (4)</td>
<td></td>
</tr>
</tbody>
</table>
### C. Additional Science Courses:

A minimum of 11 units from the following:

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANTH 300</td>
<td>Biological Anthropology (3)</td>
<td></td>
</tr>
<tr>
<td>ANTH 301</td>
<td>Biological Anthropology Laboratory (1)</td>
<td></td>
</tr>
<tr>
<td>ASTR 300</td>
<td>Introduction to Astronomy (3)</td>
<td></td>
</tr>
<tr>
<td>ASTR 400</td>
<td>Astronomy Laboratory (1)</td>
<td></td>
</tr>
<tr>
<td>BIOL 300</td>
<td>The Foundations of Biology (3)</td>
<td></td>
</tr>
<tr>
<td>BIOL 307</td>
<td>Biology of Organisms (4)</td>
<td></td>
</tr>
<tr>
<td>BIOL 310</td>
<td>General Biology (4)</td>
<td></td>
</tr>
<tr>
<td>BIOL 342</td>
<td>The New Plagues: New and Ancient Infectious Diseases Threatening World Health (3)</td>
<td></td>
</tr>
<tr>
<td>BIOL 350</td>
<td>Environmental Biology (3)</td>
<td></td>
</tr>
<tr>
<td>BIOL 352</td>
<td>Conservation Biology (3)</td>
<td></td>
</tr>
<tr>
<td>BIOL 390</td>
<td>Natural History Field Study (0.5 - 4)</td>
<td></td>
</tr>
<tr>
<td>BIOL 400</td>
<td>Principles of Biology (5)</td>
<td></td>
</tr>
<tr>
<td>BIOL 410</td>
<td>Principles of Botany (5)</td>
<td></td>
</tr>
<tr>
<td>BIOL 420</td>
<td>Principles of Zoology (5)</td>
<td></td>
</tr>
<tr>
<td>BIOL 430</td>
<td>Anatomy and Physiology (5)</td>
<td></td>
</tr>
<tr>
<td>BIOL 431</td>
<td>Anatomy and Physiology (5)</td>
<td></td>
</tr>
<tr>
<td>BIOL 440</td>
<td>General Microbiology (4)</td>
<td></td>
</tr>
<tr>
<td>BIOL 462</td>
<td>Genetics in Contemporary Human Society (3)</td>
<td></td>
</tr>
<tr>
<td>CHEM 300</td>
<td>Beginning Chemistry (4)</td>
<td></td>
</tr>
<tr>
<td>CHEM 305</td>
<td>Introduction to Chemistry (5)</td>
<td></td>
</tr>
<tr>
<td>CHEM 306</td>
<td>Introduction to Organic and Biological Chemistry (5)</td>
<td></td>
</tr>
<tr>
<td>CHEM 309</td>
<td>Integrated General, Organic, and Biological Chemistry (5)</td>
<td></td>
</tr>
<tr>
<td>CHEM 321</td>
<td>Environmental Chemistry (3)</td>
<td></td>
</tr>
<tr>
<td>CHEM 322</td>
<td>Environmental Chemistry Laboratory (1)</td>
<td></td>
</tr>
<tr>
<td>CHEM 400</td>
<td>General Chemistry I (5)</td>
<td></td>
</tr>
<tr>
<td>CHEM 401</td>
<td>General Chemistry II (5)</td>
<td></td>
</tr>
<tr>
<td>CHEM 420</td>
<td>Organic Chemistry I (5)</td>
<td></td>
</tr>
<tr>
<td>CHEM 421</td>
<td>Organic Chemistry II (5)</td>
<td></td>
</tr>
<tr>
<td>ENGR 304</td>
<td>How Things Work (3)</td>
<td></td>
</tr>
<tr>
<td>GEOG 300</td>
<td>Physical Geography: Exploring Earth's Environmental Systems (3)</td>
<td></td>
</tr>
<tr>
<td>GEOG 301</td>
<td>Physical Geography Laboratory (1)</td>
<td></td>
</tr>
<tr>
<td>GEOG 305</td>
<td>Global Climate Change (3)</td>
<td></td>
</tr>
<tr>
<td>GEOG 306</td>
<td>Weather and Climate (3)</td>
<td></td>
</tr>
<tr>
<td>GEOL 300</td>
<td>Physical Geology (3)</td>
<td></td>
</tr>
<tr>
<td>COURSE CODE</td>
<td>COURSE TITLE</td>
<td>UNITS</td>
</tr>
<tr>
<td>-------------</td>
<td>-------------------------------------------------------</td>
<td>-------</td>
</tr>
<tr>
<td>GEOL 301</td>
<td>Physical Geology Laboratory (1)</td>
<td></td>
</tr>
<tr>
<td>GEOL 305</td>
<td>Earth Science (3)</td>
<td></td>
</tr>
<tr>
<td>GEOL 306</td>
<td>Earth Science Laboratory (1)</td>
<td></td>
</tr>
<tr>
<td>GEOL 310</td>
<td>Historical Geology (3)</td>
<td></td>
</tr>
<tr>
<td>GEOL 311</td>
<td>Historical Geology Laboratory (1)</td>
<td></td>
</tr>
<tr>
<td>GEOL 330</td>
<td>Introduction to Oceanography (3)</td>
<td></td>
</tr>
<tr>
<td>GEOL 390</td>
<td>Field Studies in Geology (1 - 4)</td>
<td></td>
</tr>
<tr>
<td>PHYS 310</td>
<td>Conceptual Physics (3)</td>
<td></td>
</tr>
<tr>
<td>PHYS 350</td>
<td>General Physics (4)</td>
<td></td>
</tr>
<tr>
<td>PHYS 360</td>
<td>General Physics (4)</td>
<td></td>
</tr>
<tr>
<td>PHYS 370</td>
<td>Introductory Physics - Mechanics and Thermodynamics (5)</td>
<td></td>
</tr>
<tr>
<td>PHYS 380</td>
<td>Introductory Physics - Electricity and Magnetism, Light and Modern Physics (5)</td>
<td></td>
</tr>
<tr>
<td>PHYS 411</td>
<td>Mechanics of Solids and Fluids (4)</td>
<td></td>
</tr>
<tr>
<td>PHYS 421</td>
<td>Electricity and Magnetism (4)</td>
<td></td>
</tr>
<tr>
<td>PHYS 431</td>
<td>Heat, Waves, Light and Modern Physics (4)</td>
<td></td>
</tr>
<tr>
<td>Total Units:</td>
<td></td>
<td>18</td>
</tr>
</tbody>
</table>

1Courses used in A or B above will not count towards C, except units exceeding the 4 or 3 unit minimum in A and B. For example, a student completing the 5 unit CHEM 309 under B could apply 2 of those units towards C. A total of 18 science units is required.

The General Science Associate in Science (A.S.) degree may be obtained by completion of the required program, plus general education requirements, plus sufficient electives to meet a 60-unit total. See CRC graduation requirements.

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- explain the core perspectives of the scientific method and apply it to at least one scientific discipline. (SLO 1)
- solve introductory problems of a conceptual and/or numerical nature of at least one scientific discipline. (SLO 2)
- accurately apply the basic vocabulary and concepts of at least one scientific discipline verbally and in writing. (SLO 3)
- recognize the use and misuse of scientific concepts in society including politics and the media. (SLO 4)

A.S. in Geology

This degree is designed to meet common lower division requirements for a major in Geology.

All CRC Geology courses satisfy lower division General Education requirements for the A.A., A.S., B.A., and B.S. degrees. For transfer students earning a Baccalaureate Degree in Geology, satisfactory completion of the CRC Geology curriculum provides a solid foundation and the standard prerequisites for upper division coursework. Geology majors planning to transfer to four-year institutions should take GEOL 300, 301, 310, and 311.

HIGHLIGHTS
* Comprehensive lower division course offerings, including a Physical Laboratory, Mineral Laboratory, and Field Course
* Dynamic geologic environment near the Sierra Nevada, San Andreas Fault, and Sacramento Delta
* Internships available with State of California, County of Sacramento, and Federal Land Management Agencies
* A Mathematics, Engineering and Science Achievement (MESA) program

Catalog Date: June 1, 2020
Degree Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 400</td>
<td>General Chemistry I</td>
<td>5</td>
</tr>
<tr>
<td>CHEM 401</td>
<td>General Chemistry II</td>
<td>5</td>
</tr>
<tr>
<td>GEOL 300</td>
<td>Physical Geology</td>
<td>3</td>
</tr>
<tr>
<td>GEOL 301</td>
<td>Physical Geology Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>GEOL 310</td>
<td>Historical Geology</td>
<td>3</td>
</tr>
<tr>
<td>GEOL 311</td>
<td>Historical Geology Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>MATH 400</td>
<td>Calculus I</td>
<td>5</td>
</tr>
<tr>
<td>MATH 401</td>
<td>Calculus II</td>
<td>5</td>
</tr>
<tr>
<td>Total Units:</td>
<td></td>
<td>28</td>
</tr>
</tbody>
</table>

The Geology Associate in Science (A.S.) degree may be obtained by completion of the required program, plus general education requirements, plus sufficient electives to meet a 60-unit total. See CRC graduation requirements.

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- <strong>SLO 1: Understand the culture and practice of science.</strong>
- <strong>SLO 2: Evaluate how nature and humans exist in various dimensions of space and time.</strong>
- <strong>SLO 3: Integrate geoscience technologies and information resources.</strong>
- <strong>SLO 4: Analyze critical geoscience issues facing the world today.</strong>
- <strong>SLO 5: Communicate geoscience concepts and information effectively in various forms (e.g., verbal, written, graphic).</strong>
- <strong>SLO 6: Assess the use and limits of natural resources.</strong>
- <strong>SLO 7: Analyze the impacts of natural processes on humanity.</strong>

Career Information

Geologist (for private industry or the government); Environmental Planner or Consultant; Earth Science Educator (middle school through university); Paleontologist; Petrologist; Land Use and Natural Resource Management; Cartographer/Stratigrapher; Park Naturalist; Hydrology; GIS Specialist; Oceanographer Most career options require additional college study.

Geology (GEOL)

GEOL 300 Physical Geology

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Advisory: Concurrent enrollment in GEOL 301.
Transferable: CSU; UC
General Education: AA/AS Area IV; CSU Area B1; IGETC Area 5A
C-ID: C-ID GEOL 100
Catalog Date: June 1, 2020

Physical Geology introduces the composition and dynamics of Earth from the atomic scale of minerals to the global scale of plate tectonics. Major themes include the composition of minerals and rock, volcanism, Earth structures, earthquakes, erosion and surface processes, geologic time, geologic hazards, and plate tectonics. This course analyzes human interactions with geologic processes and the physical environment. Successful completion of physical geology prepares the student to recognize, understand, and appreciate the physical processes which continually change Earth over geologic time.
Student Learning Outcomes

Upon completion of this course, the student will be able to:

- **SLO#1: Apply the Scientific Method to evaluating geologic processes.**
  - Examine scientific inquiry as a platform for exploring our world objectively.
  - Illustrate a historical instance in geology where scientific ideas were improved upon through inquiry using the scientific method.

- **SLO#2: Evaluate temporal and spatial dimensions in which Earth originated and exists.**
  - Discuss the basic narrative of Earth origin and ocean and atmospheric development based on known scientific evidence.
  - Use basic concepts and tools of geologic time -- uniformity, geometric principals of relative age dating, radiometric dating -- to solve problems of geologic timing.

- **SLO#3: Examine how we can determine Earth's interior and surface compositions.**
  - Synthesize data from geophysics, seismology, and petrology to produce a comprehensive view of Earth's interior layered structure.
  - Recognize what minerals are and how to identify important rock forming varieties.
  - Define and give examples of igneous, sedimentary, and metamorphic rocks.
  - Identify environmental influences on rock formation based on textural, compositional, and structural features in the rock.
  - Evaluate the importance, availability, and rate of usage of those natural resources which are geologic in nature.

- **SLO#4: Apply plate tectonic theory to formulate geologic settings for physical processes.**
  - Discuss evidence that contributed to the development of plate tectonics.
  - Evaluate divergent, convergent, and transform boundaries and describe the characteristics of each.
  - Identify the main features of ocean floor topography.
  - Evaluate how volcanic activity, mountain building, and earthquakes are related to each other.
  - Contrast and assess evidence of orogenesis and explain how continents grow by accretion.

- **SLO#5: Assess the potential threats of geologically-related natural disasters.**
  - Recognize and appraise the hazards associated with earthquakes.
  - Evaluate the conditions that generate floods and landslides.
  - Assess how good long and short term predictions are for major natural disasters.
  - Explain some environmental disasters that humans can potentially create.

- **SLO#6: Evaluate the various depositional and erosional features associated with different agents of erosion -- wind, glaciers, rivers, gravity, and waves.**
  - Critique how features of these environments can indicate climate change.

- **SLO#7: Communicate geologic concepts and information effectively in various forms (e.g., verbal, written, graphic).**
  - Research credible sources of geologic information.

GEOL 301 Physical Geology Laboratory

- **Units:** 1
- **Hours:** 54 hours LAB
- **Prerequisite:** None.
- **Corequisite:** GEOL 300 (may be taken previously)
- **Transferable:** CSU; UC
- **General Education:** CSU Area B3; IGETC Area 5A; IGETC Area 5C
- **C-ID:** C-ID GEOL 100L
- **Catalog Date:** June 1, 2020
This course provides "hands-on" experience with the tools and skills discussed in Physical Geology (GEOL 300). Lab topics include mineral and rock identification, map and air photograph interpretation and landform identification, and introduction to the study of geologic maps and cross-sections.

Student Learning Outcomes
Upon completion of this course, the student will be able to:

- **SLO#1**: Apply the Scientific Method to evaluating Earth science processes.
  - Note how the scientific method is followed in various experiments.
  - Evaluate a data set with conscious reference to the scientific method.
- **SLO#2**: Examine Earth's interior and solid surface compositions.
  - Identify rock and minerals specimens in hand samples to determine their geologic origin.
  - Deduce the properties and compositions of Earth's interior layers based on various types of evidence observed at Earth's surface.
  - Interpret the geologic processes which produce specific rock types.
- **SLO#3**: Apply plate tectonic theory to formulate geologic settings for physical processes.
  - Discuss how earthquakes are connected to tectonic settings.
  - Calculate rates of plate motion and sea floor spreading.
  - Distinguish between different plate boundaries and the rock types produced by tectonic processes.
  - Compare and contrast the rate of seafloor spreading and explain the physiographic features produced.
  - Evaluate the affect of hot spots on continent and ocean-floor evolution.
- **SLO#4**: Evaluate temporal and spatial dimensions in which Earth history is explored.
  - Assess the time-event sequence on a geologic column by utilize both relative and absolute time.
  - Assemble a geologic map and evaluation the relative and absolute time sequencing.
- **SLO#5**: Assess the impact of earthquake activity at a human scale.
  - Calculate and model the speed of P and S waves to derive an earthquake's epicenter.
  - Analyze the factors that cause earthquake destruction and how serious damage can be avoided.
- **SLO#6**: Confirm the effects of surface geologic processes on terrain landscape.
  - Construct and interpret topographic maps and compute gradient from them.
  - Inspect and evaluate aerial/satellite photos and determine the geologic structures present.
  - Recognize, describe, and illustrate groundwater processes and the formation of karst topography.
  - Illustrate, examine, and interpret erosional and depositional features produced by stream, glacial, and wind processes.

GEOL 305 Earth Science

| Units: | 3 |
| Hours: | 54 hours LEC |
| Prerequisites: | None. |
| Transferable: | CSU; UC (No transfer credit for GEOL 305 or 306, if taken after GEOL 300, 301, 310, or 311) |
| General Education: | AA/AS Area IV; CSU Area B1; IGETC Area 5A |
| C-ID: | C-ID GEOL 120 |
| Catalog Date: | June 1, 2020 |

This course is an introductory course covering major topics in geology, oceanography, meteorology, astronomy, scientific method, and philosophy of science. This course is designed for non-science majors. This course is not open to students who have received credit for GEOL 300 or GEOL 310.

Student Learning Outcomes
Upon completion of this course, the student will be able to:

- **SLO#1**: Apply the Scientific Method to evaluating Earth science processes.
- Examine scientific inquiry as a platform for exploring our world objectively.
- Illustrate historical instances where scientific ideas were improved upon through inquiry using the scientific method.
- **SLO#2**: Evaluate temporal and spatial dimensions in which Earth originated and exists.
- Discuss the basic narrative of Earth origin and ocean and atmospheric development based on known scientific evidence.
- Compare and contrast Earth as a planet to other planets and objects in the Solar System.
- Use basic concepts and tools of geologic time -- uniformity, geometric principals of relative age dating, radiometric dating -- to solve problems of geologic timing.
- **SLO#3**: Apply plate tectonic theory to formulate geologic settings for physical processes.
- Discuss evidence that contributed to the development of plate tectonics.
- Analyze how plate tectonic theory explains the development and break up of continents, and of the growth and shrinkage of oceans.
- Identify the main features of ocean floor topography.
- Evaluate how volcanic activity, mountain building, and earthquakes are related to each other.
- **SLO#4**: Examine how we determine Earth's interior and solid surface compositions.
- Synthesize different data sets to produce a comprehensive view of Earth's interior layered structure.
- Discuss how different minerals form in different environments to produce the three categories of rocks.
- Deduce past surface environments from textures and features in sedimentary rocks.
- **SLO#5**: Investigate how different aspects of atmospheric change contribute to weather and climate.
- Describe Earth's atmosphere's origin, composition, and structure.
- Delineate the various factors that affect how Earth is heated.
- Assess how changes in the atmosphere's moisture/humidity content with temperature bring about observable changes in weather.
- Evaluate how changes in atmospheric pressure produce different weather results.
- **SLO#6**: Survey Earth's basic marine processes.
- Explain the formation of three basic types of water movements (tides, currents, waves) and how they affect human activity.
- Investigate the characteristic physical properties ocean water.
- **SLO#7**: Assess the impacts of Earth processes on human activity, and human activity on Earth processes.
- Analyze the causes and impacts of global warming and global climate change.
- Assess how earthquakes are a danger to humans.
- Examine how human activity contributes to or mitigates beach erosion.

**GEOL 306 Earth Science Laboratory**

- **Units**: 1
- **Hours**: 54 hours LAB
- **Prerequisite**: GEOL 305
- **Corequisite**: CSU; UC (No transfer credit for GEOL 305 or 306, if taken after GEOL 300, 301, 310, or 311)
- **Transferable**: CSU Area B3; IGETC Area 5A
- **General Education**: C-ID GEOL 120L
- **Catalog Date**: June 1, 2020

This course emphasizes scientific methods and systematic laboratory procedures. Topics include weather analysis, rock and mineral identification, study of geologic concepts by means of topographic maps, and exercises in astronomy and oceanography. One field trip may be required. Not open to students who have received credit for GEOL 300 or GEOL 301.
Upon completion of this course, the student will be able to:

- **SLO#1**: Apply the Scientific Method to evaluating Earth science processes.
  - Note how the scientific method is followed in various experiments.
  - Evaluate a data set with conscious reference to the scientific method.

- **SLO#2**: Evaluate temporal and spatial dimensions in which Earth originated and exists in the solar system.
  - Construct a model of the solar system in order to observe characteristics of distance among the planets and sun.
  - Relate Earth, Sun, and Moon motions to observable phenomena on Earth, such as tides and lunar phases.
  - Describe the position and motion of the planets using key constellations as reference.
  - Explain why the moon exhibits all of its phases and surface textures.
  - Investigate methods for determine ages and sequences of geologic events.

- **SLO#3**: Apply plate tectonic theory to formulate geologic settings for physical processes.
  - Calculate rates of plate motion and sea floor spreading.
  - Discuss how earthquakes are connected to tectonic settings.
  - Relate igneous activity to the tectonic context of the area.

- **SLO#4**: Examine how we determine Earth's interior and solid surface compositions.
  - Identify rock and minerals specimens in hand samples to determine their geologic origin.
  - Deduce the properties and compositions of Earth's interior layers based on various types of evidence observed at Earth's surface.
  - Investigate how different components of atmospheric change contribute to weather and climate.
  - Analyze how noon-time sun angle and duration of sunlight influence the distribution of heat on Earth.
  - Compute the quantity of water vapor in the atmosphere and evaluate its significance on weather trends.
  - Measure atmospheric pressure and evaluate its affect on weather trends.
  - Integrate the above atmospheric measurements to determine conditions for weather storms.

- **SLO#5**: Collect, measure, and/or analyze geologic information using common instruments and tools.
  - Collect and analyze data using common meteorological instruments (e.g. thermometer, barometer, sling psychrometer),
 geomorphic instruments (e.g., stereoscopic imagery, stereoscope) and mapping tools (e.g., latitude/longitude, scale, USGS quad maps).

---

**GEOL 310 Historical Geology**

- **Units**: 3
- **Hours**: 54 hours LEC
- **Prerequisites**: None.
- **Advisory**: GEOL 300 or 305; An introductory geology or earth science course.
- **Transferable**: CSU; UC
- **General Education**: AA/AS Area IV; CSU Area B1; IGETC Area 5A
- **C-ID**: GEOL 110
- **Catalog Date**: June 1, 2020
This course explores the origin and geologic history of Earth and the evolution of its plant and animal inhabitants. Plate tectonic theory is used to explain changes in composition and structure of rocks in Earth's crust from the formation of Earth to the present. Emphasis is placed on the formation of sedimentary rocks for the purpose of understanding how they and the fossils contained within them record changes in Earth environment and processes. Evolution and extinction are studied to understand how they reflect environmental changes in Earth's ocean, atmosphere, and surface. Present day Earth processes are used as a model to understand past activity.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- **SLO#1:** Apply the Scientific Method to evaluating Earth history.
  - Evaluate the Scientific Method as a means to acquire and verify knowledge.
  - Explain specific instances where the Scientific Method advanced how geologists understand Earth history (e.g., uniformity, catastrophism, faunal succession).
  - Show instances where the Scientific Method identifies gaps or limits in our knowledge of Earth history (e.g., stratigraphic unconformities, lack of fossil specimens).
  - **SLO#2:** Evaluate temporal rates and spatial scales of geologic processes in Earth history.
  - Explain and apply methods used to determine the numerical and relative ages of geologic events.
  - Analyze how the Geologic Time Scale is constructed, and place significant events in Earth history within that timeline.
  - Correlate changes in fossil distribution, isotopic ratios, elemental concentration in rocks to changes in sea level, climate change, and atmospheric composition in Earth history.
  - Predict possible short term and long term trends for Earth's future environment (climate trends, sea level, atmospheric composition) based in part on the past geologic record.
  - **SLO#3:** Assess theories of evolution and extinction and the logic and evidence leading to their development and application.
  - Discuss Darwin's basic theory of evolution in the context of the development of scientific thinking of the time.
  - Critique subsequent modifications that have been made to our understanding of Darwinian evolution (e.g., DNA analyses, punctuated equilibrium).
  - Identify key fossils that are characteristic of particular periods in the geologic time scale.
  - Validate evolutionary changes in life forms and ecosystems to changes in Earth environment, with specific focus on types of extinction events (e.g., meteorite impact) and periods of diversification in life forms (e.g., "Cambrian explosion").
  - **SLO#4:** Apply plate tectonic theory to formulate past, present, and future changes on Earth.
    - Examine how tectonic environments and processes have changed throughout Earth history.
    - Illustrate how paleomagnetism is used to locate the positions of crustal fragments in the past.
    - Deduce how rock sequences and units indicate specific mountain building events which add crust to continental masses.
    - Construct a general history of ocean basin development from specific examples identified in Earth history (e.g., Tethyan, proto-Atlantic).
    - Formulate a tectonic and geologic history of California and North America from geologic features found in the region.

**GEOL 311 Historical Geology Laboratory**

- **Units:** 1
- **Hours:** 54 hours LAB
- **Prerequisites:** None.
- **Corequisites:** GEOL 310
- **Advisory:** GEOL 300 and 301
- **Transferable:** CSU; UC
- **General Education:** CSU Area B3; IGETC Area 5A; IGETC Area 5C
- **C-ID:** C-ID GEOL 110L
- **Catalog Date:** June 1, 2020

Laboratory studies will accompany and complement GEOL 310, Historical Geology. Use of sedimentary rocks, fossils, geologic maps, and cross sections will aid in interpreting ancient environments, tectonic settings, and geologic history. Other concepts addressed include age relations and correlation of rock and time units, and introduction to fossil identification and biostratigraphy. At least one field trip or an appropriate alternative activity will be required as an introduction to sedimentary environments and field methods in geology.
Student Learning Outcomes

Upon completion of this course, the student will be able to:

- **SLO#1: Evaluate temporal rates and spatial scales of geologic processes in Earth history.**
  - Explain and apply methods used to determine the numerical and relative ages of geologic events.
  - Correlate changes in fossil distribution, isotopic ratios, elemental concentration in rocks to changes in sea level, climate change, and atmospheric composition in Earth history.
- **SLO#2: Evaluate sedimentary environments through geologic time.**
  - Resolve lithologic changes within a sedimentary basin.
  - Correlate strata over multiple stratigraphic sections.
- **SLO#3: Incorporate fossil evidence to decipher geologic history.**
  - Identify major groups and key examples of fossils and their ages.
  - Use index fossils to constrain the age of a geologic event.
- **SLO#4: Assess information from geologic maps.**
  - Extrapolate cross-sections from geologic maps.
  - Interpret geologic history from map information.
- **SLO#5: Apply plate tectonic theory to formulate past, present, and future changes on Earth.**
  - Examine how tectonic environments and processes have changed throughout Earth history.
  - Deduce how rock sequences and units indicate specific mountain building events which add crust to continental masses.

GEOL 330 Introduction to Oceanography

**Units:** 3  
**Hours:** 54 hours LEC  
**Prerequisite:** None.  
**Transferable:** CSU; UC  
**General Education:** AA/AS Area IV; CSU Area B1; IGETC Area 5A  
**Catalog Date:** June 1, 2020

The course will provide an introduction to the basic principles and practices of oceanography. Topics will be presented in terms of the applications of physics, geology, chemistry, and biology to a study of the world's oceans. Specific topics will include planetary science and earth origin, the geologic timescale, geography and location systems, matter, marine provinces, sediments, seismology, plate tectonics, seawater composition, geochemical distributions, deep ocean circulations, winds and surface circulation, waves, tides, estuarine environment, biological production, nekton, plankton, and benthic organisms.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- **SLO#1: Apply the scientific method to evaluating Earth processes.**
  - Evaluate the Scientific Method as a means to acquire and verify knowledge.
  - Explain specific instances where the Scientific Method advanced how Earth scientists understand ocean processes.
- **SLO#2: Evaluate temporal rates and spatial scales of Earth processes.**
  - Discuss the basic narrative of Earth origin and ocean development based on known scientific evidence.
  - Compare rates of change of ocean processes, including sea level, ocean chemistry, and temperature variations.
- **SLO#3: Apply plate tectonic theory to formulate past, present, and future changes on Earth.**
  - Explain how exploration of features of marine geology refined plate tectonic theory.
  - Analyze how plate tectonic theory explains the development of oceans, their growth, and their shrinkage and collapse.
  - Identify the main features of ocean floor topography.
- **SLO#4:** Assess how Earth processes affect the physical environments and resources of living organisms, and analyze evidence that living organisms have changed their physical environments.<p>

- Categorize different marine communities based on depth, available sunlight, salinities, and temperatures.

- Assess evidence of global climate change and how ocean processes are involved.

- Evaluate instances in which human activity caused positive and negative effects on ocean environments. <p>

- **SLO#5:** Determine the kinds and degrees of interaction between the atmosphere and the ocean and between the solid earth and ocean.<p>

- Describe how winds help to determine direction of major currents.

- Explain how winds affect wave dimensions.

- Investigate how coasts form in interactions of waves with various rocks.

- Explain how storms strengthen over water, weaken over land.

- Relate how temperature differentials between land and water generate certain kinds of breezes.

---

**GEOL 390 Field Studies in Geology**

| Units: | 1 - 4 |
| Hours: | 6 - 24 hours LEC; 36 - 144 hours LAB |
| Prerequisite: | None. |
| Advisory: | GEOL 300 or 305 |
| Transferable: | CSU; UC |
| Catalog Date: | June 1, 2020 |

This course covers the study of geologic principles and processes of specific areas (mountains, deserts, great valley, coastal region, etc.). A multi-day field trip and camping may be required. For specific details, see the course description(s) listed in the schedule.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- examine the surrounding physical and/or human environment and formulate explanations for the geologic patterns and processes observed. (SLO 1)

- apply concepts and processes discussed in lecture to the real world. (SLO 2)

- compose field notes and collect and analyze field data.

- integrate geologic information with other disciplines (geography, biology, ecology, urban studies, anthropology, history, economics, cultural studies, and others), as appropriate, in order to develop a comprehensive view of landscapes and processes. (SLO 3)

---

**GEOL 495 Independent Studies in Geology**

| Units: | 1 - 3 |
| Hours: | 54 - 162 hours LAB |
| Prerequisite: | None. |
| Transferable: | CSU |
| Catalog Date: | June 1, 2020 |

An independent studies project involves an individual student or small group of students in study, research, or activities beyond the scope of regularly offered courses. See the current catalog section of “Special Studies” for full details of Independent Studies.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- SLO #1: Actively engage in intellectual inquiry beyond that required in order to pass a course of study (College Wide Learning Outcome – Area 4).

- Discuss and outline a proposal of study (that can be accomplished within one semester term) with a supervising instructor qualified within the discipline.
• Design an independent study (to be completed individually or by collaboration of a small group) to foster special knowledge, skills, and experience that are not available in any one regularly scheduled course.

• Use information resources to gather discipline-specific information.

• SLO #2: Utilize modes of analysis and critical thinking to apply theoretical perspectives and/or concepts in the major discipline of study to significant problems and/or educational activities (College Wide Learning Outcome – Area 3).

• Analyze and apply the knowledge, skills and experience that are involved in the independent study to theoretical perspectives and/or concepts in the major discipline of study.

• Explain the importance of the major discipline of study in the broader picture of society.

• SLO #3: Communicate a complex understanding of content matter of the major discipline of study (College Wide Outcome – Area 3).

• Demonstrate competence in the skills essential to mastery of the major discipline of study that are necessary to accomplish the independent study.

• SLO #4: Identify personal goals and pursue these goals effectively (College Wide Outcome – Area 4).

• Utilize skills from the “academic tool kit” including time management, study skills, etc., to accomplish the independent study within one semester term.
Courses in Health Education are designed to provide students the essential information for the evaluation, protection and maintenance of individual health.

Dean
Collin Pregliasco
(916) 691-7261
PregliC@crc.losrios.edu

Associate Degree

A.S. in Health Information Technology

The CRC Health Information Technology A.S. degree program is designed to train health information professionals with the knowledge and skills to process, analyze, disseminate and maintain health care information. A career as a health information professional offers a unique opportunity to combine an interest in health information, business, and computer information science. Employment opportunities are available in long-term care, ambulatory care, and acute care facilities; state and federal health agencies; and private industry.

HIGHLIGHTS

According to the Bureau of Labor Statistics, employment of medical records and health information technicians is expected to increase by 21 percent from 2010 to 2020, faster than the average for all occupations.

*The HIT A.S. Degree Program is accredited by the Commission on Accreditation for Health Informatics and Information Management Education (CAHIIM) in cooperation with the Council on Accreditation of the American Health Information Management Association (The Certificate of Achievement Health Information Coding Specialist Program is not accredited by the Commission on Accreditation for Health Informatics and Information Education (CAHIIM)).

*A Non-paid clinical experience at an affiliated health-related agency is required as part of this Program.

*This is an online program

To be eligible for enrollment in the program, the student must meet the following criteria: A grade of "C" or better in the following courses; AH 110, AH 124, and BIOL 100 or 102. Completion of a pre-enrollment form. See the Program website for more information.

Catalog Date: June 1, 2020

Degree Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Semester 1 - Fall:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>HIT 100</td>
<td>Introduction to Health Information Technology: Hospital Settings</td>
<td>3</td>
</tr>
<tr>
<td>HIT 102</td>
<td>Introduction to Health Information Technology: Alternative Settings</td>
<td>2</td>
</tr>
<tr>
<td>HIT 120</td>
<td>Basic ICD-CM Coding</td>
<td>2</td>
</tr>
<tr>
<td>AH 120</td>
<td>Human Disease</td>
<td>3</td>
</tr>
<tr>
<td>COURSE CODE</td>
<td>COURSE TITLE</td>
<td>UNITS</td>
</tr>
<tr>
<td>-------------</td>
<td>----------------------------------------------------------</td>
<td>-------</td>
</tr>
<tr>
<td>CISC 302</td>
<td>Computer Familiarization</td>
<td>2</td>
</tr>
</tbody>
</table>

**Semester 2 - Spring:**

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIT 122</td>
<td>Advanced ICD Coding</td>
<td>4</td>
</tr>
<tr>
<td>HIT 130</td>
<td>Health Statistics</td>
<td>2</td>
</tr>
<tr>
<td>HIT 140</td>
<td>Computerized Health Information Systems</td>
<td>2</td>
</tr>
</tbody>
</table>

**Semester 3 - Fall:**

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIT 110</td>
<td>Medical Legal Aspects of Health Information</td>
<td>2</td>
</tr>
<tr>
<td>HIT 150</td>
<td>Continuous Quality Improvement</td>
<td>2</td>
</tr>
<tr>
<td>HIT 170</td>
<td>Health Information Technology Directed Practice I</td>
<td>4</td>
</tr>
</tbody>
</table>

**Semester 4 - Spring:**

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIT 160</td>
<td>Supervision for the Allied Health Professional</td>
<td>2</td>
</tr>
<tr>
<td>CISA 315</td>
<td>Introduction to Electronic Spreadsheets</td>
<td>2</td>
</tr>
<tr>
<td>CISA 320</td>
<td>Introduction to Database Management</td>
<td>1</td>
</tr>
</tbody>
</table>

Total Units: 35

1 AH 110 and AH 124 and BIOL 100 or 102 must be completed prior to enrolling in the AH program as part of the pre-enrollment process. Contact the Careers and Technology Division Office for more information.

The Health Information Technology Associate in Science (A.S.) degree may be obtained by completion of the required program, plus general education requirements, plus sufficient electives to meet a 60-unit total. See CRC graduation requirements.

**Enrollment Eligibility**

To be eligible for enrollment in the program, the student must meet the following criteria:

- Completion of AH 110, AH 124, and Biology 100 or 102 with grades of C or better.
- Completion of a pre-enrollment form. Forms are available online on the Health Information Technology website.

**Enrollment Process**

Eligible students are selected for the program according to the following steps:

- Only students who meet the enrollment eligibility criteria will be considered for the program.

**Student Learning Outcomes**

Upon completion of this program, the student will be able to:

- SLO #1 Recognize and apply the knowledge and skills necessary to pass the national Registered Health Information Technician (RHIT) examination.
- SLO #2 Demonstrate certifiable skills and knowledge to be employable in the health information field.

**Career Information**

Employment Opportunities are possible in the Following Settings: Ambulatory Care, Long-Term Care/Rehabilitation, State and Federal Health Agencies, Professional Review Organizations, Insurance Companies, Educational Settings, Consulting Firms, Mental Health/Chemical Dependency, Acute Care. Some career options may require experience in addition to two years of college study.

**Certificate of Achievement**
Health Information Coding Specialist Certificate

The Health Information Coding Specialist Certificate prepares the student to apply medical coding classifications to health care encounters using industry standards through both theory and practical (externship) applications for the purpose of: meeting health care industry needs; preparing students for appropriate certification exams; and providing career ladder opportunities for health care workers.

A career as a health information coding specialist offers a unique opportunity to combine an interest in health information, business, and computer information science. Employment opportunities are available in long-term care, ambulatory care, and acute care facilities; state and federal health agencies; and private industry.

The Certificate of Achievement Health Information Coding Specialist Program is not accredited by the Commission on Accreditation for Health Informatics and Information Education (CAHIIM).

HIGHLIGHTS
Employment of medical records and health information technicians is expected to increase by 21 percent from 2010 to 2020, faster than the average for all occupations.

This is an online program.

Enrollment Eligibility:
To be eligible for enrollment in the Health Information Coding Specialist Program, the student must meet the following criteria:
A grade of "C" or better in the following courses; AH 110, AH 124, and BIOL 100 or 102.

Completion of a pre-enrollment form. The form is available online on the Health Information Technology website.

Catalog Date: June 1, 2020

Certificate Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIT 100</td>
<td>Introduction to Health Information Technology: Hospital Settings</td>
<td>3</td>
</tr>
<tr>
<td>HIT 120</td>
<td>Basic ICD-CM Coding</td>
<td>2</td>
</tr>
<tr>
<td>AH 120</td>
<td>Human Disease</td>
<td>3</td>
</tr>
<tr>
<td>CISC 302</td>
<td>Computer Familiarization</td>
<td>2</td>
</tr>
<tr>
<td>HIT 122</td>
<td>Advanced ICD Coding</td>
<td>4</td>
</tr>
<tr>
<td>HIT 130</td>
<td>Health Statistics</td>
<td>2</td>
</tr>
<tr>
<td>HIT 110</td>
<td>Medical Legal Aspects of Health Information</td>
<td>2</td>
</tr>
<tr>
<td>HIT 150</td>
<td>Continuous Quality Improvement</td>
<td>2</td>
</tr>
<tr>
<td>HIT 172</td>
<td>Directed Practice: Health Information Coding Specialist</td>
<td>2</td>
</tr>
<tr>
<td>CISA 315</td>
<td>Introduction to Electronic Spreadsheets</td>
<td>2</td>
</tr>
<tr>
<td>CISA 320</td>
<td>Introduction to Database Management</td>
<td>1</td>
</tr>
<tr>
<td>Total Units:</td>
<td></td>
<td>27</td>
</tr>
</tbody>
</table>

1AH 110, AH 124, and BIOL 100 or 102 must be taken prior to enrolling in the HIT program as part of the pre-enrollment process. Contact the Careers and Technology Division Office for more information.

Enrollment Eligibility
To be eligible for enrollment in the program, the student must meet the following criteria:

- Completion of AH 110, AH 124, and Biology 100 or 102 with grades of C or better.
- Completion of a pre-enrollment form.

Enrollment Process
The aim of this course is to help people achieve a high level of wellness and prevent disease by assisting them to maximize both their personal lifestyles and their environments. This course will help you to identify the various factors influencing your current and future levels of wellness. Information presented will include, but not be exclusive to: mental health, stress management, nutrition, weight control, fitness, sexuality, addictive substances, and disease.

Upon completion of this course, the student will be able to:

- SLO #1: Examine and be able to utilize critical thinking skills to assess health information presented through health products, fitness endeavors and other sources.
- SLO #2: Explain the basic concepts of Health and Wellness
- SLO #3: Identify all dimensions of the individual and relate them to overall health.
- SLO #4: Evaluate their current status of Health in all dimensions of the individual.
- SLO #5: Identify characteristics of mental illness and understand treatment options for specific illnesses.
- SLO #6: Recognize the components of a healthy diet and avoid diet misconceptions.
- SLO #7: Apply training principles to a fitness program and avoid fitness misconceptions.
- SLO #8: Interpret and recognize signs of anorexia and bulimia.
- SLO #9: Distinguish between healthy and unhealthy behaviors in relationships.
- SLO #10: Identify structures and functions of the male and female reproductive anatomy.
- SLO #11: Identify the phases of human sexual response.
- SLO #12: Appraise the various birth control methods for effectiveness and understand how they work.
- SLO #13: Illustrate knowledge of pregnancy and birth.
- SLO #14: Recognize various drug properties and the effects of specific drugs on the body.

Employment Opportunities Are Possible in the Following Settings Ambulatory Care Long-Term Care/Rehabilitation State and Federal Health Agencies Professional Review Organizations Insurance Companies Consulting Firms Mental Health/Chemical Dependency Acute Care Some career options may require experience in addition to at least one year of college study.
HEED 350 Personal Wellness

Upon completion of this course, the student will be able to:

- SLO #1: Utilize critical thinking skills to assess health information presented through lectures, assignments and other sources.
- Define the basic concepts of health and wellness.
- Identify the components of fitness.
- Describe the recommendations of nutrition guidelines and assessments useful in selecting a proper diet.
- Evaluate the different ways to assess body composition.
- Distinguish between unhealthy and healthy stress.
- Analyze strategies useful in coping with stress.
- Evaluate and assess methods toward making responsible decisions.
- SLO #2: Evaluate their current personal health status and devise programs designed to improve and/or maintain that status.
- Evaluate their current status of Wellness.
- Apply training principles to a fitness program and avoid fitness misconceptions.
- SLO #3: Articulate the importance of lifestyle choices as a determinant toward disease prevention and leading a healthier, happier life.
- Measure and assess the effects of negative health habits and positive health habits on both short and long term health.
- SLO #4: Apply goal setting techniques to produce behavioral changes for improvement in their lives.
- Recognize the distinct stages for changing a behavior.
- Create short term, medium and long term goals geared toward behavioral changes for improved health.
- Evaluate and apply motivational techniques when implementing a behavioral change plan.

HEED 495 Independent Studies in Health Education

<table>
<thead>
<tr>
<th>Units:</th>
<th>1 - 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hours:</td>
<td>54 - 162 hours LAB</td>
</tr>
<tr>
<td>Prerequisite:</td>
<td>None.</td>
</tr>
<tr>
<td>Transferable:</td>
<td>CSU</td>
</tr>
<tr>
<td>Catalog Date:</td>
<td>June 1, 2020</td>
</tr>
</tbody>
</table>

An independent studies project involves an individual student or small group of students in study, research, or activities beyond the scope of regularly offered courses. See the current catalog section of "Special Studies" for full details of Independent Studies.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO #1: Actively engage in intellectual inquiry beyond that required in order to pass a course of study (College Wide Learning Outcome – Area 4).

- Discuss and outline a proposal of study (that can be accomplished within one semester term) with a supervising instructor qualified within the discipline.

- Design an independent study (to be completed individually or by collaboration of a small group) to foster special knowledge, skills, and experience that are not available in any one regularly scheduled course.

- Use information resources to gather discipline-specific information.

- SLO #2: Utilize modes of analysis and critical thinking to apply theoretical perspectives and/or concepts in the major discipline of study to significant problems and/or educational activities (College Wide Learning Outcome – Area 3).

- Analyze and apply the knowledge, skills and experience that are involved in the independent study to theoretical perspectives and/or concepts in the major discipline of study.

- Explain the importance of the major discipline of study in the broader picture of society.

- SLO #3: Communicate a complex understanding of content matter of the major discipline of study (College Wide Outcome – Area 3).

- Demonstrate competence in the skills essential to mastery of the major discipline of study that are necessary to accomplish the independent study.

- SLO #4: Identify personal goals and pursue these goals effectively (College Wide Outcome – Area 4).

- Utilize skills from the "academic tool kit" including time management, study skills, etc., to accomplish the independent study within one semester term.
Health Information Technology | Cosumnes River College

The CRC Health Information Technology program is designed to train health information professionals with the knowledge and skills to process, analyze, disseminate and maintain health care information. A career as a health information professional offers a unique opportunity to combine an interest in health information, business, and computer information science.

Dean
Collin Pregliasco
(916) 691-7261
PregliC@crc.losrios.edu

Associate Degree

A.S. in Health Information Technology

The CRC Health Information Technology A.S. degree program is designed to train health information professionals with the knowledge and skills to process, analyze, disseminate and maintain health care information. A career as a health information professional offers a unique opportunity to combine an interest in health information, business, and computer information science. Employment opportunities are available in long-term care, ambulatory care, and acute care facilities; state and federal health agencies; and private industry.

HIGHLIGHTS

According to the Bureau of Labor Statistics, employment of medical records and health information technicians is expected to increase by 21 percent from 2010 to 2020, faster than the average for all occupations.

*The HIT A.S. Degree Program is accredited by the Commission on Accreditation for Health Informatics and Information Management Education (CAHIIM) in cooperation with the Council on Accreditation of the American Health Information Management Association (The Certificate of Achievement Health Information Coding Specialist Program is not accredited by the Commission on Accreditation for Health Informatics and Information Education (CAHIIM)).

*This is an online program

To be eligible for enrollment in the program, the student must meet the following criteria: A grade of "C" or better in the following courses; AH 110, AH 124, and BIOL 100 or 102.
Completion of a pre-enrollment form. See the Program website for more information.

Catalog Date: June 1, 2020

Degree Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Semester 1 - Fall:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>HIT 100</td>
<td>Introduction to Health Information Technology: Hospital Settings</td>
<td>3</td>
</tr>
<tr>
<td>HIT 102</td>
<td>Introduction to Health Information Technology: Alternative Settings</td>
<td>2</td>
</tr>
<tr>
<td>HIT 120</td>
<td>Basic ICD-CM Coding</td>
<td>2</td>
</tr>
<tr>
<td>COURSE CODE</td>
<td>COURSE TITLE</td>
<td>UNITS</td>
</tr>
<tr>
<td>-------------</td>
<td>--------------------------------------------------</td>
<td>-------</td>
</tr>
<tr>
<td>AH 120</td>
<td>Human Disease</td>
<td>3</td>
</tr>
<tr>
<td>CISC 302</td>
<td>Computer Familiarization</td>
<td>2</td>
</tr>
</tbody>
</table>

**Semester 2 - Spring:**

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIT 122</td>
<td>Advanced ICD Coding</td>
<td>4</td>
</tr>
<tr>
<td>HIT 130</td>
<td>Health Statistics</td>
<td>2</td>
</tr>
<tr>
<td>HIT 140</td>
<td>Computerized Health Information Systems</td>
<td>2</td>
</tr>
</tbody>
</table>

**Semester 3 - Fall:**

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIT 110</td>
<td>Medical Legal Aspects of Health Information</td>
<td>2</td>
</tr>
<tr>
<td>HIT 150</td>
<td>Continuous Quality Improvement</td>
<td>2</td>
</tr>
<tr>
<td>HIT 170</td>
<td>Health Information Technology Directed Practice I</td>
<td>4</td>
</tr>
</tbody>
</table>

**Semester 4 - Spring:**

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIT 160</td>
<td>Supervision for the Allied Health Professional</td>
<td>2</td>
</tr>
<tr>
<td>CISA 315</td>
<td>Introduction to Electronic Spreadsheets</td>
<td>2</td>
</tr>
<tr>
<td>CISA 320</td>
<td>Introduction to Database Management</td>
<td>1</td>
</tr>
</tbody>
</table>

**Total Units:** 35

1AH 110 and AH 124 and BIOL 100 or 102 must be completed prior to enrolling in the AH program as part of the pre-enrollment process. Contact the Careers and Technology Division Office for more information.

The Health Information Technology Associate in Science (A.S.) degree may be obtained by completion of the required program, plus general education requirements, plus sufficient electives to meet a 60-unit total. See CRC graduation requirements.

**Enrollment Eligibility**

To be eligible for enrollment in the program, the student must meet the following criteria:

- Completion of AH 110, AH 124, and Biology 100 or 102 with grades of C or better.
- Completion of a pre-enrollment form. Forms are available online on the Health Information Technology website.

**Enrollment Process**

Eligible students are selected for the program according to the following steps:

- Only students who meet the enrollment eligibility criteria will be considered for the program.

**Student Learning Outcomes**

Upon completion of this program, the student will be able to:

- SLO #1 Recognize and apply the knowledge and skills necessary to pass the national Registered Health Information Technician (RHIT) examination.
- SLO #2 Demonstrate certifiable skills and knowledge to be employable in the health information field.

**Career Information**

Employment Opportunities are possible in the Following Settings: Ambulatory Care, Long-Term Care/Rehabilitation State and Federal Health Agencies, Professional Review Organizations, Insurance Companies, Educational Settings, Consulting Firms, Mental Health/Chemical Dependency, Acute Care. Some career options may require experience in addition to two years of college study.
Certificate of Achievement

Health Information Coding Specialist Certificate

The Health Information Coding Specialist Certificate prepares the student to apply medical coding classifications to health care encounters using industry standards through both theory and practical (externship) applications for the purpose of: meeting health care industry needs; preparing students for appropriate certification exams; and providing career ladder opportunities for health care workers.

A career as a health information coding specialist offers a unique opportunity to combine an interest in health information, business, and computer information science. Employment opportunities are available in long-term care, ambulatory care, and acute care facilities; state and federal health agencies; and private industry.

The Certificate of Achievement Health Information Coding Specialist Program is not accredited by the Commission on Accreditation for Health Informatics and Information Education (CAHIIM).

HIGHLIGHTS

- Employment of medical records and health information technicians is expected to increase by 21 percent from 2010 to 2020, faster than the average for all occupations.

This is an online program.

Enrollment Eligibility:

To be eligible for enrollment in the Health Information Coding Specialist Program, the student must meet the following criteria:

- A grade of "C" or better in the following courses; AH 110, AH 124, and BIOL 100 or 102.
- Completion of a pre-enrollment form. The form is available online on the Health Information Technology website.

Catalog Date: June 1, 2020

Certificate Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIT 100</td>
<td>Introduction to Health Information Technology: Hospital Settings</td>
<td>3</td>
</tr>
<tr>
<td>HIT 120</td>
<td>Basic ICD-CM Coding</td>
<td>2</td>
</tr>
<tr>
<td>AH 120</td>
<td>Human Disease</td>
<td>3</td>
</tr>
<tr>
<td>CISC 302</td>
<td>Computer Familiarization</td>
<td>2</td>
</tr>
<tr>
<td>HIT 122</td>
<td>Advanced ICD Coding</td>
<td>4</td>
</tr>
<tr>
<td>HIT 130</td>
<td>Health Statistics</td>
<td>2</td>
</tr>
<tr>
<td>HIT 110</td>
<td>Medical Legal Aspects of Health Information</td>
<td>2</td>
</tr>
<tr>
<td>HIT 150</td>
<td>Continuous Quality Improvement</td>
<td>2</td>
</tr>
<tr>
<td>HIT 172</td>
<td>Directed Practice: Health Information Coding Specialist</td>
<td>2</td>
</tr>
<tr>
<td>CISA 315</td>
<td>Introduction to Electronic Spreadsheets</td>
<td>2</td>
</tr>
<tr>
<td>CISA 320</td>
<td>Introduction to Database Management</td>
<td>1</td>
</tr>
<tr>
<td>Total Units:</td>
<td></td>
<td>27</td>
</tr>
</tbody>
</table>

$^1$AH 110, AH 124, and BIOL 100 or 102 must be taken prior to enrolling in the HIT program as part of the pre-enrollment process. Contact the Careers and Technology Division Office for more information.

Enrollment Eligibility

To be eligible for enrollment in the program, the student must meet the following criteria:

- Completion of AH 110, AH 124, and Biology 100 or 102 with grades of C or better.
- Completion of a pre-enrollment form.
Enrollment Process

Eligible students are selected for the program according to the following steps:

- Only students who meet the enrollment eligibility criteria will be considered for the program.

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- SLO # 1: DEMONSTRATE AN UNDERSTANDING OF HEALTH DATA MANAGEMENT WITH EMPHASIS ON HEALTH DATA STRUCTURE, CONTENT AND STANDARDS
  - Collect and maintain health data, such as data elements, data sets, and databases.
  - Analyze data to ensure documentation in the health record supports the diagnosis and reflects the patient's progress, clinical findings, and discharge status.
  - Validate policies and procedures to ensure the accuracy of health data.
  - Apply clinical vocabularies and terminologies used in the organization's health information systems.
  - Verify timeliness, completeness, accuracy, and appropriateness of data and data sources for patient care, management, billing reports, registries, and/or databases.

- SLO # 2: DEMONSTRATE AN UNDERSTANDING OF HEALTH INFORMATION REQUIREMENTS AND STANDARDS
  - Cite, monitor and apply organization-wide record documentation guidelines.
  - Cite and apply policies and procedures to ensure organizational compliance with regulations and standards.
  - Define the procedure of reporting compliance findings according to organizational policy.
  - Define accuracy and completeness of the patient record as defined by organizational policy and external regulations and standards.
  - Define the procedure for the preparation required of the organization for accreditation, licensing, and/or certification surveys.

Career Information

Employment Opportunities Are Possible in the Following Settings: Ambulatory Care, Long-Term Care/Rehabilitation, State and Federal Health Agencies, Professional Review Organizations, Insurance Companies, Consulting Firms, Mental Health/Chemical Dependency, Acute Care. Some career options may require experience in addition to at least one year of college study.

Health Information Technology (HIT)

HIT 100 Introduction to Health Information Technology: Hospital Settings

<table>
<thead>
<tr>
<th>Units:</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hours:</td>
<td>45 hours LEC; 27 hours LAB</td>
</tr>
<tr>
<td>Prerequisite:</td>
<td>None.</td>
</tr>
<tr>
<td>Catalog Date:</td>
<td>June 1, 2020</td>
</tr>
</tbody>
</table>

This course is an introduction to health records systems in the acute care setting focusing on procedures for completion, maintenance, and preservation of health information. The relationship between health information management and the health care delivery system will also be discussed. Students will become familiar with the concept of accreditation, certification, and licensing of health care facilities with emphasis on the accreditation survey process.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO #1: DEMONSTRATE AN UNDERSTANDING OF HEALTH DATA MANAGEMENT WITH EMPHASIS ON HEALTH DATA STRUCTURE, CONTENT AND STANDARDS
  - Collect and maintain health data, such as data elements, data sets, and databases.
  - Analyze data to ensure documentation in the health record supports the diagnosis and reflects the patient's progress, clinical findings, and discharge status.
  - Validate policies and procedures to ensure the accuracy of health data.
  - Apply clinical vocabularies and terminologies used in the organization's health information systems.
  - Verify timeliness, completeness, accuracy, and appropriateness of data and data sources for patient care, management, billing reports, registries, and/or databases.

- SLO # 2: DEMONSTRATE AN UNDERSTANDING OF HEALTH INFORMATION REQUIREMENTS AND STANDARDS
  - Cite, monitor and apply organization-wide record documentation guidelines.
  - Cite and apply policies and procedures to ensure organizational compliance with regulations and standards.
  - Define the procedure of reporting compliance findings according to organizational policy.
  - Define accuracy and completeness of the patient record as defined by organizational policy and external regulations and standards.
  - Define the procedure for the preparation required of the organization for accreditation, licensing, and/or certification surveys.
SLO # 3: DEMONSTRATE AN UNDERSTANDING OF HEALTH INFORMATION REIMBURSEMENT METHODOLOGIES

- Apply policies and procedures for the use of clinical data required for reimbursement and prospective payment systems (PPS) in healthcare delivery.
- Verify accurate billing through coding, chargemaster, claims management, and bill reconciliation processes.
- Recognize established guidelines to comply with reimbursement and reporting requirements such as the National Correct Coding Initiative.
- Compile patient data and perform data quality reviews to validate code assignment and compliance with reporting requirements such as outpatient prospective payment systems.

SLO # 4: DEMONSTRATE AN UNDERSTANDING OF HEALTH SERVICE ORGANIZATIONS AND DELIVERY SYSTEMS

- Apply information system policies and procedures required by national health information initiatives on the healthcare delivery system.
- Apply current laws, accreditation, licensure, and certification standards related to health information initiatives from the national, state, local, and facility levels.
- Apply policies and procedures to comply with the changing regulations among various payment systems for healthcare services such as Medicare, Medicaid, managed care, and so forth.
- Define the roles of various providers and disciplines throughout the continuum of healthcare and respond to their information needs.

HIT 102 Introduction to Health Information Technology: Alternative Settings

**Units:** 2  
**Hours:** 36 hours LEC  
**Prerequisite:** None.  
**Catalog Date:** June 1, 2020

This course introduces a multitude of alternative health care settings available to the health information management professional. The student will be introduced to: regulatory issues; documentation; reimbursement and funding; information management, including data flow, coding and classification, electronic information systems, and data sets; quality improvement and utilization management; risk management and legal issues; role of HIM professionals; and trends.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO # 1: Describe general characteristics of the healthcare practice area, including past, present, and future utilization, if applicable.
- SLO # 2: Demonstrate an understanding of regulatory issues, including licensure and accreditation standards.
- Demonstrate an understanding of documentation requirements and practices.
- Demonstrate an understanding of reimbursement, payment, and other revenue requirements, practices, and issues.
- SLO # 3: Demonstrate an understanding of information management, including coding and classification, data and information flow, electronic information systems, and data sets.
- SLO # 4: Describe issues in information management, including coding and classification, data and information flow, electronic information systems, and data sets.
- SLO # 5: Demonstrate an understanding of Quality assessment and utilization management activities, risk management and legal concerns.

HIT 110 Medical Legal Aspects of Health Information

**Units:** 2  
**Hours:** 36 hours LEC  
**Prerequisite:** HIT 100 with a grade of "C" or better  
**Catalog Date:** June 1, 2020
This course explores the legal aspects surrounding the maintenance, use, disclosure, and protection of health information. Policies and procedures that guide the handling of health information to prevent inappropriate use and improper disclosure will be discussed.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO # 1: Identify legal issues related to ownership, control, and confidentiality of health information.
- Become familiar with the types of laws that govern the healthcare industry.
- Understand the significance of statutes, administrative laws, and regulatory agencies with regard to the maintenance, use and disclosure of health information.
- Understand policies and procedures with regard to health information use and disclosure.
- Discuss the HIPAA Privacy Rule with regard to health information use and disclosure, including requirements implemented by the American Recovery and Reinvestment Act.
- Describe types of medical identity theft and understand actions required by the Red Flags Rule.
- Identify legal issues relating to the workforce, including employees and the medical staff.
- SLO # 2: Apply and promote ethical standards of practice.
- Identify ethical principles and professional values that can guide health information management professionals who must confront and respond to ethical problems.

HIT 120 Basic ICD-CM Coding

<table>
<thead>
<tr>
<th>Units:</th>
<th>2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hours:</td>
<td>27 hours LEC; 27 hours LAB</td>
</tr>
<tr>
<td>Prerequisite:</td>
<td>AH 120 with a grade of &quot;C&quot; or better</td>
</tr>
<tr>
<td>Catalog Date:</td>
<td>June 1, 2020</td>
</tr>
</tbody>
</table>

This introductory course covers the basic principles of coding diseases and procedures using the INTERNATIONAL CLASSIFICATION OF DISEASES, Current Edition. Coding for reimbursement will be introduced, including topics such as third-party payers and health care reimbursement methodologies.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO # 1: DEMONSTRATE AN UNDERSTANDING OF HEALTHCARE DATA MANAGEMENT AND CLINICAL CLASSIFICATION SYSTEMS.
- Use and maintain electronic applications and work processes to support clinical classification and coding.
- Apply diagnosis codes and procedure codes using ICD-CM/PCS.
- Adhere to current regulations and established guidelines in code assignment.
- Ensure accuracy of diagnostic/procedural groupings such as Diagnosis related groups (DRG), Ambulatory payment classification (APC), and so on.
- Use and maintain applications and processes to support other clinical classification and nomenclature systems.
- Resolve discrepancies between coded data and supporting documentation.
- SLO # 2: DEMONSTRATE AN UNDERSTANDING OF HEALTHCARE DATA MANAGEMENT AND REIMBURSEMENT METHODOLOGIES.
- Understand policies and procedures for the use of clinical data required in reimbursement and prospective payment systems (PPS) in healthcare delivery.
- Use established guidelines to comply with reimbursement and reporting requirements such as the National Correct Coding Initiative.
- Comprehend the processes for compilation of patient data and the performance of data quality reviews to validate code assignment and compliance with reporting requirements such as outpatient prospective payment systems.
- Understand clinical vocabularies and terminologies used in the organization's health information systems.
HIT 122 Advanced ICD Coding

This course is a study of advanced coding principles related to ICD-CM/PCS coding. Class lectures and labs will focus on learning and applying higher level coding skills. The Prospective Payment System and Diagnosis Related Groups (DRGs) will be introduced as well as coding for prospective payment for acute inpatient, long term care, and inpatient rehabilitation care. Computerized encoders and groupers may be emphasized.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO # 1: DEMONSTRATE AN UNDERSTANDING OF HEALTHCARE DATA MANAGEMENT AND CLINICAL CLASSIFICATION SYSTEMS.
- Use and maintain electronic applications and work processes to support clinical classification and coding.
- Apply diagnosis codes using ICD-CM/PCS codes.
- Adhere to current regulations and established guidelines in code assignment.
- Ensure accuracy of diagnostic/procedural groupings such as DRG, APC, and so on.
- Adhere to current regulations and established guidelines in code assignment.
- Use and maintain applications and processes to support other clinical classification and nomenclature systems (such as ICD-10-CM, Systemized Nomenclature of Medicine Clinical Terminology (SNOMED), and so on.
- Resolve discrepancies between coded data and supporting documentation.
- SLO # 2: DEMONSTRATE AN UNDERSTANDING OF HEALTHCARE DATA MANAGEMENT AND REIMBURSEMENT METHODOLOGIES.
- Apply policies and procedures for the use of clinical data required in reimbursement and prospective payment systems (PPS) in healthcare delivery.
- Support accurate billing through coding, chargemaster, claims management, and bill reconciliation processes.
- Use established guidelines to comply with reimbursement and reporting requirements such as the National Correct Coding Initiative.
- Compile patient data and perform data quality reviews to validate code assignment and compliance with reporting requirements such as outpatient prospective payment systems.
- Contribute to the definitions for and apply clinical vocabularies and terminologies used in the organization's health information systems.
- Verify timeliness, completeness, accuracy, and appropriateness of data and data sources for patient care, management, billing reports, registries, and databases.


The principles and mechanics of coding procedures according to the Current Procedural Terminology Coding System (CPT) are taught in this course. Coding for reimbursement will be introduced, including topics such as: third-party payers, health care reimbursement systems and the impact of HIPAA on reimbursement.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO # 1: DEMONSTRATE AN UNDERSTANDING OF HEALTHCARE DATA MANAGEMENT AND CLINICAL CLASSIFICATION SYSTEMS.
Use and maintain electronic applications and work processes to support clinical classification and coding.

Apply procedure codes using CPT/HCPCS.

Adhere to current regulations and established guidelines in code assignment.

Validate coding accuracy using clinical information found in the health record.

Resolve discrepancies between coded data and supporting documentation.

SLO # 2: DEMONSTRATE AN UNDERSTANDING OF HEALTHCARE DATA MANAGEMENT AND REIMBURSEMENT METHODOLOGIES.

Use established guidelines to comply with reimbursement and reporting requirements such as the National Correct Coding Initiative.

HIT 130 Health Statistics

Units: 2
Hours: 27 hours LEC; 27 hours LAB
Prerequisite: HIT 100 with a grade of "C" or better
Catalog Date: June 1, 2020

This course will introduce the principles of health care statistics including the process of abstracting data from medical records, the preparation of administrative and medical reports, the use of statistics in medical research, the applications of automated systems, and the interpretation of reports and the registration of vital statistics. Automated abstracting and vital statistics systems, as well as the use of spreadsheet packages for data display will be introduced.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO #1: DEMONSTRATE AN UNDERSTANDING OF HEALTH STATISTICS, BIOMEDICAL RESEARCH, AND QUALITY MANAGEMENT
  - Abstract and maintain data for clinical indices/databases/registries
  - Collect, organize, and present data for quality management, utilization management, risk management, and other related studies.
  - Compute and interpret healthcare statistics.
  - Apply Institutional Review Board (IRB) processes and policies.
  - Use specialized databases to meet specific organization needs such as medical research and disease registries.

HIT 140 Computerized Health Information Systems

Units: 2
Hours: 27 hours LEC; 27 hours LAB
Prerequisite: CISC 302 with a grade of "C" or better
Catalog Date: June 1, 2020

This online course will provide practical experience in the use of software programs commonly used in health information, including master patient index, chart tracking, abstracting, encoders and groupers, release of information, birth registration, and incomplete record management systems. Emphasis will also be placed on the use of spreadsheet and database programs in the manipulation and use of health information.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO #1: DEMONSTRATE AN UNDERSTANDING OF HEALTHCARE DATA MANAGEMENT, HEALTH DATA STRUCTURE, CONTENT AND STANDARDS.
  - Collect and maintain health data (such as data elements, data sets, and databases).
  - Conduct analysis to ensure documentation in the health record supports the diagnosis and reflects the patient's progress, clinical findings, and discharge status.
  - Apply policies and procedures to ensure the accuracy of health data.
Contribute to the definitions for and apply clinical vocabularies and terminologies used in the organization’s health information systems.

Verify timeliness, completeness, accuracy, and appropriateness of data and data sources for patient care, management, billing reports, registries, and/or databases.

SLO #2: DEMONSTRATE AN UNDERSTANDING OF HEALTHCARE DATA MANAGEMENT, HEALTH INFORMATION REQUIREMENTS AND STANDARDS.

Monitor and apply organization-wide health record documentation guidelines.

Apply policies and procedures to ensure organizational compliance with regulations and standards.

Report compliance findings according to organizational policy.

Maintain the accuracy and completeness of the patient record as defined by organizational policy and external regulations and standards.

SLO #3: DEMONSTRATE AN UNDERSTANDING OF HEALTHCARE DATA MANAGEMENT, CLINICAL CLASSIFICATION SYSTEMS.

Adhere to current regulations and established guidelines in code assignment.

Validate coding accuracy using clinical information found in the health record.

Use and maintain applications and processes to support other clinical classification and nomenclature systems (such as ICD-10-CM, SNOMED, and so on).

SLO #4: DEMONSTRATE AN UNDERSTANDING OF HEALTH SERVICE ORGANIZATIONS AND DELIVERY SYSTEMS.

Differentiate the roles of various providers and disciplines throughout the continuum of healthcare and respond to their information needs.

Use technology, including hardware and software, to ensure data collection, storage, analysis, and reporting of information.

Use common software applications such as spreadsheets, databases, word processing, graphics, presentation, e-mail, and so on in the execution of work processes.

Design and generate reports using appropriate software.

SLO #5: DEMONSTRATE AN UNDERSTANDING OF HEALTH SERVICES ORGANIZATION AND DELIVERY, PRIVACY, CONFIDENTIALITY, LEGAL, AND ETHICAL ISSUES.

Apply policies and procedures for access and disclosure of personal health information.

Use specialized software in the completion of HIM processes such as record tracking, release of information, coding, grouping, registries, billing, quality improvement, and imaging.

HIT 150 Continuous Quality Improvement

This course will provide an overview of Continuous Quality Improvement inherent in the health care industry. Students will explore the history and development of Continuous Quality Improvement (CQI) efforts in health care. Students will also discuss quality and process improvement techniques applicable to health care. The roles and responsibilities of individuals involved in medical staff peer review, utilization review and risk management will be presented to students. The concept of an organized medical staff will be discussed, as well as the role of the medical staff office. The variety of computer applications available for CQI and Medical Staff Organization (MSO) functions will also be presented to students.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

SLO # 1: DEMONSTRATE AN UNDERSTANDING OF HEALTH STATISTICS, BIOMEDICAL RESEARCH AND QUALITY MANAGEMENT.

Abstract and report data for facility-wide quality management and performance improvement programs.

Analyze clinical data to identify trends that demonstrate quality, safety, and effectiveness of healthcare.

SLO # 2: DEMONSTRATE AN UNDERSTANDING OF ORGANIZATIONAL RESOURCES, INCLUDING HUMAN RESOURCES.

Apply the fundamentals of team leadership.
HIT 160 Supervision for the Allied Health Professional

This course studies classic and current management principles in the healthcare setting. Students will be introduced to leadership styles, motivation principles, ethical standards, communication principles, and strategies for dealing with difficult behavior in the workplace.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- **SLO # 1: DEMONSTRATE AN UNDERSTANDING OF HEALTH DATA STRUCTURE, CONTENT AND USE.**
  - Collect and maintain health data (such as data elements, data sets, and databases).
  - Conduct analysis to ensure documentation in the health record supports the diagnosis and reflects the patient's progress, clinical findings, and discharge status.
  - Apply policies and procedures to ensure the accuracy of health data.
  - Contribute to the definitions for and apply clinical vocabularies and terminologies used in the organization’s health information systems.
  - Verify timeliness, completeness, accuracy, and appropriateness of data and data sources for patient care, management, billing reports, registries, and/or databases.
- **SLO # 2: DEMONSTRATE AN UNDERSTANDING OF QUALITY MANAGEMENT AND PERFORMANCE IMPROVEMENT.**
  - Recognize requirements for abstracting and reporting data for facility-wide quality management and performance improvement programs.
- **SLO # 3: DEMONSTRATE AN UNDERSTANDING OF HEALTHCARE PRIVACY, CONFIDENTIALITY, LEGAL AND ETHICAL ISSUES.**
  - Participate in the implementation of legal and regulatory requirements related to the health information infrastructure.
  - Apply policies and procedures for access and disclosure of personal health information.
  - Practice release of patient-specific data to authorized users.
  - Recognize requirements for conducting privacy and confidentiality training programs.
  - Investigate and recommend solutions to privacy issues/problems.
  - Apply and promote ethical standards of practice.
- **SLO # 4: DEMONSTRATE AN UNDERSTANDING OF HUMAN RESOURCES.**
  - Apply the fundamentals of team leadership.
  - Organize and contribute to work teams and committees.
  - Recognize requirements for conducting new staff orientation and training programs.
  - Recognize requirements for conducting continuing education programs.
  - Recognize requirements for monitoring staffing levels and productivity standards for health information functions, and provide feedback to management and staff regarding performance.
  - Communicate benchmark staff performance data.
  - Prioritize job functions and activities.
  - Use quality improvement tools and techniques to monitor, report and improve processes.
SLO # 5: DEMONSTRATE AN UNDERSTANDING OF FINANCIAL AND PHYSICAL RESOURCES.

- Make recommendations for items to include in budgets and contracts.
- Define the process for monitoring and ordering supplies needed for work processes.
- Describe the process for monitoring coding and revenue cycle processes.
- Recognize the process for recommending cost-saving and efficient means of achieving work processes and goals.
- Recognize the process required for contributing to work plans, policies, procedures, and resource requisitions in relation to job functions.

HIT 170 Health Information Technology Directed Practice

HIT 170 provides the student with practical work experience in community health-related institutions. The clinical experience is performed under professional supervision. Students perform delineated functions and will complete handbook questions about various health information management topics. Students shall have the status of learner and shall not be considered agency employees, nor shall they replace agency staff. Directed Practice is conducted as a non-paid laboratory experience. Students must have a TB clearance and any other immunization required by the clinical facility. A drug screen and background check may be required. Students must have an established Agency Agreement with a sponsoring site prior to the beginning of the first day of class. Contact the Career and Technology Main Office for information about the Agency Agreement.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO # 1: DEMONSTRATE AN UNDERSTANDING OF INFORMATION TECHNOLOGY AND SYSTEMS
  - Use technology, including hardware and software, to ensure data collection, storage, analysis, and reporting of information.
  - Use common software applications such as spreadsheets, databases, word processing, graphics, presentation, and e-mail, in the execution of work processes.
  - Use specialized software in the completion of HIT processes such as record tracking, release of information, coding, grouping, registries, billing, quality improvement, and imaging.
  - Apply policies and procedures to the use of networks, including intranet and Internet applications to facilitate the electronic health record (EHR), personal health record (PHR), public health, and other administrative applications.

- SLO # 2: DEMONSTRATE AN UNDERSTANDING OF DATA, INFORMATION AND FILE STRUCTURES
  - Apply knowledge of data base architecture and design (such as data dictionary, data modeling, data warehousing) to meet departmental needs.

- SLO # 3: DEMONSTRATE AN UNDERSTANDING OF DATA STORAGE AND RETRIEVAL
  - Use appropriate electronic or imaging technology for data/record storage.
  - Query and generate reports to facilitate information retrieval.
  - Design and generate reports using appropriate software.
  - Maintain archival and retrieval systems for patient information stored in multiple formats.
  - Coordinate, use, and maintain systems for document imaging and storage.

- SLO # 4: DEMONSTRATE AN UNDERSTANDING OF DATA SECURITY
  - Apply confidentiality and security measures to protect electronic health information.
  - Protect data integrity and validity using software or hardware technology.
  - Apply departmental and organizational data and information system security policies.

- SLO # 5: DEMONSTRATE AN UNDERSTANDING OF HEALTHCARE INFORMATION SYSTEMS

Units: 4
Hours: 36 hours LEC; 108 hours LAB
Prerequisite: HIT 102, 110, 122, 123, 140, and 150 with grades of "C" or better
Catalog Date: June 1, 2020
- Participate in the planning, design, selection, implementation, integration, testing, evaluation, and support for organization-wide information systems.
- Use the principles of ergonomics and human factors in work process design.
- SLO # 6: DEMONSTRATE AN UNDERSTANDING OF ORGANIZATIONAL RESOURCES.
- Use quality improvement tools and techniques to monitor, report, and improve processes.

HIT 172 Directed Practice: Health Information Coding Specialist

<table>
<thead>
<tr>
<th>Units:</th>
<th>2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hours:</td>
<td>27 hours LEC; 27 hours LAB</td>
</tr>
<tr>
<td>Prerequisite:</td>
<td>HIT 122 and 123 with grades of &quot;C&quot; or better</td>
</tr>
<tr>
<td>Catalog Date:</td>
<td>June 1, 2020</td>
</tr>
</tbody>
</table>

HIT 172 provides the student with practical work experience in community health-related institutions. The clinical experience is performed under professional supervision. Students perform coding and abstracting and other delineated functions and will complete handbook questions about various health information management topics. Students shall have the status of learner and shall not be considered agency employees, nor shall they replace agency staff. Directed Practice is conducted as a non-paid laboratory experience. Students must have a TB clearance and any other immunization required by the clinical facility. A drug screen and background check may be required. Students must have an established Agency Agreement with a sponsoring site prior to the beginning of the first day of class. Contact the Career and Technology Main Office for information about the Agency Agreement.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO # 1: DEMONSTRATE AN UNDERSTANDING OF HEALTH DATA MANAGEMENT AND CLINICAL CLASSIFICATION SYSTEMS.
- Use and maintain electronic applications and work processes to support clinical classification and coding.
- Apply diagnosis codes using ICD-CM/PCS.
- Ensure accuracy of diagnostic/procedural groupings such as Diagnosis Related Groups (DRG), Ambulatory Payment Classifications (APC) etc.
- Adhere to current regulations and established guidelines in code assignment.
- Validate coding accuracy using clinical information found in the health record.
- Use and maintain applications and processes to support other clinical classification and nomenclature systems (such as ICD-10-CM, SNOMED, and so on.)
- Resolve discrepancies between coded data and supporting documentation.

HIT 295 Independent Studies in Health Information Technology

<table>
<thead>
<tr>
<th>Units:</th>
<th>1 - 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hours:</td>
<td>54 - 162 hours LAB</td>
</tr>
<tr>
<td>Prerequisite:</td>
<td>None.</td>
</tr>
<tr>
<td>Catalog Date:</td>
<td>June 1, 2020</td>
</tr>
</tbody>
</table>

An independent studies project involves an individual student or small group of students in study, research, or activities beyond the scope of regularly offered courses. See the current catalog section of "Special Studies" for full details of Independent Studies.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO #1: Actively engage in intellectual inquiry beyond that required in order to pass a course of study (College Wide Learning Outcome – Area 4).
- Discuss and outline a proposal of study (that can be accomplished within one semester term) with a supervising instructor qualified within the discipline.
• Design an independent study (to be completed individually or by collaboration of a small group) to foster special knowledge, skills, and experience that are not available in any one regularly scheduled course.

• Use information resources to gather discipline-specific information.

• SLO #2: Utilize modes of analysis and critical thinking to apply theoretical perspectives and/or concepts in the major discipline of study to significant problems and/or educational activities (College Wide Learning Outcome – Area 3).

• Analyze and apply the knowledge, skills, and experience that are involved in the independent study to theoretical perspectives and/or concepts in the major discipline of study.

• Explain the importance of the major discipline of study in the broader picture of society.

• SLO #3: Communicate a complex understanding of content matter of the major discipline of study (College Wide Outcome – Area 3).

• Demonstrate competence in the skills essential to mastery of the major discipline of study that are necessary to accomplish the independent study.

• SLO #4: Identify personal goals and pursue these goals effectively (College Wide Outcome – Area 4).

• Utilize skills from the “academic tool kit” including time management, study skills, etc., to accomplish the independent study within one semester term.

HIT 298 Work Experience in Health Information Technology

This course provides students with opportunities to develop marketable skills in preparation for employment in their major field of study or advancement within their career. It is designed for students interested in work experience and/or internships in associate degree level or certificate occupational programs. Course content includes understanding the application of education to the workforce; completion of required forms which document the student's progress and hours spent at the work site; and developing workplace skills and competencies. Appropriate level learning objectives are established by the student and the employer. During the semester, the student is required to participate in a weekly orientation and 75 hours of related paid work experience, or 60 hours of unpaid work experience for one unit. An additional 75 or 60 hours of related work experience is required for each additional unit. Work Experience may be taken for a total of 16 units when there are new or expanded learning objectives. Only one Work Experience course may be taken per semester.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• DEMONSTRATE AN UNDERSTANDING AND APPLICATION OF PROFESSIONAL WORKPLACE BEHAVIOR IN A FIELD OF STUDY RELATED ONE’S CAREER.(SLO 1)

• Understand the effects time, stress, and organizational management have on performance.

• Demonstrate an understanding of consistently practicing ethics and confidentiality in a workplace.

• Examine the career/life planning process and relate its relevancy to the student.

• Demonstrate an understanding of basic communication tools and their appropriate use.

• Demonstrate an understanding of workplace etiquette.

• DESCRIBE THE CAREER/LIFE PLANNING PROCESS AND RELATE ITS RELEVANCY TO ONE’S CAREER.(SLO 2)

• Link personal goals to long term achievement.

• Display an understanding of creating a professional first impression.

• Understand how networking is a powerful job search tool.

• Understand necessary elements of a résumé.

• Understand the importance of interview preparation.
- Identify how continual learning increases career success.

- DEMONSTRATE APPLICATION OF INDUSTRY KNOWLEDGE AND THEORETICAL CONCEPTS AS WRITTEN IN LEARNING OBJECTIVES IN PARTNERSHIP WITH THE EMPLOYER WORK SITE SUPERVISOR (SLO 3)
Health Records Information Technology
| Cosumnes River College

The Health Records Information Technology program is in the process of discontinuance and will not be accepting new students.

The Health Records IT certificates are designed to quickly train students in the kind of computerized health information systems that are being installed by hospitals, medical and dental offices across the country. These IT systems make it possible for health care providers to better manage patient care through secure use and sharing of health information in electronic form. The electronic systems are replacing inefficient paper records and allow health providers to quickly review and update a patient’s medical history, which can be shared electronically as patients move to other health systems and/or to other geographic locations. Students completing these programs will support the IT systems that are in place in various health care related facilities.

Dean
Collin Pregliasco

(916) 691-7261
PregliC@crc.losrios.edu

Certificates of Achievement

Health Records IT Implementation Support Specialist Certificate

Students who complete this certificate will be prepared to provide on-site user support for the period of time before and during implementation of Health IT systems in clinical and public health settings. These individuals will provide support services, above and beyond what is provided by the vendor, to be sure the technology functions properly and is configured to meet the needs of the redesigned practice workflow.

Catalog Date: June 1, 2020

Certificate Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>CISA 320</td>
<td>Introduction to Database Management</td>
</tr>
<tr>
<td>CISC 308</td>
<td>Exploring Computer Environments and the Internet</td>
</tr>
<tr>
<td>CISC 356</td>
<td>Introduction to Local Area Networks</td>
</tr>
<tr>
<td>CISC 310</td>
<td>Introduction to Computer Information Science</td>
</tr>
<tr>
<td>AH 110</td>
<td>Medical Language for Health-Care Providers</td>
</tr>
<tr>
<td>HRIT 102</td>
<td>The Culture of Health Care (2)</td>
</tr>
<tr>
<td>HRIT 112</td>
<td>Networking and Health Information Exchange for Health Records IT Professionals</td>
</tr>
<tr>
<td>HRIT 132</td>
<td>Configuring Electronic Health Records (EHRs)</td>
</tr>
<tr>
<td>HRIT 140</td>
<td>Introduction to Health Records Management Information Systems</td>
</tr>
<tr>
<td>HRIT 142</td>
<td>Installation and Maintenance of Health Records IT Systems</td>
</tr>
<tr>
<td>COURSE CODE</td>
<td>COURSE TITLE</td>
</tr>
<tr>
<td>-------------</td>
<td>------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>HRIT 160</td>
<td>Professionalism and Customer Service in the Health Care Environment</td>
</tr>
<tr>
<td>HRIT 164</td>
<td>Usability and Human Factors in Health Records IT</td>
</tr>
<tr>
<td>HRIT 144</td>
<td>Working with Health Records IT Systems</td>
</tr>
<tr>
<td>HRIT 162</td>
<td>Training and Instructional Design in Health Records IT</td>
</tr>
<tr>
<td>HRIT 180</td>
<td>Special Topics Course on Vendor-Specific Systems in Health Records IT</td>
</tr>
<tr>
<td>COMM 341</td>
<td>Organizational Communication (3)</td>
</tr>
<tr>
<td>or COMM 361</td>
<td>The Communication Experience (3)</td>
</tr>
<tr>
<td>Total Units</td>
<td></td>
</tr>
</tbody>
</table>

**Student Learning Outcomes**

Upon completion of this program, the student will be able to:

- Execute implementation project plans, by installing hardware (as needed) and configuring software to meet practice needs.
- Incorporate usability principles into software configuration and implementation.
- Test the software against performance specifications.
- Interact with the vendors as needed to rectify technical problems that occur during the deployment process.
- Proactively identify software or hardware incompatibilities.
- Assist the practice in identifying a data back-up and recovery solution, and ensure the solution is effective.
- Ensure that the mechanism for hardware/software recovery (e.g., data backup or redundant systems) and related capabilities are appropriately implemented to minimize system downtime.
- Ensure that privacy and security functions are appropriately configured and activated in hardware and software.
- Document IT problems and evaluate the effectiveness of problem resolution.
- Assist end users with the execution of audits.
- Demonstrate effective listening skills to comprehend spoken messages, analyze information critically and consider multiple perspectives.
- Express ideas clearly in effective, appropriate and well-organized format.

**Career Information**

Health Care/IT Implementation Support Specialist

**Health Records IT Technical Support Specialist Certificate**

Students who complete this certificate will be prepared to support, on an ongoing basis, the technology deployed in clinical and public health settings. Workers in this role maintain systems in clinical and public health settings, including patching and upgrading of software. They also provide one-on-one support, in a traditional “help desk” model, to individual users with questions or problems.

**Catalog Date:** June 1, 2020

**Certificate Requirements**

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>CISA 320</td>
<td>Introduction to Database Management</td>
<td>1</td>
</tr>
<tr>
<td>COURSE CODE</td>
<td>COURSE TITLE</td>
<td>UNITS</td>
</tr>
<tr>
<td>-------------</td>
<td>-------------------------------------------------------------------------------</td>
<td>-------</td>
</tr>
<tr>
<td>CISC 308</td>
<td>Exploring Computer Environments and the Internet</td>
<td>1</td>
</tr>
<tr>
<td>CISC 310</td>
<td>Introduction to Computer Information Science</td>
<td>3</td>
</tr>
<tr>
<td>CISC 356</td>
<td>Introduction to Local Area Networks</td>
<td>1.5</td>
</tr>
<tr>
<td>AH 110</td>
<td>Medical Language for Health-Care Providers</td>
<td>3</td>
</tr>
<tr>
<td>HRIT 112</td>
<td>Networking and Health Information Exchange for Health Records IT Professionals</td>
<td>2</td>
</tr>
<tr>
<td>HRIT 142</td>
<td>Installation and Maintenance of Health Records IT Systems</td>
<td>2</td>
</tr>
<tr>
<td>HRIT 160</td>
<td>Professionalism and Customer Service in the Health Care Environment</td>
<td>1</td>
</tr>
<tr>
<td>HRIT 180</td>
<td>Special Topics Course on Vendor-Specific Systems in Health Records IT</td>
<td>1</td>
</tr>
<tr>
<td>CISS 310</td>
<td>Network Security Fundamentals</td>
<td>3</td>
</tr>
<tr>
<td>HRIT 132</td>
<td>Configuring Electronic Health Records (EHRs)</td>
<td>2</td>
</tr>
<tr>
<td>HRIT 144</td>
<td>Working with Health Records IT Systems</td>
<td>2</td>
</tr>
<tr>
<td>HRIT 164</td>
<td>Usability and Human Factors in Health Records IT</td>
<td>1</td>
</tr>
<tr>
<td>CISN 490</td>
<td>Networking Helpdesk Practicum</td>
<td>3</td>
</tr>
<tr>
<td>Total Units:</td>
<td></td>
<td>26.5</td>
</tr>
</tbody>
</table>

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- Interact with end users to diagnose IT problems and implement solutions.
- Document IT problems and evaluate the effectiveness of problem resolution.
- Support systems security and standards.
- Assist end users with the execution of audits and related privacy and security functions.
- Incorporate usability principles into ongoing software configuration and implementation.
- Ensure that the hardware/software “fail-over” and related capabilities are appropriately implemented to minimize system downtime.
- Ensure that privacy and security functions are appropriately configured and activated in hardware and software.
- Interact with the vendors as needed to rectify technical problems that occur during the deployment process.
- Work with the vendor and other sources of information to find the solution to a user’s question or problem as needed.
- Describe the purpose of typical networking hardware and software.
- Summarize the mechanisms used to make network data continuously available.
- Analyze fundamental security concepts.
- Demonstrate effective communication skills.
- Review the skills for troubleshooting computer problems.
- Examine common support problems.

Career Information

Technical Support Staff or Software Support Staff
Health Records IT Trainer Certificate

Students who complete this certificate will be prepared to design and deliver training programs, using adult learning principles, to employees in clinical and public health care settings.

Catalog Date: June 1, 2020

Certificate Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>CISC 310</td>
<td>Introduction to Computer Information Science</td>
<td>3</td>
</tr>
<tr>
<td>AH 110</td>
<td>Medical Language for Health-Care Providers</td>
<td>3</td>
</tr>
<tr>
<td>HRIT 160</td>
<td>Professionalism and Customer Service in the Health Care Environment</td>
<td>1</td>
</tr>
<tr>
<td>HRIT 100</td>
<td>Introduction to Health Care and Public Health in the U.S. (2)</td>
<td>2</td>
</tr>
<tr>
<td>HRIT 112</td>
<td>Networking and Health Information Exchange for Health Records IT Professionals (2)</td>
<td>2</td>
</tr>
<tr>
<td>HRIT 140</td>
<td>Introduction to Health Records Management Information Systems</td>
<td>2</td>
</tr>
<tr>
<td>HRIT 162</td>
<td>Training and Instructional Design in Health Records IT</td>
<td>1</td>
</tr>
<tr>
<td>HRIT 164</td>
<td>Usability and Human Factors in Health Records IT</td>
<td>1</td>
</tr>
<tr>
<td>HRIT 180</td>
<td>Special Topics Course on Vendor-Specific Systems in Health Records IT</td>
<td>1</td>
</tr>
<tr>
<td>COMM 301</td>
<td>Introduction to Public Speaking (3)</td>
<td>3</td>
</tr>
<tr>
<td>or COMM 331</td>
<td>Group Discussion (3)</td>
<td></td>
</tr>
<tr>
<td>Total Units:</td>
<td></td>
<td>19</td>
</tr>
</tbody>
</table>

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- Assess a range of Health Records IT applications, preferably at an expert level
- Communicate proficiently using both health care and IT concepts
- Assess training needs and competencies of adult learners
- Build lesson plans while structuring active learning principles for the users
- Analyze training records of the users and develop appropriate learning plans
- Demonstrate effective listening skills to comprehend spoken messages, analyze information critically and consider multiple perspectives.
- Express ideas clearly in effective, appropriate and well-organized format.

Career Information

Health Care IT Trainer/Instructor

Health Records Information Technology (HRIT)
HRIT 100 Introduction to Health Care and Public Health in the U.S.

Units: 2
Hours: 36 hours LEC
Prerequisite: None.
Catalog Date: June 1, 2020

This course is a survey of how health care and public health are organized and services delivered in the United States. It also covers public policy, relevant organizations and their interrelationships, professional roles, legal and regulatory issues, and payment systems.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- EXAMINE THE MEDICAL MODEL OF HEALTH CARE IN THE U.S. (SLO #01)
- Distinguish between health care systems and health care practice
- Measure key paradigm shifts in medicine
- Examine in overview terms the technology used in the delivery and administration of health care

- EVALUATE THE ADMINISTRATIVE AND FUNCTIONAL ORGANIZATION OF ENTITIES THAT DELIVER HEALTH CARE IN THE U.S., BOTH IN THE INPATIENT AS WELL AS THE OUTPATIENT SETTING (SLO #02)
- Compare the organization of healthcare at the federal, state and local levels
- Compare different types of long term care facilities, with an emphasis on their function

- RESEARCH THE ROLE OF VARIOUS HEALTHCARE PROFESSIONALS, THEIR EDUCATION, AND CERTIFICATION/LICENSURE REQUIREMENTS (SLO #03)
- Compare the organization of clinical health care delivery in the outpatient setting, and the organization of outpatient health care delivery (including organizational characteristics such as large medical groups, IPAs, small and single-provider offices, and types of outpatient environments such as multispecialty offices, single specialty offices, community health centers, urgent care centers and teaching/training clinics)
- Describe the organization of ancillary health care delivery in the outpatient setting
- Discuss the role of different health care providers, with an emphasis on the delivery of care in an interdisciplinary setting, and their education and licensing

- EXAMINE HEALTH CARE FINANCING STRUCTURES, INCLUDING INSURANCE PLANS, THIRD-PARTY Payers, MEDICARE, AND MEDICAID (SLO #04)
- Describe models of health care financing in the US and in selected other countries
- Describe the organization and function of Medicare and Medicaid
- Analyze the organization and structure of network-based managed care health insurance programs

- ASSESS METHODS OF BILLING AND REIMBURSEMENT IN HEALTHCARE (SLO #05)
- Describe concepts of billing and reimbursement in medicine
- Summarize, at a broad overview level, concepts of coding
- Discuss methods to control exorbitant medical costs

- COMPARE AND CONTRAST THE FUNCTION OF THE JOINT COMMISSION, FDA, CDC, AND NIH, WITH AN EMPHASIS ON EHRS (SLO #06)
- Categorize the organization and role of the Department of Health and Human Services (HHS), including the Office of the Secretary and the agencies of the HHS
- Describe the role of JCAHO and the process of accreditation and certification of health care organizations in the U.S.
- Identify major health care regulatory bodies in the U.S.
- Describe the key processes in regulating the confidentiality and safety of the patient in the health care environment
- Discuss legal aspects of medicine including medical malpractice and tort reform

- CONTRAST THE ORGANIZATION OF PUBLIC HEALTH IN THE U.S. AT THE FEDERAL, STATE, AND LOCAL LEVELS, AND DISCUSS THE ROLE OF PUBLIC HEALTH IN AVERTING EPIDEMICS AND BIO-TERRORISM (SLO #07)
Discuss the role of public health in mitigating the severity of communicable and chronic diseases, and in averting bioterrorism

DESCRIBE EVIDENCE-BASED MEDICINE, CLINICAL PRACTICE GUIDELINES, AND QUALITY INDICATORS IN MEDICINE. IDENTIFY KEY ORGANIZATIONS INVOLVED IN DEVELOPING CLINICAL GUIDELINES (SLO #08)

Uncover evidence-based medicine, clinical practice guidelines, and quality indicators in medicine

Inspect the patient-centered medical home

Discuss the key issues driving health care reform in the U.S.

HRIT 102 The Culture of Health Care

Units: 2
Hours: 36 hours LEC
Prerequisite: None.
Catalog Date: June 1, 2020

This course addresses job expectations in a health care setting. It covers how care is organized inside a practice setting, privacy laws, and professional and ethical issues encountered in the workplace.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- ANALYZE THE MAJOR TYPES OF CLINICAL PERSONNEL INVOLVED IN HEALTH CARE, INCLUDING THEIR EDUCATION AND TRAINING, CERTIFICATION AND LICENSURE, AND TYPICAL ROLES IN HEALTH CARE (SLO #01)
- Categorize common medical specialties and sub-specialties
- Assess doctors and nurses (their education, training, certification, licensure, and roles)
- Describe the major types of settings in which health care occurs including ambulatory care, acute and emergency care, hospital based and critical care, and community health and public health settings.
- UNCOVER THE MAJOR TYPES OF SETTINGS IN WHICH HEALTH CARE OCCURS INCLUDING AMBULATORY CARE, ACUTE AND EMERGENCY CARE, HOSPITAL BASED AND CRITICAL CARE, AND COMMUNITY HEALTH AND PUBLIC HEALTH SETTINGS (SLO #02)
- Distinguish between outpatient care and secondary care
- COMPARISONTHE MAJOR PROCESSES OF INFORMATION GATHERING, ANALYSIS, AND DOCUMENTATION USED BY CLINICIANS TO DETECT, UNDERSTAND, AND PREVENT OR TREAT DISEASES (SLO #03)
- Critique the classic paradigm (one doctor, one patient, one problem, one episode)
- Compare the differences between nursing assessment, intervention, and judgment
- EXAMINE THE ROLE OF COMMUNITY HEALTH AND PUBLIC HEALTH IN MANAGING ILLNESS OUTBREAKS, EPIDEMICS, AND PANDEMICS (SLO #04)
- INSPECT THE ROLE OF MEDICAL ETHICS AND PROFESSIONAL VALUES IN CARE DELIVERY INCLUDING SUCH ISSUES AS PRIVACY (INCLUDING HIPAA), ETHICAL CONFLICTS, AND HEALTH DISPARITIES (SLO #05)
- Critique the Oath of Geneva
- Compare the principles of medical ethics (autonomy, beneficence, non-maleficence and justice)
- Evaluate some common ethical conflicts (privacy and confidentiality, end of life care, death with dignity, disparities in health care, ‘rationing’ of care and clinician religious and conscientious objection)
- ANALYZE COMMON FORMS OF QUALITY MEASUREMENT, PERFORMANCE IMPROVEMENT, AND INCENTIVE PAYMENT SCHEMES MEANT TO INFLUENCE CARE DELIVERY (SLO #06)
- Examine quality measurement, performance improvement, and incentive payment schemes meant to influence care delivery
- Evaluate socio-technical aspects of medicine
- Rate the interaction and interdependence of social and technical issues, such as the "resistance to change"
HRIT 104 Medical Terminology for Health Records IT Professionals

This course is designed to give IT Professionals an overview of medical language. Students will learn basic terms found in the health care systems. This course is intended only for students in the HRIT program. If you are interested in other Allied Health programs, please see a counselor or someone in the appropriate department to determine which medical terminology course will meet your program's requirements.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- POSSESS A BASIC WORKABLE KNOWLEDGE OF MEDICAL VOCABULARY – SLO #1
- Utilize medical terms correctly as they apply to the systems of the body - anatomy, physiology, disease, diagnosis, and treatment
- Define medical abbreviations and translate in to non-medical language.
- ANALYZE THE STRUCTURAL DESIGN OF MEDICAL TERMS - SLO #2
- Compose medical words with correct spelling and pronunciation
- Identify component parts of a medical word including prefixes, suffixes and combining forms.

HRIT 112 Networking and Health Information Exchange for Health Records IT Professionals

This course is designed to give IT Professionals an overview of data mobility. Students will learn about hardware infrastructure, Internet protocols, nationwide health records information systems, and other nationwide approaches.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- POSSESS A BASIC WORKABLE KNOWLEDGE OF THE COMPONENTS OF HEALTH RECORDS IT STANDARDS FOR HEALTH INFORMATION EXCHANGE-SLO #1.
- Identify component parts of health records IT standards, including Health Level 7 and Technical Committee standard 215.
- POSSESS A BASIC KNOWLEDGE OF PRIVACY, CONFIDENTIALITY, AND SECURITY STANDARDS FOR HEALTH INFORMATION EXCHANGE-SLO #2
- Describe professional and regulatory standards related to privacy, confidentiality, and security when implementing and maintaining networks and health information exchange systems.

HRIT 132 Configuring Electronic Health Records (EHRs)

This course offers a practical experience with a laboratory component, addressing approaches to assessing, selecting, and configuring EHRs to meet the specific needs of customers and end-users.
Student Learning Outcomes

Upon completion of this course, the student will be able to:

- EXPLAIN THE IMPORTANCE OF MIGRATING TO AN ELECTRONIC HEALTH RECORD (EHR) SYSTEM (SLO #01).
- Describe the migration to the electronic health record.
- Determine the appropriate members for a steering committee, who are planning to move to electronic health records.
- Define the steps in a basic strategic management plan.
- RELATE THE IMPORTANCE OF MEANINGFUL USE TO DEFINE THIS FIELD (SLO #02).
- Understand the process and purpose of EHR certification and the work of CCHIT and other possible certifying bodies.
- Understand how the exchange of electronic health data relates to meaningful use.
- Understand how clinical quality measures relate to meaningful use.
- DEFINE A CLINICAL DECISION SUPPORT (CDS) SYSTEM (SLO #03).
- Define what is meant by clinical decision support (CDS) systems.
- Discuss key factors in the development of CDS for clinical and administrative use.
- Given a case study, analyze the issues related to provider fatigue related to alerts and reminders.
- EVALUATION OF AN EHR SYSTEM AND SELECTION CRITERIA FOR A HOSPITAL AND A DOCTOR’S OFFICE (SLO #04).
- Analyze/interpret user specification requirements against vendor specifications.
- Assess interpersonal skills between IT and user.
- Discuss/role-play the interaction between IT and user for successful development of user data entry screens and templates.
- Discuss key issues in electronic health record development and implementation affecting acute care.
- Discuss key issues in electronic health record development and implementation affecting long term care including interchange of health information with acute care.
- Discuss key issues in electronic health record development and implementation affecting ambulatory care including interoperability with acute care, ASP and community offerings for an EHR.
- Discuss key issues in electronic health record development in other health care settings including physician practice, home health and hospice, behavioral health, and health departments.

HRIT 140 Introduction to Health Records Management
Information Systems

Units: 2
Hours: 36 hours LEC
Prerequisite: None.
Catalog Date: June 1, 2020

This course is an introduction to health records IT standards, health-related data structures, software applications, and enterprise architecture in health care and public health organizations.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- RECOMMEND SOME GENERAL FUNCTIONS, PURPOSES AND BENEFITS OF HEALTH INFORMATION SYSTEMS, WHY THEY ARE NEEDED, AND THE BENEFITS THEY PROVIDE IN DIFFERENT HEALTHCARE AND PUBLIC HEALTH SETTINGS (SLO #01)
- Detect how health informaticians process data into information and knowledge for health care tasks with the support of information technology to improve patient care
- Critique the professional roles and skills of health informaticians
- Recommend some good information management, information technology and informatics systems
- INVESTIGATE THE SIGNIFICANT DEVELOPMENTS AND FEDERAL INITIATIVES THAT HAVE INFLUENCED THE EVOLUTION AND ADOPTION OF HEALTH INFORMATION SYSTEMS (SLO #02)
• COMPARE AND CONTRAST THE DIFFERENT TYPES OF HEALTH INFORMATION SYSTEMS IN TERMS OF THEIR ABILITY TO SUPPORT THE REQUIREMENTS OF A HEALTH CARE ENTERPRISE (SLO #03)

• Define the concept of an information system in general and characteristics of an information system and a health information system in particular

• Examine the challenges presented by emerging trends in information technology (e.g., mobility, web services, the Internet, Intranet, and wireless computing), social media, and global communications

• Discuss the advantages and disadvantages of using the Internet as a platform for health care applications

• MEASURE HOW ELECTRONIC HEALTH RECORDS AFFECT PATIENT SAFETY, QUALITY, EFFICIENCY AND PATIENT CARE, PRODUCTIVITY, AND REPORTING OUTCOMES (SLO #04)

• Compare and contrast the similarities and differences between an electronic medical record (EMR) and electronic health record (EHR)

• Explain how the use of an EHR can affect patient care safety, efficiency of care practices, and patient outcomes

• Outline issues regarding governmental regulation of EHR systems such as meaningful use of interoperable health information technology and a qualified EHR

• Identify how ongoing developments in biomedical informatics can affect future uses and challenges related to health information systems

• Research how the Institute of Medicine’s ‘Vision for 21st Century Health Care’ and ‘Wellness’ may impact health management information systems

• PROPOSE STRATEGIES TO MINIMIZE MAJOR BARRIERS TO THE ADOPTION OF ELECTRONIC HEALTH RECORDS (SLO #05)

• Examine the purposes, processes, storage concerns, and management issues related to the use of imaging systems in healthcare

• Analyze the purpose, attributes and functions of patient monitoring systems

• Analyze how the integration of data from many sources assists health care professionals in making clinical decisions

• Examine the role of smart technology and links to health information systems for use in the home

• EMPLOY THE PRINCIPLES OF HEALTHCARE DATA EXCHANGE AND STANDARDS, WORKFLOW DESIGN AND ASSESSMENT, AND THEIR RELATIONSHIP TO PATIENT CARE (SLO #06)

• Discuss how current and emerging technologies may influence consumer health informatics

• Explore the strategies used by healthcare organizations to ensure integration of front-end clinical data collection, back-end billing functions

• Explain how automation tools (such as scheduling system support tools) need to be and are being integrated in health information systems

• Describe the significance of information systems in promoting the health of the public and communities

• Examine how a national health information infrastructure is related to homeland security

• Explore how public health related large-scale strategies and other federal initiatives are likely to shape the development of an HAI Information Architecture

HRIT 142 Installation and Maintenance of Health Records IT Systems

**Units:** 2
**Hours:** 27 hours LEC; 27 hours LAB
**Prerequisite:** CISA 320, CISC 356, and HCIT 112 with grades of “C” or better
**Catalog Date:** June 1, 2020

This course covers the installation and maintenance of a Health IT system, including testing prior to implementation. Introduction to principles underlying system configuration is also covered.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

• DESCRIBE THE USE OF CLIENT AND SERVER HARDWARE TO ACCESS AND STORE EHRS (SLO #01).

• Describe network needs to access and store EHRs.
Identify application software and back-end data storage software in a Health IT System.

DEFINE COTS (COMMERCIAL OFF-THE-SHELF) AND IN-HOUSE/HOMEGROWN SYSTEMS AND DESCRIBE THEIR RELATIVE ADVANTAGES AND DISADVANTAGES (SLO #02).

Estimate costs and consider advantages and disadvantages of purchasing versus licensing hardware and software.

Explain vendor documentation of system functionality and requirements.

Determine whether systems meet ARRA “Meaningful Use” criteria.

Compare and rank vendor systems.

Evaluate and select system based on requirements and certification needs.

IDENTIFY POSSIBLE STEPS TO CHOOSING AN EHR SYSTEM (SLO #03).

Gather functional requirements from institution and users.

Document use-cases and relate them to functional requirements.

Prioritize functional requirements, including grouping as essential versus desired.

Identify minimum and recommended software and hardware requirements.

CREATE PROJECT PLAN FOR SYSTEM DESIGN AND IMPLEMENTATION, INCLUDING DATA MIGRATION AND CONVERSION (SLO #04).

DEFINE THE STEPS OF THE SOFTWARE DEVELOPMENT LIFE CYCLE (SDLC) AND THE PURPOSE AND IMPORTANCE OF EACH ONE (SLO #05).

Map project plan to SDLC model.

Choose a popular, commonly-known software application and describe how it might have gone through the SDLC.

IDENTIFY REGULATORY REQUIREMENTS, SUCH AS HIPAA, FOR EHRs AND INTEGRATE THEM INTO THE PROJECT PLAN (SLO #06).

Identify best practices for OS and network system security installation and patches (such as those provided by vendors, SANS, and ISC2) and integrate into project plan.

Provide training for system users regarding the methods and importance of security compliance.

IDENTIFY AND IMPLEMENT AN EFFECTIVE TROUBLESHOOTING PROCEDURE FOR REPORTING, EVALUATING, FIXING, DEPLOYING, AND FOLLOWUP OF ERRORS, PROBLEMS, OR LIMITATIONS FOR THE SYSTEM (SLO #07).

Develop a process for communicating requirements and supplying updates between vendors/developer and users.

Create a baseline for system performance measurement and comparison for troubleshooting.

PERFORM SYSTEM TESTING AND VALIDATION (SLO #08).

Gather user feedback and performance baseline for system validation and testing

Document problems with their resolution status.

Create, execute, and document a test plan.

HRIT 144 Working with Health Records IT Systems

Units: 2
Hours: 27 hours LEC; 27 hours LAB
Prerequisite: HCIT 142 with a grade of “C” or better
Catalog Date: June 1, 2020

Students will work with simulated systems or real systems with simulated data. As they play the role of practitioners using these systems, they will learn what is happening “under the hood.” They will experience threats to security and appreciate the need for standards, high levels of usability, and how errors can occur.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- UNDERSTAND THE COMPONENTS OF A HEALTH IT SYSTEM (SLO #01).
Define a system and relate systems concepts to HIT
Discuss specific examples of settings where Health IT is used (acute, rural, public health, clinic, office, patient home, etc.).
Identify common components of a clinical HIT system.
Demonstrate beginning level competency in maneuvering the demonstration EHRS.
IDENTIFY THE FUNCTIONS OF A HEALTH IT SYSTEM (SLO #02).
- Identify the health IT functions that support a generic ambulatory patient care process.
- Identify the health IT functions that support a generic inpatient care process.
DISCUSS THE WAY INFORMATION IS EXCHANGED IN A HEALTH IT SYSTEM (SLO #03).
- Identify common elements of the HIT system.
- Explain the need for standards and why they exist.
- Define and differentiate between messaging standards and terminology standards.
- Compare current efforts to facilitate health information exchange between providers, communities, regions, & nation. (basic level definitions/descriptions – NHIN, HIEs, etc.).
UNDERSTAND THE EFFECTIVENESS OF A HEALTH IT SYSTEM (SLO #04).
- Identify characteristics of an effective HIT system.
- Define and provide examples of how evidence-based practice can be supported in HIT Systems.
- List and contrast different types of reports/queries (predefined vs. ad hoc) required for internal and external reporting.
DEFINE THE USEABILITY OF A HEALTH IT SYSTEM (SLO #05).
- Define usability in relation to HIT systems.
- Explain the impact of HIT usability on user satisfaction, adoption, and workarounds in error rates or unintended consequences.
- Provide alternatives to HIT usability bottlenecks.
RECITE ISSUES RELATED TO PRIVACY, SECURITY, AND CONFIDENTIALITY IN A HEALTH IT SYSTEM (SLO #06).
- Explain and illustrate privacy, security, and confidentiality in HIT settings.
- Identify common threats encountered when using HIT.
- Formulate strategies to minimize threats to privacy, security, and confidentiality in HIT systems.

HRIT 160 Professionalism and Customer Service in the Health Care Environment

This course is designed to give IT Professionals an overview of the skills necessary to communicate effectively across the full range of roles that will be encountered in health care and public health settings.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- EXPLAIN KEY ELEMENTS OF CUSTOMER SERVICE IN HEALTH CARE IT-SLO #1
- Describe the definitions of customer service.
- Identify different approaches to customer service in Health Care IT.
- DEMONSTRATE EFFECTIVE WRITTEN AND ORAL COMMUNICATION APPROACHES TO COMMON COMMUNICATION INTERACTIONS-SLO # 2.
- Identify common roles in health care.
HRIT 162 Training and Instructional Design in Health Records IT

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- EXAMINE DIFFERENT INSTRUCTIONAL SYSTEMS DESIGN METHODS AND THE PHASES OF THE ADDIE MODEL OF INSTRUCTION DESIGN, TO A GIVEN POPULATION OF ADULT LEARNERS (SLO #01)
- Analyze the levels of learning per Bloom’s Taxonomic Domains (Cognitive, Affective, Psychomotor)
- Categorize the characteristics of adult learners and factors that could impact training design and learning outcomes
- Describe the five phases of the ADDIE (Analysis, Design, Development, Implementation, and Evaluation) model of instruction design.
- PLAN AND IMPLEMENT AN INSTRUCTIONAL NEEDS ASSESSMENT, GIVEN A SPECIFIC POPULATION OF USERS IN A HEALTH CARE SETTING (SLO #02)
- Identify an instructional design problem for a given group of learners and a training setting
- List a range of useful data collection methods for conducting needs assessments in healthcare settings
- Analyze learner, task, and situational characteristics
- Recognize the special training needs and constraints in a health care setting
- ASSEMBLE A LESSON PLAN USING APPROPRIATE INSTRUCTIONAL METHODS AND APPROACHES, GIVEN A SPECIFIC POPULATION OF LEARNERS (SLO #03)
- Compile measurable goals and learning objectives for a training program which meet the SMART criteria (Specific, Measurable, Attainable, Relevant, Time-bound)
- Make specific learning objectives based on Bloom’s Taxonomy, classifying learning from the simplest to the most complex levels
- Identify the appropriate instructional approaches tied to a needs analysis, situational characteristics, and subject matter domain when designing a lesson plan
- Select appropriate activities for training objectives
- Create learning objectives that are tied to needs analysis and outcomes
- CONSTRUCT AN INSTRUCTIONAL PRODUCT USING APPROPRIATE MEDIA, SUCH AS CUSTOMIZED IMAGES, CUSTOMIZED VIDEO (SLO #04)
- Design simple online tutorials using screen capture software
- Select appropriate instructional media for a given lesson plan and objectives/goals
- CREATE A CUSTOM PRESENTATION USING THE PRINCIPLES OF EFFECTIVE DESIGN, GIVEN A PARTICULAR TRAINING PROGRAM AND LEARNER POPULATION (SLO #05)
- Construct a script or storyboard for a presentation
- Distinguish between the appropriate use of color and text in a presentation
- Assess different software for designing instructional materials
- Design a custom slide background for a training program
- BUILD A MULTIMEDIA TRAINING/PRESENTATION, GIVEN A SET OF USER NEEDS AND TRAINING CONTEXT (SLO #06)
- Assess the training environment
- Modify a presentation to compensate for presentation constraints
- Demonstrate effective public speaking skills
- Operate necessary computer and AV equipment to make an effective multimedia presentation

**CONDUCT STUDENT OUTCOME ASSESSMENTS AND PROGRAM EVALUATIONS IN GIVEN TRAINING CONTEXTS (SLO #07)**
- Assess appropriate assessment/testing instruments and procedures aligned with instructional goals/objectives
- Conduct formative evaluations in one-on-one and group contexts

**DESIGN A TRAINING PROGRAM IN LEARNING MANAGEMENT SYSTEMS (LMS) THAT ADHERE TO THE STANDARDS AND OPEN SOURCE INITIATIVES IN ONLINE LEARNING (SLO #08)**
- Build a training program in an LMS, applying standards for online learning
- Identify the role of standards and open source initiatives in online learning
- Describe the basic functions and technologies in Learning Management Systems (LMS) and Content Management Systems (CMS)

**CLASSIFY AND IMPLEMENT WEB 2.0 TECHNOLOGIES AS INSTRUCTIONAL TECHNOLOGIES GIVEN A SPECIFIC PLATFORM AND TRAINING PROGRAM (SLO #09)**
- Distinguish between synchronous and asynchronous learning
- Utilize different tools within the design and delivery of online training
- Select an appropriate platform for a particular training program
- Use basic functions of an LMS or CMS

---

**HRIT 164 Usability and Human Factors in Health Records IT**

**Units:** 1  
**Hours:** 18 hours LEC  
**Prerequisite:** None  
**Catalog Date:** June 1, 2020

This course covers the discussion of rapid prototyping, user-centered design and evaluation, usability; understanding effects of new technology and workflow on downstream processes; and facilitation of a unit-wide focus group or simulation.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- ARTICULATE A SYSTEMS APPROACH TO USABILITY AND HUMAN FACTORS AS IT APPLIES TO HEALTH INFORMATION TECHNOLOGY (SLO #01)
- Assess the importance of technology in health
- Test the concept of system usability
- Distinguish patient safety issues
- EXPLAIN THE COGNITIVE CONSEQUENCES OF HEALTH INFORMATION TECHNOLOGY ON CLINICAL PERFORMANCE (SLO #02)
- Produce an understanding of how to conduct a workflow analysis
- Construct different methods to interpret results of data collection
- Support the need of gathering an usability evaluation
- COMPARE AND CONTRAST COGNITION AND HUMAN PERFORMANCE MODELS (SLO #03)
- Investigate the concept of cognitive engineering
- Examine the representational effect as it applies to human computer interaction and web design
- Correlate how cognition and human performance models should inform iterative design processes
- Examine human factors in relation to systems-design and the study of human errors and patient safety (SLO #04)
- Distinguish between human factors and human computer interactions (HCI) as they apply to usability
- Describe how the concepts of mental workload, selective attention and information overload affect usability
- Select the most appropriate usability evaluation method, given particular system, setting, and development phase (SLO #05)
- Rate the different usability testing environments, required equipment, logistics, and materials (moderator/facilitator guide, consent forms, and surveys) being used today
- Apply principles of usability and design to critiquing EHR systems and to making recommendations for iterative improvement (SLO #06)
- Analyze the role of usability testing, training and implementation of electronic health records
- Identify potential methods of assessing and rating EHR usability when selecting an appropriate EHR
- Explain how user-centered design can enhance adoption of EHRs
- Diagnose problems associated with a clinical decision support system (SLO #07)
- Define clinical decision support and its relation to errors in clinical error
- Assess cognitive methods of analysis to medical device testing (SLO #08)
- Define the scope of medical devices in healthcare
- Distinguish the role of usability in mobile health devices and communication in healthcare
- Compare and contrast user interface designs using cognitive methods of analysis, usability testing, and Nielsen's heuristic evaluation method (SLO #09)
- Recognize whether an interface design exhibits good design principles
- Reason how requirements translate into good design
- Distinguish the difference between low fidelity and high fidelity prototypes and when it would be appropriate to use one versus the other
- Detect various types of errors and create or select potential solutions (SLO #10)
- Identify sources of error in medicine
- Define workflow analysis
- Explain the cognitive taxonomy of error
- Explain how to “design for safety”
- Detect appropriate technology input methods given different technology uses, user populations and contexts (SLO #11)
- Categorize and define a range of technology input methods (pen input, voice, gesture, menu structures & beyond, context-sensitive menus)
- Compare and contrast technology input methods
- Examine how information visualization can support and enhance the representation of trends and aggregate data (SLO #12)
- Critique the role of mobile and ubiquitous computing in healthcare (SLO #13)
- Define context-sensitive applications
- Examine the role of mobile and ubiquitous computing in healthcare

HRIT 180 Special Topics Course on Vendor-Specific Systems in Health Records IT

Units: 1
Hours: 18 hours LEC
Prerequisite: None.
Catalog Date: June 1, 2020
This course is designed to give IT Professionals an overview of the most popular vendor systems, highlighting the features of each and noting the differences between the systems.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- **ASSESS AND COMPARE COMMON COMMERCIAL EHR SYSTEMS-SLO #1**
  - Describe the most common commercial electronic health record systems used in ambulatory and inpatient care settings.
- **ANALYZE THE FUNCTIONALITY OF A VENDOR EHR SYSTEM, GIVEN A SET OF USER NEEDS-SLO #2**
  - Compare and contrast EHR functionality for CPOE, documentation, messaging, and results review among different vendor applications.

HRIT 298 Work Experience in Health Records Information Technology

<table>
<thead>
<tr>
<th>Units:</th>
<th>1 - 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hours:</td>
<td>60 - 300 hours LAB</td>
</tr>
<tr>
<td>Prerequisite:</td>
<td>None.</td>
</tr>
<tr>
<td>Enrollment Limitation:</td>
<td>Students must be in a paid or unpaid internship, volunteer position or job related to career goals in Health Records Information Technology.</td>
</tr>
<tr>
<td>General Education:</td>
<td>AA/AS Area III(b)</td>
</tr>
<tr>
<td>Catalog Date:</td>
<td>June 1, 2020</td>
</tr>
</tbody>
</table>

This course provides students with opportunities to develop marketable skills in preparation for employment in their major field of study or advancement within their career. It is designed for students interested in work experience and/or internships in associate degree level or certificate occupational programs. Course content includes understanding the application of education to the workforce; completion of required forms which document the student's progress and hours spent at the work site; and developing workplace skills and competencies. Appropriate level learning objectives are established by the student and the employer. During the semester, the student is required to participate in a weekly orientation and 75 hours of related paid work experience, or 60 hours of unpaid work experience for one unit. An additional 75 or 60 hours of related work experience is required for each additional unit. Work Experience may be taken for a total of 16 units when there are new or expanded learning objectives. Only one Work Experience course may be taken per semester.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- **DEMONSTRATE AN UNDERSTANDING AND APPLICATION OF PROFESSIONAL WORKPLACE BEHAVIOR IN A FIELD OF STUDY RELATED ONE’S CAREER,(SLO 1)**
  - Understand the effects time, stress, and organizational management have on performance.
  - Demonstrate an understanding of consistently practicing ethics and confidentiality in a workplace.
  - Examine the career/life planning process and relate its relevancy to the student.
  - Demonstrate an understanding of basic communication tools and their appropriate use.
  - Demonstrate an understanding of workplace etiquette.
  - **DESCRIBE THE CAREER/LIFE PLANNING PROCESS AND RELATE ITS RELEVANCY TO ONE’S CAREER,(SLO 2)**
  - Link personal goals to long term achievement.
  - Display an understanding of creating a professional first impression.
  - Understand how networking is a powerful job search tool.
  - Understand necessary elements of a résumé.
  - Understand the importance of interview preparation.
  - Identify how continual learning increases career success.
  - **DEMONSTRATE APPLICATION OF INDUSTRY KNOWLEDGE AND THEORETICAL CONCEPTS AS WRITTEN IN LEARNING OBJECTIVES IN PARTNERSHIP WITH THE EMPLOYER WORK SITE SUPERVISOR,(SLO 3)**
History | Cosumnes River College

Associate Degree for Transfer

A.A.-T. in History

The Associate in Arts in History for Transfer degree provides a clearly articulated curricular track for students who wish to transfer to a CSU campus, while also serving the diverse needs of students interested in the breadth and depth of the field of history. Additionally, this degree exposes students to the core principles and practices of the study of history in order to build a foundation for their future personal, academic and professional paths.

The Associate in Arts in History for Transfer Degree (AA-T) is designed to provide a seamless transfer pathway for students interested in pursuing a History degree in the California State University (CSU) system. The required and elective coursework surveys a broad spectrum of physical geography, human geography, geospatial technologies (e.g., GIS, the Global Positioning System, remote sensing), and related disciplines. The degree is comprised of lower division coursework typically required by CSU institutions. Students must complete a total of 60 transferable semester units with a minimum 2.0 GPA, to include either the California State University General Education Breadth pattern or the Intersegmental General Education Transfer Curriculum; students must also earn a grade of C or better in all the courses for the major as described in the Required Program. Upon successful completion of the degree requirements, students will be guaranteed admission to the CSU system with junior status and will not have to repeat lower division coursework. Students are encouraged to meet with a counselor to develop their educational plans as degree options and general education requirements vary for each university.

Catalog Date: June 1, 2020

Degree Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>US History:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HIST 310</td>
<td>History of the United States</td>
<td>3</td>
</tr>
<tr>
<td>HIST 311</td>
<td>History of the United States</td>
<td>3</td>
</tr>
<tr>
<td><strong>World History or Western Civilization:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HIST 301</td>
<td>History of Western Civilization (to 1660)</td>
<td>3</td>
</tr>
<tr>
<td>or HIST 307</td>
<td>History of World Civilizations to 1500</td>
<td>3</td>
</tr>
<tr>
<td>HIST 302</td>
<td>History of Western Civilization (3)</td>
<td>3</td>
</tr>
<tr>
<td>or HIST 308</td>
<td>History of World Civilizations, 1500 to Present (3)</td>
<td></td>
</tr>
<tr>
<td>A minimum of 3 units from the following:</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>HIST 320</td>
<td>History of the United States: African-American Emphasis (3)</td>
<td></td>
</tr>
<tr>
<td>HIST 331</td>
<td>Women in American History (3)</td>
<td></td>
</tr>
<tr>
<td>HIST 344</td>
<td>Survey of California History: A Multicultural Perspective (3)</td>
<td></td>
</tr>
<tr>
<td>HIST 360</td>
<td>History of African Civilizations (3)</td>
<td></td>
</tr>
<tr>
<td>HIST 364</td>
<td>Asian Civilization (3)</td>
<td></td>
</tr>
<tr>
<td>COURSE CODE</td>
<td>COURSE TITLE</td>
<td>UNITS</td>
</tr>
<tr>
<td>-------------</td>
<td>------------------------------------------------------------------------------</td>
<td>-------</td>
</tr>
<tr>
<td>HIST 365</td>
<td>Asian Civilization (3)</td>
<td></td>
</tr>
<tr>
<td>HIST 370</td>
<td>History of the Americas through the 19th Century Wars of Independence (3)</td>
<td></td>
</tr>
<tr>
<td>HIST 371</td>
<td>History of the Americas from the 19th Century Wars of Independence to the Present (3)</td>
<td></td>
</tr>
<tr>
<td>HIST 380</td>
<td>History of the Middle East (3)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>A minimum of 3 units from the following:</td>
<td>3°</td>
</tr>
<tr>
<td>HIST 301</td>
<td>History of Western Civilization (to 1660) (3)</td>
<td></td>
</tr>
<tr>
<td>HIST 302</td>
<td>History of Western Civilization (3)</td>
<td></td>
</tr>
<tr>
<td>HIST 307</td>
<td>History of World Civilizations to 1500 (3)</td>
<td></td>
</tr>
<tr>
<td>HIST 308</td>
<td>History of World Civilizations, 1500 to Present (3)</td>
<td></td>
</tr>
<tr>
<td>HIST 314</td>
<td>Recent United States History (3)</td>
<td></td>
</tr>
<tr>
<td>HIST 320</td>
<td>History of the United States: African-American Emphasis (3)</td>
<td></td>
</tr>
<tr>
<td>HIST 331</td>
<td>Women in American History (3)</td>
<td></td>
</tr>
<tr>
<td>HIST 344</td>
<td>Survey of California History: A Multicultural Perspective (3)</td>
<td></td>
</tr>
<tr>
<td>HIST 360</td>
<td>History of African Civilizations (3)</td>
<td></td>
</tr>
<tr>
<td>HIST 364</td>
<td>Asian Civilization (3)</td>
<td></td>
</tr>
<tr>
<td>HIST 365</td>
<td>Asian Civilization (3)</td>
<td></td>
</tr>
<tr>
<td>HIST 370</td>
<td>History of the Americas through the 19th Century Wars of Independence (3)</td>
<td></td>
</tr>
<tr>
<td>HIST 371</td>
<td>History of the Americas from the 19th Century Wars of Independence to the Present (3)</td>
<td></td>
</tr>
<tr>
<td>HIST 373</td>
<td>History of Mexico (3)</td>
<td></td>
</tr>
<tr>
<td>HIST 380</td>
<td>History of the Middle East (3)</td>
<td></td>
</tr>
<tr>
<td>POLS 301</td>
<td>Introduction to Government: United States (3)</td>
<td></td>
</tr>
<tr>
<td>POLS 302</td>
<td>Comparative Politics (3)</td>
<td></td>
</tr>
<tr>
<td>POLS 304</td>
<td>Introduction to Government: California (3)</td>
<td></td>
</tr>
<tr>
<td>POLS 310</td>
<td>Introduction to International Relations (3)</td>
<td></td>
</tr>
<tr>
<td>POLS 312</td>
<td>Politics of the Middle East (3)</td>
<td></td>
</tr>
<tr>
<td>POLS 313</td>
<td>Latin America (3)</td>
<td></td>
</tr>
<tr>
<td>POLS 314</td>
<td>Modern Europe and the Unification Process (3)</td>
<td></td>
</tr>
<tr>
<td>POLS 315</td>
<td>Pacific Rim (3)</td>
<td></td>
</tr>
<tr>
<td>POLS 317</td>
<td>Global Studies: Africa (3)</td>
<td></td>
</tr>
<tr>
<td>POLS 318</td>
<td>Global Studies: Central Asia (3)</td>
<td></td>
</tr>
<tr>
<td>POLS 319</td>
<td>Global Studies: Southeast Asia (3)</td>
<td></td>
</tr>
<tr>
<td>HUM 300</td>
<td>Classical Humanities (3)</td>
<td></td>
</tr>
<tr>
<td>HUM 310</td>
<td>Modern Humanities (3)</td>
<td></td>
</tr>
<tr>
<td>HUM 320</td>
<td>Asian Humanities (3)</td>
<td></td>
</tr>
<tr>
<td>COURSE CODE</td>
<td>COURSE TITLE</td>
<td>UNITS</td>
</tr>
<tr>
<td>-------------</td>
<td>--------------------------------------------------</td>
<td>-------</td>
</tr>
<tr>
<td>HUM 324</td>
<td>Global Islam: Culture and Civilization (3)</td>
<td></td>
</tr>
<tr>
<td>HUM 331</td>
<td>Latin American Humanities (3)</td>
<td></td>
</tr>
<tr>
<td>HUM 332</td>
<td>American Humanities (3)</td>
<td></td>
</tr>
<tr>
<td>SOC 300</td>
<td>Introductory Sociology (3)</td>
<td></td>
</tr>
<tr>
<td>SOC 301</td>
<td>Social Problems (3)</td>
<td></td>
</tr>
<tr>
<td>SOC 321</td>
<td>Race, Ethnicity and Inequality in the United States (3)</td>
<td></td>
</tr>
<tr>
<td>SOC 341</td>
<td>Sex and Gender in the U.S. (3)</td>
<td></td>
</tr>
<tr>
<td>ANTH 310</td>
<td>Cultural Anthropology (3)</td>
<td></td>
</tr>
<tr>
<td>ANTH 316</td>
<td>Global Forces in Culture Change (3)</td>
<td></td>
</tr>
<tr>
<td>ANTH 324</td>
<td>World Prehistory (3)</td>
<td></td>
</tr>
<tr>
<td>ANTH 331</td>
<td>The Anthropology of Religion (3)</td>
<td></td>
</tr>
<tr>
<td>ANTH 332</td>
<td>Native Peoples of California (3)</td>
<td></td>
</tr>
<tr>
<td>ANTH 334</td>
<td>Native Peoples of North America (3)</td>
<td></td>
</tr>
</tbody>
</table>

Total Units: 18

1 Students completing both HIST 310 and 320, or both HIST 311 and 321, may not receive credit for both courses at all universities. Please see a counselor for more information.

2 One course from the following group if not used in World History/Western Civilization or List B above.

The Associate in Arts in History for Transfer (AA-T) degree may be obtained by completion of 60 transferable, semester units with a minimum 2.0 GPA, including (a) the major or area of emphasis described in the Required Program, and (b) either the Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education Breadth Requirements.

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- PSLO #1: Analyze and describe key developments and events in United States History.
- Analyze and describe key developments and events in Western and World Histories to 1500.
- Analyze and describe key developments and events in Western and World Histories from 1500 to the present.
- PSLO #2: Demonstrate an understanding of the historian's methods in reconstructing the past using primary and secondary sources.
- Identify and explain the sequence of cause and effect in history.
- Research and compose written work based on extensive research of primary and secondary source materials.
- PSLO #3: Evaluate the diversity in American and world societies with particular attention on race, ethnicity, class, gender, religion, and nation.
- Appreciate the role of geography in history.

History (HIST)

HIST 301 History of Western Civilization (to 1660)
History 301 is a survey course on Western Civilization from c. 3000 BCE to 1600 CE. The course will trace the origins, development, and advancement of European Civilization from antiquity to early modernization. In addition to political analysis, emphasis will be placed upon the socio-economic structures of various peoples discussed during the four thousand six hundred year time period. Finally, the birth, growth, and later fragmentation of Christianity will be covered.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- demonstrate an understanding of Western Civilization from c. 3000th BCE to the 17th century CE (SLO #1).
- evaluate and assess the development of key civilizations and imperial powers through the use of critical thinking skills.
- differentiate the diverse political and economical structures of each civilization and/or nation grouping covered in the course.
- compare and contrast the common and diverse cultural and spiritual values of European peoples during the Middle Ages.
- apply analytical skills in evaluating the effects of intellectual development on early Western Civilization.
- survey and incorporate the geography discussed in the class.
- demonstrate an understanding of the historian's methods in reconstructing the past using primary and secondary sources (SLO #2).
- analyze and describe selected topics from both lectures and required readings.
- research and compose written work based on extensive research of secondary source materials.

HIST 302 History of Western Civilization

This is a survey of Western Civilization from 1600 to the present. The course will trace the development and advancement of European nation-states from early modernization to the crises of the World Wars. In addition to political analysis, emphasis will be placed upon the ideological and socio-economic structures that developed during the last four hundred years of the 20th century. Finally, the effects of the Cold War and decolonization will also be addressed.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- demonstrate an understanding of Western Civilization from the 17th century to the present (SLO #1).
- evaluate and assess the development of nation-states in both Western and Eastern Europe through the use of critical thinking skills.
- differentiate the diverse political and economical structures of each nation group covered in the course.
- compare and contrast the common and diverse cultures of both Western and Eastern Europeans.
- apply analytical skills in evaluating the effects of intellectual development on European History.
- survey and incorporate the geography discussed in the class.
- demonstrate an understanding of the historian's methods in reconstructing the past using primary and secondary sources (SLO #2).
analyze and describe selected topics from both lectures and required readings.
research and compose written work based on extensive research of secondary source materials.

HIST 307 History of World Civilizations to 1500

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Advisory: ENGWR 300, or placement through the assessment process.
Transferable: CSU; UC
General Education: AA/AS Area V(b); CSU Area D6; IGETC Area 4F
Catalog Date: June 1, 2020

History 307 is a survey course on world civilization from c. 3000 BCE to 1500 CE. The course will trace the development of various peoples beginning with the first civilizations of Mesopotamia, India, and China to the establishment of great empires and infant nations of the world. In addition to political analysis, emphasis will be placed upon the advancement of various world cultures and social structures. Particular attention will be placed on the lives of the common people of various civilizations discussed during the four thousand, five hundred year time period. Finally, various world religions will be highlighted during the duration of the course.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- demonstrate an understanding of World Civilization from c. 3000 BCE to the 16th century CE (SLO #1).
- evaluate and assess the development of key civilizations and imperial powers through the use of critical thinking skills.
- differentiate the diverse political and economical structures of each civilization and/or nation group covered in the course.
- compare and contrast the development of religious values and the universal use of religion to manipulate the masses.
- apply analytical skills in evaluating the effects of intellectual development on influential civilizations.
- survey and incorporate the role of geography on developing civilizations discussed in the class.
- demonstrate an understanding of the historian's methods in reconstructing the past using primary and secondary sources (SLO #2).
- analyze and describe selected topics from both lectures and required readings.
- research and compose written work based on extensive research of secondary source materials.

HIST 308 History of World Civilizations, 1500 to Present

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Advisory: ENGWR 300, or placement through the assessment process.
Transferable: CSU; UC
General Education: AA/AS Area V(b); AA/AS Area VI; CSU Area D6; IGETC Area 4F
C-ID: C-ID HIST 160
Catalog Date: June 1, 2020

History 308 is a survey course on world civilization from 1500 to the present age. The course will cover the political, economic, and intellectual developments of various world social and cultural structures. Particular emphasis will be placed upon the increased integration of peoples and cultures as a result of globalization. Additional focus will center upon the influencing effects of modern warfare, military technology, and international politics in shaping world society. Analysis of these revolutionary changes of the past five hundred years will offer a better understanding of world society today.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- demonstrate an understanding of World Civilization from the 16th century to the present by comparing the diverse political and economic structures of each civilization /or nation covered in the course (SLO #1).
- evaluate and interpret primary and secondary sources to better understand the historian's methods in reconstructing the past (SLO #2).
HIST 310 History of the United States

This is a survey course on the establishment and development of the United States from its colonial beginnings to the end of Reconstruction in 1877. Particular emphasis will be placed upon the political, economic, social, and cultural developments of the United States during the designated time period. The course will cover the ideological influences that were instrumental in shaping the Constitution and other related government structures. Additionally, the course will address the institution of slavery and how the divisive issue dismembered the nation and further complicated the process of Reconstruction.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO #1 Demonstrate a basic knowledge of the key events, individuals, and themes that have shaped United States history, to 1877.
- Demonstrate a working knowledge of the chronology involved in this period of United States history.
- Analyze the roles, contributions, sacrifices, and both the unique and common experiences of the wide variety of people who have been significant in the development of the United States in this period.
- Assess the major aspects of the institution of slavery and the Atlantic Slave Trade as they relate to the development of the United States. These phenomena will be examined in terms of economics, culture, politics, religion and society.
- Demonstrate a clear understanding of the geography of the area under study and offer a hypothesis concerning the role of geography in the development of the United States.
- Investigate the philosophical reasoning behind and the nature of democratic ideology with a particular emphasis on the philosophical thinking of the framers of the Constitution and their antecedents.
- Illustrate the relationship between national, state, and local governments and evaluate the effectiveness of the federal system.
- SLO #2 Demonstrate an understanding of and an appreciation for historiography.
- Examine methods of organizing and recording information; testing methods; distinguishing fact from opinion; the importance of historical distance, reflection and revision; the use of numerous and sometimes conflicting sources; the use of the past in an attempt to understand the present and speculate about (and prepare) for the future.
- Research and prepare written work based on extensive use of primary and secondary sources.
- SLO #3 Demonstrate the mastery of higher level analytical skills.
- Illustrate the realities of history's inter-connectedness through the ability to compare and contrast events, times, individuals.
- Develop historical themes using events and individuals from vastly different time periods.
- Evaluate and analyze the connection between events in other parts of the world and developments in the United States.
- Offer an appraisal of the cyclical nature of history.

HIST 311 History of the United States
This is a survey course on the development and growth of the United States from Reconstruction to the present day. Particular emphasis will be placed upon the political, economic, social and cultural developments during the designated time period. The course will cover the establishment and evolutionary status of the U.S. as a leading world power. Additionally, the course will address the changes to American society resulting from various revolutionary movements on race, gender, orientation, and labor. Includes coverage of California state and local government.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- Demonstrate a basic knowledge of the key events, individuals, and themes that have shaped United States History from 1865-Present (SLO #1).
- Illustrate the nature of cause and effect relationships, concepts of continuity and change, the impact of ideas and individuals, and how it is that members of society both shape and are shaped by History.
- Apply analytical skills in evaluating changes in both domestic and foreign affairs during the course time period (SLO #2).
- Investigate and critically assess the roles, contributions, sacrifices and both the unique and common experiences of the wide variety of social and ethnic groups who have been significant in the development of the United States in this period.
- Demonstrate an understanding of the historian's methods in reconstructing the past using primary and secondary sources (SLO #3).
- Analyze different methods in reviewing information and distinguishing fact from bias in an attempt to understand the present and speculate about (and prepare for) the future.
- Survey and incorporate the chronology and the geography discussed in this course.
- Compare and contrast both Democrat and Republican Party platforms that evolved during the late 19th to early 21st centuries.
- Research and compose written work based on primary and secondary source materials.
- Critique the special role California has played in the growth and development of the United States in this period. Specifically, they will focus on the origins and revision of the California constitution; the nature and processes of state government and their impact on the nation as a whole (i.e. Progressive Era reforms); California's ethnic and social diversity; California today.

HIST 314 Recent United States History

This is a survey of the development and growth of the United States from the conclusion of World War II in 1945 to the present. Particular emphasis will be placed upon the political, economical, social, and cultural developments of the United States during the designated time period. The course will also address the establishment of the United States as a world power following the Second World War. Finally, particular emphasis will center upon the social and economical conditions of various minority groups, especially African Americans.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- demonstrate an understanding of United States History from 1945 to the present (SLO #1).
- apply analytical skills in evaluating the development of United States foreign policy during the Cold War and the current crusade against terrorism.
- evaluate and assess the evolution of socio-economic conditions in the United States during course's time period.
compare and contrast the development of both Democrat and Republican party platforms of the late 20th and early 21st centuries

demonstrate an understanding of the historian’s methods in reconstructing the past using primary and secondary sources (SLO #2).

survey and incorporate the geography discussed in the class.

analyze and describe selected topics from both lectures and required readings.

research and compose written work based on extensive research of secondary source materials.

HIST 320 History of the United States: African-American Emphasis

Units: 3  
Hours: 54 hours LEC  
Prerequisite: None.  
Advisory: ENGWR 300  
Transferable: CSU; UC (HIST 312 and 320 combined; maximum transfer credit is one course)  
General Education: AA/AS Area V(a); CSU Area D; CSU Area F1; CSU Area F2; IGETC Area 4F  
Catalog Date: June 1, 2020

U.S. History from the founding of Jamestown in 1607, through the Civil War. The course begins with a brief overview of the Black American’s African heritage. It continues with the role played by African-American women as well as men in the growth and development of the nation. The U.S. Constitution and the establishment of American government institutions are also covered.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• SLO #1 Students will demonstrate a basic knowledge of the key events, individuals, and themes that have shaped United States history, with an African-American to 1865.

• evaluate the complex interplay between World history and United States history with special emphasis put on the African American experience.

• identify and critique the crucial role major events and diverse social and ethnic groups have played in the shaping of American history.

• SLO #2 Students will demonstrate the mastery of higher level analytical skills:

• develop critical thinking skills particularly in the area of cause and effect and analyze and differentiate between trends in history.

• investigate the reasoning behind and the nature of democratic ideology with a particular emphasis on the philosophical thinking of the framers of the Constitution and their antecedents.

• illustrate the relationship between national, state, and local governments and evaluate the effectiveness of the federal system.

• critique the complex interplay between the historical experience of black people and the large society.

• develop analytical tools and objective attitudes in dealing with questions of race, ethnicity, class, sex and other controversial issues in U.S. history.


Units: 3  
Hours: 54 hours LEC  
Prerequisite: None.  
Advisory: ENGWR 300  
Transferable: CSU; UC (HIST 313 and 321 combined; maximum transfer credit is one course)  
General Education: AA/AS Area V(a); CSU Area D; CSU Area F1; CSU Area F3; IGETC Area 4F  
Catalog Date: June 1, 2020

U.S. History from 1865 to the present, including coverage of the state and local government, with an increased emphasis on the role of black women as well as men, spelling out their specific contributions in the growth and development of the nation. It includes coverage of California state and local government.
Upon completion of this course, the student will be able to:

- **SLO #1** Students will demonstrate a basic knowledge of the key events, individuals, and themes that have shaped United States history, with an African-American Emphasis from 1865 to the present.
- Evaluate the complex interplay between World history and United States history with special emphasis put on the African American experience.
- Identify and investigate the crucial role major events and certain individuals have played in the shaping of American history.
- **SLO #2** Students will demonstrate the mastery of higher level analytical skills:
  - Develop critical thinking skills particularly in the area of cause and effect and the analysis of trends in history.
  - Examine and analyze California history and its crucial role in the growth of the United States; its state constitutional processes and its social diversity with special emphasis put on the African American Experience.
  - Evaluate interplay between the historical experience of black people and the larger society.
  - Integrate analytical tools and objective attitudes in dealing with questions of race, ethnicity, class, sex and other controversial issues in U.S. history.

**HIST 331 Women in American History**

Survey history of the United States from 1607 to the present, emphasizing the economic and social conditions that gave women more actual respect and some public power. Course includes the roles of women in Native American tribes, the English heritage of the colonists, the contributions of women in creating new homes and farms, and the role of women in times of war. Emphasis on the role of women in the three major social issues of the 19th century: labor, abolition, and women's rights. Includes present-day issues and the legacy of how women in the past dealt with similar issues.

Upon completion of this course, the student will be able to:

- **SLO #1** Demonstrate an understanding of the basic facts, themes and chronology involved in the account of Women in American History.
- Critically analyze and compare the experiences of different groups of American women’s lives across time, paying particular attention to the ways that race, class, and ethnicity shaped their experiences.
- Assess the social, economic, and political arrangements that structured women’s status, and how they accepted or challenged these arrangements.
- Investigate and offer an appraisal of gender norms of different eras throughout American history and relate the experiences of women to broader themes in American history.
- Critique the social conditions that granted options to women.
- **SLO #2** Demonstrate an understanding of and appreciation for historiography.
- Differentiate between methods of organizing and recording information; testing methods; distinguishing fact from opinion; the importance of historical distance, reflection, and revision; the use of numerous and sometimes conflicting sources; the use of the past in an attempt to understand the present and speculate about (and prepare for) the future.
- **SLO #3** Demonstrate the mastery of higher level analytical skills.
- Offer an appraisal of the various historical explanations for women's past experiences, using both primary and secondary sources.
HIST 344 Survey of California History: A Multicultural Perspective

This is a survey course on the development and growth of California from its origins to the present time. Particular emphasis will be placed upon California's multicultural heritage and the state's significant local history. The course will examine, compare, and evaluate the historical experiences of Native Californians, Spanish, Mexican, Asian, African, and European Americans. Field trips to local sites of historical significance may be included.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- Demonstrate understanding of California history from its origin to the present day (SLO #1).
- Apply analytical skills in evaluating the development of California's multicultural history and appraise the contributions of different cultural groups to the state's historical evolution.
- Demonstrate an understanding of the historian's methods in reconstructing the past using primary and secondary sources (SLO #2).
- Compare and contrast the experiences of various groups as influenced by race, class, gender, nationality, and ethnicity.
- Demonstrate an understanding of the influence of synergistic global forces in California history and evaluate their connections to local and international developments (e.g., European settlement, the US conquest, industrialization, commercialization of agriculture, technological change, civil and human rights struggles, environmental movements, ideological clashes over capitalism and state power, the rise of multinational corporations, etc.).
- Examine the origins of the California constitution, the constitutional revision in 1878, and Progressive Era reforms, especially the nonpartisan ballot, as well as the initiative, referendum, and recall.
- Assess the role of California's geography on its historical development.

HIST 360 History of African Civilizations

This course is an introductory survey of the history of Africa from earliest times to the present. Major topics will include origins of humanity and society, civilizations of the Nile Valley, the peopling of Sub-Saharan Africa, African societies to 1500 A.D., precolonial Saharan and Sub-Saharan Africa, colonial Africa and the emergence of modern state in Africa.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO #1 Students will demonstrate a basic knowledge of the key events, individuals, and themes that have shaped African Civilizations.
- Form a hypothesis concerning the profound influence the past has had on the present.
- Critique civilizations that have been developed by non-literate societies and be able to differentiate between their contributions and those of literate societies.
- Evaluate the meaning and the definitions of history, civilization, culture, and the impact of cultural evolution and cultural diffusion as well as the environment influence on cultural development.
- demonstrate the integration of the outside contacts on the African Continent and the complex interplay of African history and World history.
SLO #2 Students will demonstrate the mastery of higher level analytical skills:
- investigate the reality of the contributions of African Societies to global history and world civilizations
- demonstrate critical thinking, particularly in the area of cause and effect and the analysis of trends in history.

HIST 364 Asian Civilization

<table>
<thead>
<tr>
<th>Units:</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hours:</td>
<td>54 hours LEC</td>
</tr>
<tr>
<td>Prerequisite:</td>
<td>None.</td>
</tr>
<tr>
<td>Advisory:</td>
<td>ENGWR 300</td>
</tr>
<tr>
<td>Transferable:</td>
<td>CSU; UC</td>
</tr>
<tr>
<td>General Education:</td>
<td>AA/AS Area V(b); AA/AS Area I; CSU Area C2; CSU Area D6; IGETC Area 3B; IGETC Area 4F</td>
</tr>
<tr>
<td>Catalog Date:</td>
<td>June 1, 2020</td>
</tr>
</tbody>
</table>

This is a survey of Asian History from the birth of civilization to 1600 C.E. With particular emphasis on East Asia, the course will evaluate the political, economical, social, and cultural developments of China, Japan, and Korea. Additional topics will include the effects of foreign interactions with peoples from India, the Middle East, and Europe.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- demonstrate an understanding of East Asian civilizations from the birth of such civilizations to the 17th century C.E. (SLO #1).
- evaluate and assess Chinese, Japanese, Korean, and other East Asian civilizations through the use of critical thinking skills.
- differentiate the diverse political and economical structures of each group covered in the course.
- compare and contrast the common and diverse cultures of East Asian peoples.
- utilize analytical skills in evaluating the effects of foreign ideas and religions on East Asian peoples.
- survey and incorporate the geography discussed in the class.
- demonstrate an understanding of the historians' methods in reconstructing the past using primary and secondary sources (SLO #2).
- analyze and describe selected topics from both lectures and required readings.
- research and prepare written work based on extensive research of secondary source materials.

HIST 365 Asian Civilization

<table>
<thead>
<tr>
<th>Units:</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hours:</td>
<td>54 hours LEC</td>
</tr>
<tr>
<td>Prerequisite:</td>
<td>None.</td>
</tr>
<tr>
<td>Advisory:</td>
<td>ENGWR 300</td>
</tr>
<tr>
<td>Transferable:</td>
<td>CSU; UC</td>
</tr>
<tr>
<td>General Education:</td>
<td>AA/AS Area V(b); AA/AS Area I; CSU Area C2; CSU Area D6; IGETC Area 3B; IGETC Area 4F</td>
</tr>
<tr>
<td>Catalog Date:</td>
<td>June 1, 2020</td>
</tr>
</tbody>
</table>

This is a survey of Asian History from 1600 C.E. to the present. With particular emphasis on China, Japan, Korea, and Vietnam, the course will evaluate the political, economical, social, and cultural effects of Western involvement in East Asia. Additional topics will include the rise of nationalism in East Asia during the Cold War, as well as China's rising participation in world events.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- demonstrate an understanding of East Asian civilizations from the 17th century C.E. to the present (SLO #1).
- evaluate and assess Chinese, Japanese, Korean, and other East Asian civilizations through the use of critical thinking skills.
- differentiate the diverse political and economical structures of each group covered in the course.
- compare and contrast the common and diverse cultures of East Asian peoples.
- utilize analytical skills in evaluating the effects of Western imperialism and ideologies on East Asian peoples.
HIST 370 History of the Americas through the 19th Century Wars of Independence

- survey and incorporate the geography discussed in the class.
- demonstrate an understanding of the historian's methods in reconstructing the past using primary and secondary sources (SLO #2).
- analyze and describe selected topics from both lectures and required readings.
- research and compose written work based on extensive research of secondary source materials.

This course is a general historical survey of North, Central, and South America from the earliest civilizations through to the 19th century wars of independence. The focus is on the roles played by political, economic, cultural, and religious forces in shaping the western hemisphere.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- demonstrate an understanding of the history of the Americas to the 19th century wars of independence by comparing the diverse political and economical structures of each civilization and/or nation covered in the course (SLO #1).
- evaluate and interpret primary and secondary sources to better understand the historian's methods in reconstructing the past (SLO #2).
- demonstrate mastery of higher level analytical skills to recognize the historical process of cause and effect. (SLO #3)
- evaluate key events, social groups, and various colonial institutions.
- analyze the differences between and the effects of the Anglo-American and Ibero-American process of colonization on indigenous peoples.

HIST 371 History of the Americas from the 19th Century Wars of Independence to the Present

- survey and incorporate the geography discussed in the class.
- demonstrate an understanding of the historian's methods in reconstructing the past using primary and secondary sources (SLO #2).
- analyze and describe selected topics from both lectures and required readings.
- research and compose written work based on extensive research of secondary source materials.

This course is a general historical survey of North, Central, and South America from the wars of independence to the present day. Special emphasis is placed on a review of the North American colonies, the road to revolution, independence from England, and the constitutional period as well as subsequent Latin American - United States relations. This course satisfies the state requirements in United States history.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- demonstrate an understanding of the history of the Americas from the 19th century wars of independence to the present day by comparing the diverse political and economical structures of each civilization and/or nation covered in the course (SLO #1).
- evaluate and interpret primary and secondary sources to better understand the historian's methods in reconstructing the past (SLO #2).
- demonstrate mastery of higher level analytical skills to recognize the historical process of cause and effect. (SLO #3)
analyze the marginalization and disenfranchisement of disadvantaged groups in various North, Central, and South American countries.

examine how Central and South American nations have and continue to be affected by the United States' heightened involvement in the western hemisphere.

HIST 373 History of Mexico

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Advisory: Eligibility for ENGWR 300
Transferable: CSU; UC
General Education: AA/AS Area V(b); CSU Area D6; IGETC Area 4F
Catalog Date: June 1, 2020

History 373 is a survey course on the origins and development of Mexico from c. 2500 BCE to the present. In addition to discussing the early civilizations of Mesoamerica, the course will evaluate the political, economical, social, and cultural evolution of Mexico from the colonial era to the present day. Finally, Mexico's relationship with the United States and other western powers will be addressed.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- demonstrate an understanding of the history of Mexico from the earliest Mesoamerican civilizations to the present day by comparing the key events, individuals, and themes that helped shape Mexican history from Mesoamerican heritage to the present (SLO #1).
- discover and appreciate the cultural heritage of Mexico and its impact on the United States southwest.
- summarize the impact on Mexico regarding the strong presence of the U.S. in the western hemisphere.
- explain the role of geography in the development of Mexico as nation.
- evaluate and interpret primary and secondary sources to better understand the historian's methods in reconstructing the past (SLO #2).
- exhibit mastery of higher level analytical skills to recognize the historical process of cause and effect. (SLO #3)

HIST 380 History of the Middle East

Units: 3
Hours: 54 hours LEC
Prerequisite: ENGWR 101, or placement through the assessment process.
Advisory: CSU; UC
Transferable: AA/AS Area V(b); CSU Area C2; CSU Area D6; IGETC Area 3B; IGETC Area 4
General Education: June 1, 2020

This course surveys the history of the Middle East and North Africa with emphasis on the period from the 6th century C.E. (A.D.) to the present. The course focuses on the major social, economic, political and cultural transformations of the region, while taking into account both regional and global contexts of interaction and change in a comparative format. This course will provide students with a historical understanding of the impact of European colonialism, the discovery of petroleum and its consequences, the Palestinian-Israeli conflict, and the role played by the United States in the region.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- DESCRIBE AND ANALYZE THE ANCIENT HISTORICAL CONTEXT OF THE MIDDLE EAST AND NORTH AFRICA. - SLO 1
- In particular examine those aspects of the cultures of late antiquity which impacted the subsequent development of the region in pre-Islamic times, then in the earliest days of Islam, followed by the Arab/Islamic conquests of the 7th century C.E.
- ANALYZE THE DEVELOPMENT OF CIVILIZATION AND CULTURE IN THE MIDDLE EAST AND NORTH AFRICA FROM THE 6TH CENTURY C.E. TO CONTEMPORARY TIMES. - SLO 2.
Study and examine urban cultures during Rashidun times, the Classical Age of Islam in the Middle East, Andalusian and Maghrebi Muslim periods, Safavid, Seljuk and Ottoman Empires.

IDENTIFY AND RECOGNIZE THE CONTRIBUTIONS AND INTERACTIONS OF DIFFERENT CULTURAL GROUPS TO MIDDLE EASTERN AND NORTH AFRICAN HISTORY. - SLO 3.

Compare, contrast, and integrate the rich multicultural composition of Middle Eastern and North African societies and peoples, for example, Arabs, Iranians, Berbers, Turks, Kurds, Mauritaniians, Spaniards, as well as religious groups, Muslims, and minority groups such as Christians and Jews.


Analyze and assess travel and trade, communication networks, cultural explorations and writers of the culture.

DEVELOP CRITICAL THINKING SKILLS NECESSARY FOR FORMULATING AN ANALYTICAL FRAMEWORK RELEVANT TO THE STUDY OF THE HISTORY OF THE REGION. - SLO 5.

Research topics and write evaluative essays, papers, and reports.

Compare, contrast, synthesize and analyze current regional historical issues in light of past history.

Explore cross-cultural comparative aspects of Middle Eastern and North African history.


Compose evaluative essays, papers and reports.

HIST 485 Recent United States History - Honors

This course is an introduction to the study of American history from 1945 to the present day. It is an honors course that uses an intensive instructional methodology designed to challenge motivated students and cultivate advanced critical thinking skills. Particular emphasis will be placed on the role played by complex interrelationships of political, economic, social, and cultural forces in United States history after World War II, and the role played by multiple ethnic groups as well. This course is not open to students who have completed HIST 314. Enrollment is limited to Honors Program students. Details about the Honors Program can be found in the front of the Catalog and on the CRC website.

Upon completion of this course, the student will be able to:

- ANALYZE REASONING PROCESSES TO EVALUATE ISSUES, VALUE JUDGMENTS, OR CONCLUSIONS THAT DETERMINE THE QUALITY, VALIDITY, AND/OR RELIABILITY OF INFORMATION (SLO #1).
- Construct an accurate and/or logical interpretation of reasoning while applying a framework of analytic concepts through written assignments.
- Communicate a complex understanding of content matter of a major discipline of study through oral presentations and class discussions.
- Explain the importance of historical consciousness of the major discipline of study in understanding the broader picture of society through a final project.
- APPLY COMPLEX CRITICAL THINKING SKILLS TO READ AND WRITE EFFECTIVELY AS SELF-RELIANT, EVALUATIVE READERS AND WRITERS (SLO #2).
- Express ideas clearly and completely in a variety of written formats.
- Utilize correct and appropriate conventions of mechanics, usage, and style in written communication.
- Comprehend main ideas and reasonably interpret written information in the form of primary documents.
- Compose and apply properly documented sources of information.
- Define and identify various theoretical perspectives across the discipline of history through reading primary and secondary sources (SLO #3).
- Generate significant open-ended questions about United States history, and critically analyze primary and secondary sources to construct historical arguments and perspectives that inform one’s own life.
- Demonstrate an understanding of the interconnectedness between United States history and global history to foster active citizenship as well as applying historical knowledge and historical thinking to contemporary issues.
- Identify, explain, and evaluate the major historical forces in United States history since 1945.
- Evaluate and analyze diverse experiences and perspectives in United States history through an examination of conflicting narratives and power imbalances.

HIST 495 Independent Studies in History

| Units: | 1 - 3 |
| Hours: | 54 - 162 hours LAB |
| Prerequisite: | None. |
| Transferable: | CSU |
| Catalog Date: | June 1, 2020 |

An independent studies project involves an individual student or small group of students in study, research, or activities beyond the scope of regularly offered courses. See the current catalog section of “Special Studies” for full details of Independent Studies.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO #1: Actively engage in intellectual inquiry beyond that required in order to pass a course of study (College Wide Learning Outcome – Area 4).
- Discuss and outline a proposal of study (that can be accomplished within one semester term) with a supervising instructor qualified within the discipline.
- Design an independent study (to be completed individually or by collaboration of a small group) to foster special knowledge, skills, and experience that are not available in any one regularly scheduled course.
- Use information resources to gather discipline-specific information.
- SLO #2: Utilize modes of analysis and critical thinking to apply theoretical perspectives and/or concepts in the major discipline of study to significant problems and/or educational activities (College Wide Learning Outcome – Area 3).
- Analyze and apply the knowledge, skills and experience that are involved in the independent study to theoretical perspectives and/or concepts in the major discipline of study.
- Explain the importance of the major discipline of study in the broader picture of society.
- SLO #3: Communicate a complex understanding of content matter of the major discipline of study (College Wide Outcome – Area 3).
- Demonstrate competence in the skills essential to mastery of the major discipline of study that are necessary to accomplish the independent study.
- SLO #4: Identify personal goals and pursue these goals effectively (College Wide Outcome – Area 4).
- Utilize skills from the “academic tool kit” including time management, study skills, etc., to accomplish the independent study within one semester term.
CRC offers the basic grammar and conversation courses in Hmong. Students will be able to understand the spoken language, to speak with reasonable fluency, and to write at their speaking level.

Dean  
Alex Casareno

(916) 691-7740
CasareA@crc.losrios.edu

Hmong (HMONG)

HMONG 401 Elementary Hmong

Units: 4  
Hours: 54 hours LEC; 54 hours LAB  
Prerequisite: None.  
Transferable: CSU; UC (UC Transfer Credit: Corresponds to two years of high school study)  
General Education: CSU Area C2; IGETC Area 6  
Catalog Date: June 1, 2020

This course will provide an introduction to the Hmong language at the elementary level, which is characterized by an emerging ability to understand and produce appropriate responses in high-frequency situation utilizing learned materials, standardized messages, phrases and expressions including terms for addressing, numbers, time, dates, days, weather, and kinship terms. Speaking and writing will be comprehensible to a sympathetic listener, including a native speaker used to interacting with non-native speakers. Verbal and written expression is limited to short, culturally appropriate communication. Students will also acquire knowledge of the geography, culture and people of regions where Hmong is spoken as well as Hmong-speakers’ contributions to North American and world-wide cultures.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO#1 PRODUCE AND COMPREHEND BASIC COURTESIES AND SIMPLE CONVERSATIONS IN HMONG.
- Understand short spoken dialogues and answer simple questions, such as greetings, identifying people, using numbers, telling time, days of the week, and weather descriptions.
- Respond orally using core vocabulary phrases and expressions.
- Incorporate basic learned materials, such as phrases and expressions, in a daily life situations.
- SLO#2 DEMONSTRATE ABILITY TO COMMUNICATE IN WRITING USING LEARNED GRAMMATICAL FORMS.
- Write and describe a list from materials read or heard.
- Write simple sentences about biographical information, telling time and calendar, and describing weather and activities.
- SLO#3 ANALYZE AND INTERPRET WRITTEN MATERIAL.
- Comprehend a reading selection based on familiar topics, such as greetings, biographical information, telling time and calendar, and describing weather and activities.

HMONG 402 Elementary Hmong II
This is the second course in the Elementary Hmong sequence. It is designed for students who have completed Hmong 401 and provides refinement of skills learned in Hmong 401. Students will gain increased accuracy and ability to understand and produce appropriate responses in high frequency situations utilizing learned materials. Speaking and writing will be comprehensible to a sympathetic listener. Verbal and written expression will be limited to short, culturally appropriate communication on a broader scale than at the 401 level. Students will acquire a knowledge of the geography, culture, and people of regions where Hmong is spoken and of Hmong speakers' contributions to North American and world cultures.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- **SLO #1: PRODUCE AND COMPREHEND BASIC COURTESIES AND SIMPLE CONVERSATIONS IN HMONG.**
  - Understand short spoken dialogues and answer simple questions on familiar topics such as color and clothing, shopping habit, food, body and health, hobbies, directions, and traveling.
  - Initiate and maintain conversations in various familiar situations and respond using core vocabulary phrases and expressions.
  - Incorporate basic learned materials in daily life situations to communicate needs, goals, and wishes in accurate and appropriate cultural terms.
  - Understand the basic language structure of Hmong and produce recognizable speech.
  - Describe and compare people, places and things.

- **SLO #2: DEMONSTRATE ABILITY TO COMMUNICATE IN WRITING USING LEARNED GRAMMATICAL FORMS.**
  - Describe or summarize information based on written or oral materials.
  - Supply specific biographical information and daily activities.
  - Write simple and complex sentences about color and clothing, food and eating habits, body and health, hobbies, directions, and traveling.

- **SLO #3: ANALYZE AND INTERPRET WRITTEN MATERIALS.**
  - Comprehend a reading selection based on familiar topics, such as clothing, food, body and health, hobbies, directions, and traveling.
  - Comprehend a selection of written texts on learned topics and reply to content questions in Hmong.

Units: 4
Hours: 72 hours LEC
Prerequisite: Hmong 401 with a grade of "C" or better
Transferable: CSU, UC
General Education: CSU Area C2; IGETC Area 6
Catalog Date: June 1, 2020
Designated specifically for academically accomplished students or those with the potential for high academic achievement, CRC's Honors program provides enhanced General Education study opportunities supporting intellectual growth, scholarly relationships with peers, and faculty-student engagement beyond that generally associated with lower-division undergraduate programs. Honors Program participation supports transfer and scholarship opportunities at select transfer colleges and universities including UCLA, in whose Transfer Alliance Partnership CRC is a member. Honors Program students receive enhanced access to career and academic advising as well as enhanced opportunities for scholarship, including the opportunity to pursue their own original research.

Honors (HONOR)

HONOR 340 Honors Seminar: Political Campaign Communication

Same As: COMM 480
Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Enrollment Limitation: Enrollment is limited to Honors Program students. Details about the Honors Program can be found in the Cosumnes River College Catalog.
Transferable: CSU; UC
General Education: AA/AS Area V(b); CSU Area D7; IGETC Area 4G
Catalog Date: June 1, 2020

What do pundits, politicians and the public have in common? The ability to impact political campaign communication. This seminar-style course will introduce students to the effects of political campaign communication on public opinion and election results. Using timely data, students will evaluate news media, debate presidential debates, and analyze campaign messages using qualitative and quantitative approaches. This course is intended for the honors student interested in learning about political communication, rhetorical criticism, and techniques for writing for academic audiences. Enrollment is limited to Honors Program students. Details about the Honors Program can be found in the front of the Catalog and on the CRC website. This course is the same as COMM 480, and only one may be taken for credit.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- EXPRESS IDEAS CLEARLY IN WELL-ORGANIZED WRITTEN MESSAGES (SLO #1).
- Express ideas clearly and completely in a variety of written formats.
- Utilize correct and appropriate conventions of mechanics, usage, and style in written communication.
- Comprehend main ideas and reasonably interpret written information.
- Compose and apply properly documented sources of information.
- UTILIZE MODES OF ANALYSIS AND CRITICAL THINKING IN A DISCIPLINE OF STUDY AS APPLIED TO SIGNIFICANT ISSUES AND/OR PROBLEMS (SLO #2).
- Contrast historical campaign communication with contemporary examples.
Distinguish between quantitative and qualitative theoretical approaches in research of political communication.

Analyze the critical process by differentiating between “maxims” that guide critical invention.

Compare and contrast different rhetorical approaches. Analyze contemporary pieces of rhetorical criticism and consider applications for current political messages.

Analyze reasoning processes to evaluate issues, value judgments or conclusions that determine the quality, validity, and/or reliability of information.

Construct an accurate and/or logical interpretation of reasoning while applying a framework of analytic concepts.

Explain the importance of the study of political campaign communication in the broader picture of society.

ACTIVELY ENGAGE IN INTELLECTUAL INQUIRY BEYOND THAT REQUIRED IN ORDER TO PASS A COURSE OF STUDY (SLO #3).

Apply information and resources necessary to develop academically and personally.

Utilize skills from one’s “academic tool kit” including time management, study skills, etc.

RECOGNIZE THE ETHICAL DIMENSIONS OF DECISIONS AND ACTIONS (SLO #4).

Demonstrate the ability to engage in ethical reasoning necessary to exercise responsibility as an ethical individual, professional, local and global citizen.

ARTICULATE AN AWARENESS OF A VARIETY OF PERSPECTIVES WITHIN A DISCIPLINE AND THE RELEVANCE OF THESE PERSPECTIVES TO ONE’S OWN LIFE (SLO #5). This includes the ability to:

- Collect and critically evaluate media messages. Focusing on news mediums (e.g. television, radio, newspapers, the Internet), assess the role of the media and its impact on campaign communication.

- Contrast and assess the effectiveness of candidate messages. Construct rhetorical visions expressed in the campaign communication of presidential (and possibly other) candidates.

- Debate the presidential debates. Analyze the presidential candidates’ positions on political issues and performance effectiveness.

- Assess voter reaction to the political debates and other forms of campaign communication. Select common themes communicated in focus groups research as a way to interpret public opinion.

- Design and construct a critical paper evaluating some aspect of political campaign communication.

- Consider the implications of writing for an academic audience.

HONOR 341 Honors Seminar: Persuasion within Social Issues

Same As: COMM 482

Units: 3

Hours: 54 hours LEC

Prerequisite: ENGWR 300, ENGWR 480, or HONOR 375 with a grade of "C" or better, or placement through the assessment process.

Enrollment Limitation: Enrollment is limited to Honors Program students.

Transferable: CSU; UC (UC Transfer Credit Limitation: HONOR 341 and COMM 482 combined: maximum credit, 1 course)

General Education: CSU Area A3; IGETC Area 1B

Catalog Date: June 1, 2020

This seminar-style course will introduce students to the fundamental theories and techniques of persuasion as they occur in various communication contexts, including commercial, interpersonal, public and mass media. A series of writing assignments will focus on the skills of critical thinking, persuasion, and the sophistication of argumentative essay skills. Essays of advanced composition shall be evaluated for their quality in both critical thinking and composition. The writing assignments will apply theoretical models of critical thinking and communication studies to rhetoric, examining message production, analyzing messages, and exploring the fields of electronic and print media, advertising (product campaign), political campaign strategy, and ideological campaign techniques for mass communication. Students explore ethical considerations of persuasive communication, learn about types of reasoning, and identify fallacious arguments as they occur in persuasion. Students will focus on the design and organization of persuasive messages within a speech format for an individual or group presentations for a live audience. This course offers honors students the opportunity to study, critique, discuss and present advanced topics to focus on the impact of persuasive attempts within ethical, social and political issues.

Access to a computer with online capabilities may be required and computer access is available on campus. Enrollment is limited to Honors Program students. Details about the Honors Program can be found in the front of the Catalog and on the CRC website. As COMM 315, Persuasion, has a similar basis as this Honors course, this course is not open to a student that has received credit for COMM 315, Persuasion. This course is the same as COMM 482 and only one may be taken for credit.

Student Learning Outcomes
Upon completion of this course, the student will be able to:

- **COMPOSE IDEAS CLEARLY IN EFFECTIVE, APPROPRIATE AND WELL-ORGANIZED WRITTEN MESSAGES (SLO #1).**

- Use advanced lower-division composition techniques that address essay structure, continuity, emphasis and subtlety, elements of style, grammar as stylistic technique, audience, and persuasive essay writing.

- Apply the advanced use of clarity (agent-action-goal) and coherence (concentration, focus, maintenance, clear orientation and subject control), concision and emphasis to develop writing skills appropriate for a sophisticated style of English.

- Compose arguments cogently in a number of modes, including but not limited to making proposals, providing evaluation, and explanation of positions and the existence of causal and/or correlation relationships.

- Design and organize persuasive messages within a speech format for an individual or group presentations for a live audience.

- **ANALYZE AND FORMULATE CRITICAL THINKING WITHIN THE EVIDENCE AND REASONING OF SPOKEN AND WRITTEN MESSAGES (SLO #2).**

- Identify, review, and utilize methods of persuasion for messages designed within a specific content issue or arena, such as a series of public service announcements for a social issue (such as anti-drug messages, or environmental green issues, or human civil rights, etc), and/or political campaign or public office speeches, and other website or multimedia presentations.

- Understand the nature of critical thinking and quality composition.

- Apply the theoretical foundations for argument analysis, persuasion and essay construction of induction, deduction, analysis, synthesis, sound reasoning, and fallacy identification within the readings and writing of persuasive communication messages.

- Analyze and respond to competing points of views to determine the stances of the authors on the subjects as well to express individual stances logically and effectively.

- **ASSESS INDIVIDUAL RESPONSIBILITY WITHIN ONE'S ABILITY TO INFLUENCE ETHICAL, EFFECTIVE AND APPROPRIATE COMMUNICATION AMONG DIVERSE SETTINGS AND PEOPLE (SLO #3).**

- Employ critical thinking and writing skills in reflection about multi-cultural diversity issues, ethics, and politics in terms of the effectiveness and appropriateness of persuasive communication.

- **DEFINE AND IDENTIFY VARIOUS THEORETICAL PERSPECTIVES ACROSS THE DISCIPLINE OF COMMUNICATION STUDIES (SLO #4).**

- Analyze persuasive messages, including identifying and explaining the persuasive components or strategies used to effect change.

- Identify persuasive strategies and their theoretical foundations as they exist in a variety of communication contexts (e.g., interpersonal compliance-gaining, commercial advertising, political rhetoric and campaigning, public speaking, mass media, etc.).

- Differentiate between humanistic and social science approaches to persuasion.

- Determine and evaluate criteria for the development of successful persuasive campaigns, focusing on a specific set of message designs in a specified content, such as a series of public service announcements in multimedia presentation, website information, published and/or transcribed speeches, and/or publication of printed materials.

- Define and identify various theoretical perspectives across the discipline of Communication Studies within written and verbal messages prepared to present analysis of persuasive techniques and strategies to the other students participating in an Honors seminar-style format.

---

**HONOR 350 Honors Seminar: Introduction to Critical Theory**

**Same As:** FMS 488  
**Units:** 3  
**Hours:** 54 hours LEC  
**Prerequisite:** None.  
**Transferable:** CSU; UC  
**General Education:** AA/AS Area I; CSU Area C2; IGETC Area 3B  
**Catalog Date:** June 1, 2020

This course investigates questions of interpretation and representation in film, literature, media, and culture. Students examine contemporary critical and cultural theory, then apply these theories in analyzing a variety of texts from the Shakespearean play to the science fiction horror film. Theories introduced include, but are not limited to, semiotics, psychoanalysis, rhetorical criticism, gender theory, and postmodernism. Students intending to transfer into arts, film, literature, humanities, and cultural studies programs will find this course particularly useful in understanding the critical language of the university. Enrollment is limited to Honors Program students. Details about the Honors Program can be found in the front of the Catalog and on the CRC website. This course is the same as FMS 488, and only one may be taken for credit.
Upon completion of this course, the student will be able to:

- EXPRESS IDEAS CLEARLY IN WELL-ORGANIZED WRITTEN MESSAGES (SLO #1, College Wide SLO – Area 1, and General Education SLO C5a – English Composition). This includes the ability to:
  - Express ideas clearly and completely in a variety of written formats.
  - Utilize correct and appropriate conventions of mechanics, usage, and style in written communication.
  - Comprehend main ideas and reasonably interpret written information.
  - Compose and apply properly documented sources of information.
- UTILIZE MODES OF ANALYSIS AND CRITICAL THINKING IN A DISCIPLINE OF STUDY AS APPLIED TO SIGNIFICANT ISSUES AND/OR PROBLEMS (SLO #2; College Wide SLO Area 3). This includes the ability to:
  - Construct an accurate and/or logical interpretation of reasoning while applying a framework of analytic concepts.
- ACTIVELY ENGAGE IN INTELLECTUAL INQUIRY BEYOND THAT REQUIRED IN ORDER TO PASS A COURSE OF STUDY (SLO #3, College Wide SLO – Area 4). This includes the ability to:
  - Apply information and resources necessary to develop academically and personally.
  - Utilize skills from one’s “academic tool kit” including time management, study skills, etc.
- RECOGNIZE THE ETHICAL DIMENSIONS OF DECISIONS AND ACTIONS (SLO #4, College Wide SLO – Area 5). This includes the ability to:
  - Demonstrate the ability to engage in ethical reasoning necessary to exercise responsibility as an ethical individual, professional, local and global citizen.
- ARTICULATE AN AWARENESS OF A VARIETY OF PERSPECTIVES WITHIN A DISCIPLINE AND THE RELEVANCE OF THESE PERSPECTIVES TO ONE’S OWN LIFE (SLO #5, College Wide SLO – Area 2). This includes the ability to:
  - Understand, evaluate, and apply critical theory, theory's relationship to art and culture, its role in interpreting literary and visual arts, and examining ideology and representations of gender and ethnicity.
  - Apply current theory to the analysis and criticism of film, literature, and media.
  - Understand, evaluate and apply the basic concepts of semiotics, post-structuralism, psychoanalysis, gender theory, and postmodernism and their relationship to/influence on art and politics.

HONOR 352 Honors Seminar: The Films of Alfred Hitchcock

Same As: FMS 489
Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Transferable: CSU; UC
General Education: AA/AS Area I
Catalog Date: June 1, 2020

This seminar studies the work of Alfred Hitchcock from the perspective of the key concepts in film theory. Students will investigate the films and criticism of one of the greatest and strangest directors, the self-styled master of suspense. This seminar takes a close reading of Hitchcock's most important films and the most significant writing on the director's work. For students interested in film, media, art, literature, and the humanities, the course examines Hitchcock's visual style, thematic concerns, and directorial techniques, and introduces the major critical approaches to cinema studies. Enrollment is limited to Honors Program students. Details about the Honors Program can be found in the front of the Catalog and on the CRC website. This course is the same as FMS 489, and only one may be taken for credit.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- EXPRESS IDEAS CLEARLY IN WELL-ORGANIZED WRITTEN MESSAGES (SLO #1, College Wide SLO – Area 1, and General Education SLO C5a – English Composition). This includes the ability to:
  - Express ideas clearly and completely in a variety of written formats.
Utilize correct and appropriate conventions of mechanics, usage, and style in written communication.

Comprehend main ideas and reasonably interpret written information.

Compose and apply properly documented sources of information.

UTILIZE MODES OF ANALYSIS AND CRITICAL THINKING IN A DISCIPLINE OF STUDY AS APPLIED TO SIGNIFICANT ISSUES AND/OR PROBLEMS (SLO #2; College Wide SLO Area 3). This includes the ability to:

Construct an accurate and/or logical interpretation of reasoning while applying a framework of analytic concepts.

ACTIVELY ENGAGE IN INTELLECTUAL INQUIRY BEYOND THAT REQUIRED IN ORDER TO PASS A COURSE OF STUDY (SLO #3, College Wide SLO – Area 4). This includes the ability to:

Apply information and resources necessary to develop academically and personally.

Utilize skills from one’s “academic tool kit” including time management, study skills, etc.

ARTICULATE AN AWARENESS OF A VARIETY OF PERSPECTIVES WITHIN A DISCIPLINE AND THE RELEVANCE OF THESE PERSPECTIVES TO ONE’S OWN LIFE (SLO #4, College Wide SLO – Area 2). This includes the ability to:

Identify the stylistic, narrative, and thematic concerns in the director’s work.

Understand Hitchcock’s contribution to the cinematic language (pure cinema, point of view, montage, mise-en-scene) and genre (the melodrama and the thriller).

Read, understand, evaluate, and compare the key critical appraisals of the director by Modelski, Wood, Spoto, Truffaut and others.

Apply critical theory (auteur, feminist, psychoanalytic, semiotic) in the analysis of the films and their cultural implications.

Participate in the seminar mode of learning, including seminar discussion and presentation of a creative and original paper of critical value to the study of Hitchcock.

HONOR 364 Honors Seminar: Philosophy of the Martial Arts

This course provides an introduction to the philosophical views that have traditionally been associated with the practice of martial arts and explores the interplay between those views and that practice. It also provides an introduction to those contemporary philosophical issues that arise in the context of present day analytic philosophical reflection on the nature and practice of martial arts. The course thus provides both the opportunity to appreciate the eastern philosophical underpinnings of an activity that has become part of mainstream American Culture and the opportunity to experience the rigorous application of contemporary analytic academic philosophical methodology. Details about the Honors Program can be found in the front of the Catalog and on the CRC website. Enrollment is limited to Honors Program students. This course is the same as PHIL 485 and only one may be taken for credit.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- Employ the general and transferable critical thinking and communication abilities developed by the rigorous study of academic philosophy (SLO 1).
- Demonstrate the ability to engage in upper-division work in the discipline of Philosophy.
- Apply the basic methodology of contemporary analytic philosophy (e.g. assess, critique, deduce, evaluate, research, support, justify, analyze, debate, defend, detect, distinguish, examine, etc.) to understand traditional Asian, as well as contemporary American, martial arts.
- Recognize and explain the fundamental ethical, metaphysical, and epistemological tenets of Confucianism, Buddhism, and Taoism (SLO 2).
- Describe and explain the influence of the fundamental ethical, metaphysical, and epistemological tenets of Confucianism, Buddhism, and Taoism on the traditional study of (Asian) martial arts.
- Demonstrate the ability to navigate a seminar environment (SLO 3).

Same As: PHIL 485
Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Transferable: CSU; UC
General Education: CSU Area C2; IGETC Area 3B
Catalog Date: June 1, 2020
HONOR 366 Recent United States History - Honors

This course is an introduction to the study of American history from 1945 to the present day. It is an honors course that uses an intensive instructional methodology designed to challenge motivated students and cultivate advanced critical thinking skills. Particular emphasis will be placed on the role played by complex interrelationships of political, economic, social, and cultural forces in United States history after World War II, and the role played by multiple ethnic groups as well. This course is not open to students who have completed HIST 314. Enrollment is limited to Honors Program students. Details about the Honors Program can be found in the front of the Catalog and on the CRC website.

This course is the same as HIST 485 and only one may be taken for credit.

Upon completion of this course, the student will be able to:

- ANALYZE REASONING PROCESSES TO EVALUATE ISSUES, VALUE JUDGMENTS, OR CONCLUSIONS THAT DETERMINE THE QUALITY, VALIDITY, AND/OR RELIABILITY OF INFORMATION (SLO #1).
- Construct an accurate and/or logical interpretation of reasoning while applying a framework of analytic concepts through written assignments.
- Communicate a complex understanding of content matter of a major discipline of study through oral presentations and class discussions.
- Explain the importance of historical consciousness of the major discipline of study in understanding the broader picture of society through a final project.
- APPLY COMPLEX CRITICAL THINKING SKILLS TO READ AND WRITE EFFECTIVELY AS SELF-RELIANT, EVALUATIVE READERS AND WRITERS (SLO #2).
- Express ideas clearly and completely in a variety of written formats.
- Utilize correct and appropriate conventions of mechanics, usage, and style in written communication.
- Comprehend main ideas and reasonably interpret written information in the form of primary documents.
- Compose and apply properly documented sources of information.
- DEFINE AND IDENTIFY VARIOUS THEORETICAL PERSPECTIVES ACROSS THE DISCIPLINE OF HISTORY THROUGH READING PRIMARY AND SECONDARY SOURCES (SLO #3).
- Generate significant open-ended questions about United States history, and critically analyze primary and secondary sources to construct historical arguments and perspectives that inform one’s own life.
- Demonstrate an understanding of the interconnectedness between United States history and global history to foster active citizenship as well as applying historical knowledge and historical thinking to contemporary issues.
- Identify, explain, and evaluate the major historical forces in United States history since 1945.
- Evaluate and analyze diverse experiences and perspectives in United States history through an examination of conflicting narratives and power imbalances.

HONOR 367 Introduction to Government: United States – Honors
This course analyzes the U.S. government's historic origins, philosophical and theoretical justification, constitutional structures and how these institutions work. It examines and describes the procedural aspects of the political system including holding elections, campaigning, voting, lobbying, legislating, executing and adjudicating law. It provides an analysis of contemporary problems and issues. It also describes California state and local governments' constitutional base, structures and functions, political process, problems and issues. Conducted in a seminar format, this course emphasizes participatory classroom styles of learning and the material used is more substantial and sophisticated. In addition, there are extensive research projects on American institutions, political processes, and political behavior designed to challenge and motivate. This course is not open to students who have completed POLS 301. Enrollment is limited to Honors Program students. Details about the Honors Program can be found in the front of the Catalog and on the CRC website.

This course is the same as POLS 481. This course, under either name, may be taken only one time for credit.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO 1: UTILIZE MODES OF ANALYSIS AND CRITICAL THINKING IN THE STUDY OF AMERICAN GOVERNMENT AS APPLIED TO SIGNIFICANT ISSUES AND/OR PROBLEMS.
  - Describe the nature of government and its theoretical foundations and functions.
  - Relate American political thought, the Constitution, and governing institutions to one another.
  - Identify and explain the structures and functions of the United States and California governments prescribed by their respective constitutions.
  - Compare and contrast the federal, state and local governments with respect to their political foundations, functions, and contemporary problems.
  - Explain the civil liberties and civil rights of individuals as articulated in the United States Constitution and federal court decisions.
  - Identify and evaluate political processes within the United States and California, including the development of political ideologies, voting behavior and other forms of political participation.

- SLO 2: ACTIVELY ENGAGE IN INTELLECTUAL INQUIRY AND CRITICAL THINKING BEYOND THAT REQUIRED IN ORDER TO PASS A COURSE OF STUDY IN AMERICAN DEMOCRACY.
  - Analyze complex readings and processes as they apply to contemporary issues in American Politics.
  - Illustrate and appraise the relationship between national, state, and local governments and evaluate the effectiveness of the federal system.
  - Discuss and analyze contemporary political issues and operations in the United States and California.

- SLO 3: RECOGNIZE THE ETHICAL DIMENSIONS OF DECISIONS AND ACTIONS.
  - Hypothesize the conditions under which various political outcomes are likely to occur and provide theoretical explanations for said outcomes.

- SLO 4: ARTICULATE AN AWARENESS OF THE VARIETY OF PERSPECTIVES WITHIN POLITICAL SCIENCE AND THE RELEVANCE OF THESE PERSPECTIVES TO ONE'S OWN LIFE.
  - Evaluate and explain how the American system affects the student's life in terms of freedoms, restraints, and public policy.
  - Analyze the role of culture, diversity, and ideology in shaping public opinion and public policy in the United States and California.

- SLO 5: EXPRESS IDEAS CLEARLY IN WELL-ORGANIZED WRITTEN MESSAGES
  - Express ideas competently, using appropriate grammar, in a variety of written formats.

HONOR 375 Honors College Composition
This course offers the honors student a challenging course that will develop skills in critical thinking, reading, and writing. It asks students to critically analyze, compare, and evaluate various complex works. The course is designed to help students demonstrate, in both argumentative and expository prose, complex critical thinking, effective organization, precise diction, and sophisticated style; at least one of those essays requires research and appropriate MLA documentation. Essays written during the term will total at least 8,000 words. Throughout the course, fluency and correctness are emphasized. This course is not open to students who have successfully passed ENGWR 300 or ESLW 340. This course is the same as ENGWR 480. This course, under either name, may be taken one time for credit.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- Compose carefully reasoned and stylistically sophisticated college-level essays using a variety of rhetorical strategies and applying appropriate citations and formatting standards (SLO #1; Engl. Prog. SLO #1; Honors Prog. SLO #1 and #5).
- Use pre-writing, drafting, revision, and editing/proofreading to create essays.
- Write focused, thoughtful thesis statements.
- Support opinions in writing through careful, critical thinking.
- Compose stylistically sophisticated essays using a variety of approaches, such as comparison/contrast, classification, definition, narration, description, causal analysis.
- Construct a carefully reasoned argument in writing that considers audience and opposition.
- Build coherence and unity in writing at three levels: sentence, paragraph, and essay.
- Organize written texts logically and creatively without dependence on formulaic prescriptions.
- Apply complex critical thinking skills by defining issues as well as researching, evaluating, and synthesizing sources to support a thesis (SLO #2; Engl. Prog. SLO #2 and Engl. Prog. SLO #3; Honors Prog. SLO #3 and #4).
- Appraise and use a variety of research techniques.
- Evaluate sources.
- Research and incorporate sources effectively and meaningfully in writing.
- Summarize, paraphrase, and directly quote outside sources as support for his or her ideas and/or represent a belief held by the opposition.
- Use MLA documentation format correctly.
- Critically analyze, compare, and evaluate various complex works (SLO #3; Engl. Prog. SLO #4; Honors Prog. SLO #2 and #5).
- Annotate and analyze complex written texts and respond thoughtfully to them.
- Analyze and evaluate the 3-fold rhetorical concerns of audience, writer, and message in written texts.
- Question an author's claim and support.
- Critique his or her own and other student writing.
- Apply the conventions of standard written English employing a variety of sentence structures and college-level diction (SLO #4; Engl. Prog. SLO #5; Honors Prog. SLO #1).
- Use clear and varied sentences to demonstrate overall mastery of the conventions of standard written English.
- Analyze his or her own and other student style and diction.
HONOR 378 Honors - Literature Adapted into Film

This course analyzes the process, challenges, failures, and successes of adapting literary and stage material into film. It compares faithful and unfaithful adaptations through reading the original texts and viewing the adapted films with an awareness of their historical and cultural contexts. The course examines intention, creative distinctions, as well as limits and strengths of each medium. This course requires at least one research essay proposing and justifying details for an adaptation and including appropriate MLA documentation. This course is the same as ENGLT 488. This course, under either name, may be taken one time for credit.

Upon completion of this course, the student will be able to:

- CRITICALLY ANALYZE, COMPARE, AND EVALUATE VARIOUS WORKS OF LITERATURE AND FILM (SLO#1; PSLO #4 and #1; Honors Prog. SLO #2 and #5). Outcome may be evaluated by all or some of the following criteria:
  - Annotate and analyze written texts and respond thoughtfully to them.
  - Analyze and summarize films and respond thoughtfully to them.
  - Determine themes, plot structure, characters, and symbols used in written works and films.
  - Question a director's intention and effectiveness of the director's choices.
  - Compare and contrast elements of adaptations (such as theme for example) to the corresponding elements in the original texts.
  - Construct criteria for judging strengths and weaknesses of adaptations.
  - Appraise the successes and failures of adaptations.
  - Assess the effects of historical and/or social context for each work studied.
  - Critique his or her own and other student writing.
- APPLY COMPLEX CRITICAL THINKING SKILLS TO READ AND WRITE EFFECTIVELY AS SELF-RELIANT, EVALUATIVE READERS AND WRITERS (SLO#2; PSLO #2 and #3; Honors Prog. SLO #2 and #5). Outcome may be evaluated by all or some of the following criteria:
  - Demonstrate awareness of the effects of literature on the reader through textual analysis, classroom discussion, and response papers.
  - Apply terminology from literary studies.
  - Analyze and interpret elements of literature.
  - Appraise the strengths and weaknesses inherent in the genres of fiction, non-fiction, and drama.
  - Evaluate literary texts in cultural context, as cultural and artistic expressions in their historical and social background.
  - Compose interpretive essays based on the literature.
  - Propose his or her own plan of adapting a literary work into film and justify the choices made in this proposal.
- ANALYZE, CRITIQUE, AND EXPRESS IDEAS EFFECTIVELY AS SELF-RELIANT, EVALUATIVE VIEWERS OF FILMS BY APPLYING COMPLEX CRITICAL THINKING SKILLS (SLO#3; PSLO #2 and #4; Honors Prog. SLO #2 and #5). Outcome may be evaluated by all or some of the following criteria:
  - Apply terminology from film studies and critical theories.
  - Analyze and the interpret elements of film.
  - Appraise the strengths and weaknesses inherent in the genres of film
  - Evaluate films based on concepts such as narrative modes, genre conventions, and production exigencies.
  - Evaluate films in cultural context, as cultural and artistic expressions in their historical and social background.
  - Compose interpretive essays based on the literature.
• ASSESS ISSUES AS WELL AS RESEARCH, EVALUATE, AND SYNTHESIZE SOURCES TO SUPPORT A THESIS BY APPLYING COMPLEX CRITICAL THINKING SKILLS (SLO#4; PSLO #2, #3 and #5; Honors Prog. SLO # 3 and #4). Outcome may be evaluated by all or some of the following criteria:

• Evaluate and justify his or her own choices made in a proposed adaptation of a literary work.
• Integrate details from research to support his or her own choices made in the proposed adaptation.
• Appraise and use a variety of research techniques.
• Evaluate sources.
• Research and incorporate sources effectively and meaningfully in writing.
• Summarize, paraphrase, and directly quote outside sources as support for his or her ideas and/or represent a belief held by the opposition.
• Use MLA documentation format correctly.

HONOR 385 Honors Seminar in Genetics

This course offers honors students the opportunity to study, critique, and discuss advanced topics in genetics such as genetically modified foods, whole-genome rapid sequencing, gene therapies for human disease, and a variety of reproductive technologies. Furthermore, this course includes the study of Mendelian inheritance, the roles of chromosomes and genes in human disease, how genes direct development, the relationship between genes, environment and behavior, and the contribution of genes to human diversity. Students will engage with each other to discuss ethical, legal and social issues during class discussions, and analyze scientific literature in written reports. Enrollment is limited to Honors students. Details about the Honors Program can be found in the Catalog and on the CRC website. This course is the same as BIOL 485. This course, under either name, may be taken a total of one time for credit.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• SLO 1: SOLVE GENETICS PROBLEMS BY APPLYING PRINCIPLES OF INHERITANCE.
  Solve genetics problems by applying Mendelian principles to single and two gene problems with and without dominance.
  Solve genetics problems involving sex linkage.
• SLO 2: INTEGRATE MOLECULAR GENETICS AND CELL BIOLOGY TO EXPLAIN THE BASIS OF HUMAN GENETIC TRAITS.
  Relate the functions of cellular organelles to specific human genetic disorders.
  Describe the structure and functions of DNA, RNA and proteins.
  Relate DNA, RNA and proteins to the development of human characteristics.
  Examine the interaction between genes and the environment.
  Use relevant genetic concepts to assess the contribution of genetic variation and environmental variation to variation in human phenotypes.
• SLO 3: RECOGNIZE THE IMPORTANCE OF GENE THERAPY, GENETIC ENGINEERING, AND BIOTECHNOLOGY ON HUMAN HEALTH.
  Describe the role of genes in human diseases (like cancer).
  Communicate how advances in recombinant DNA technology and biotechnology (e.g. gene therapy and genetic engineering) can be used to treat genetic diseases in humans, and modify other organisms for human use.
  Understand how modern DNA sequencing and genome databases are being used to change medical practices and better human health.
• SLO 4: GATHER RELEVANT INFORMATION AND USE IT TO EVALUATE THE SCIENTIFIC VALIDITY OF INFORMATION PRESENTED BY THE MEDIA AND OTHER SOURCES.
  Distinguish between scientific hypotheses, inferences, and speculation.
Identify and analyze the scientific basis of modern genetic technologies.

Review current scientific literature, and evaluate the effectiveness of the research.

Present written and/or oral reports which address background information, procedures, results, and interpretation of data from scientific literature.

Examine current ethical and social issues in human genetics.

**HONOR 391 Honors Seminar in Mathematics - Introduction to Mathematical Proof**

- **Same As:** MATH 483
- **Units:** 1
- **Hours:** 18 hours LEC
- **Prerequisite:** MATH 370 with a grade of "C" or better
- **Transferable:** CSU; UC
- **Catalog Date:** June 1, 2020

Honors Seminars in Mathematics are special one-unit intensive courses for academically accomplished students or those with the potential for high academic achievement. This particular course will study various methods of mathematical proof in a seminar setting, and will be particularly useful to students planning to study calculus, differential equations, and linear algebra. Topics include: deductive reasoning, proof by axioms, proofs of conditional and biconditional statements, proofs by contrapositive and contradiction, and proof by mathematical induction. Studies will include homework, discussions, oral presentations and lectures. Students will be expected to do independent problem solving and present their solutions to the class. Enrollment is limited to Honors Program students (see catalog). This course is the same as MATH 483. This course, under either name, may be taken one time for credit. This course will be offered in spring semester only.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- SLO 1: EXAMINE METHODS OF PROOF
  - Prove statements using axioms
  - Prove statements using deductive reasoning
  - Prove conditional statements
  - Prove biconditional statements
  - Prove statements using the contrapositive
  - Prove statements using contradiction
  - Prove statements using mathematical induction

**HONOR 392 Honors Seminar in Mathematics - Topics in Number Theory**

- **Same As:** MATH 484
- **Units:** 1
- **Hours:** 18 hours LEC
- **Prerequisite:** MATH 370 with a grade of "C" or better
- **Transferable:** CSU; UC
- **Catalog Date:** June 1, 2020

Honors Seminars in Mathematics are special one-unit intensive courses for academically accomplished students or those with the potential for high academic achievement. This particular course will study various topics in the field of number theory in a seminar setting. Topics include: the integers and their properties; finding integer solutions to Diophantine equations (equations with more variables than equations); and cryptography (the study of how secret codes are created and broken). Studies will include homework, discussions, oral presentations and lectures. Students will be expected to do independent problem solving and present their solutions to the class. Enrollment is limited to Honors Program students (see catalog). This course is the same as MATH 484. This course, under either name, may be taken one time for credit. This course will be offered in spring semester only.

**Student Learning Outcomes**
Upon completion of this course, the student will be able to:

- **SLO 1: EXAMINE THE PROPERTIES OF THE INTEGERS**
  - Examine divisibility
  - Examine prime numbers
  - Calculate the greatest common divisor
  - Examine the fundamental theorem of arithmetic
  - Prove theorems involving the integers
- **SLO 2: EXAMINE DIOPHANTINE EQUATIONS**
  - Examine the Euclidean algorithm
  - Solve linear Diophantine equations
  - Prove theorems involving Diophantine equations
- **SLO 3: EXAMINE LINEAR CONGRUENCES**
  - Examine modular arithmetic
  - Examine the properties of congruences
  - Solve congruence equations
  - Prove theorems involving linear congruences
- **SLO 4: EXAMINE CRYPTOLOGY**
  - Examine the theory of cryptology
  - Examine encoding messages
  - Examine decoding messages
  - Prove theorems involving cryptology

**HONOR 393 Introduction to Probability and Statistics - Honors**

<table>
<thead>
<tr>
<th align="right">Same As:</th>
<th align="right">STAT 480</th>
</tr>
</thead>
<tbody>
<tr>
<td align="right">Units:</td>
<td align="right">4</td>
</tr>
<tr>
<td align="right">Hours:</td>
<td align="right">72 hours LEC</td>
</tr>
<tr>
<td align="right">Prerequisite:</td>
<td align="right">MATH 120 or 125 with a grade of &quot;C&quot; or better, or placement through the assessment process.</td>
</tr>
<tr>
<td align="right">Enrollment Limitation:</td>
<td align="right">Enrollment is limited to Honors Program students. Details about the Honors Program can be found in the Cosumnes River College Catalog.</td>
</tr>
<tr>
<td align="right">Transferable:</td>
<td align="right">CSU; UC</td>
</tr>
<tr>
<td align="right">General Education:</td>
<td align="right">AA/AS Area II(b); CSU Area B4; IGETC Area 2</td>
</tr>
<tr>
<td align="right">C-ID:</td>
<td align="right">C-ID MATH 110</td>
</tr>
<tr>
<td align="right">Catalog Date:</td>
<td align="right">June 1, 2020</td>
</tr>
</tbody>
</table>

This course is an introduction to probability and statistics designed for students in the honors program. Topics include elementary principles and applications of descriptive statistics, counting principles, elementary probability principles, probability distributions, estimation of parameters, hypothesis testing, linear regression and correlation, and ANOVA. Scientific calculators with two-variable statistical capabilities may be required for this class. This honors section uses an intensive instructional methodology designed to challenge motivated students. This course is the same as STAT 480 and only one may be taken for credit.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- **SLO 1: ORGANIZE, DISPLAY, DESCRIBE AND COMPARE REAL DATA SETS.**
- Recognize data types and data sources: develop basic statistical terminology including population parameters & sample statistics; identify common sampling methods used for obtaining data and identify advantages & disadvantages of each; recognize bias in sampling; compare principles of good experimental design
- Organize and display data appropriately by preparing tables and graphs.
Analyze data by computing measures of central tendency, measures of dispersion, and measures of position.

Analyze bivariate data for linear trends using the least-squares regression model and the correlation coefficient.

SLO 2: DISTINGUISH BETWEEN PROBABILITY MODELS APPROPRIATE TO DIFFERENT CHANCE EVENTS AND CALCULATE PROBABILITY ACCORDING TO THESE METHODS

Compute probabilities using sample spaces, the addition & multiplication rules, conditional probability, and complements.

Develop and apply probability distributions for discrete random variables; compute probabilities and expected value.

Analyze both discrete and continuous probability distributions by considering areas under the graph of a function or a histogram.

Use the normal and binomial probability distributions to compute probabilities.

Develop and apply sampling distributions for the sample mean and sample proportion.

SLO 3: APPLY INFERENTIAL STATISTICAL METHODS TO MAKE PREDICTIONS, DRAW CONCLUSIONS ABOUT HYPOTHESES AND COMPARE POPULATIONS.

Create and interpret confidence interval estimates for population mean and population proportion based on appropriate probability models.

Select the appropriate hypothesis test, perform the necessary computations and comparisons to test hypotheses about one population mean or one population proportion and explain the conclusion of the test.

Create and interpret confidence interval estimates for the difference in two population means (independent and dependent sampling) or two population proportions.

Select the appropriate hypothesis test, perform the necessary computations and comparisons to test hypotheses about two-population means (independent & dependent sampling), more than two population means (ANOVA), and two or more population proportions (Chi-Sq. tests) and explain the conclusion of the test.

Test significance of correlation and make predictions based on linear trends using the least-squares regression model.

SLO 4: USE TECHNOLOGY TO PERFORM STATISTICAL COMPUTATIONS, PREDICTIONS AND HYPOTHESIS TESTSeducation, psychology, life science, health science and education.

SLO 5: USE APPROPRIATE STATISTICAL TECHNIQUES TO ANALYZE AND INTERPRET APPLICATIONS OF DATA including all of the following: business, economics, social sciences, psychology, life science, health science and education.

SLO 6 (HONORS PROGRAM SLO 1): EXPRESSION OF IDEAS: EXPRESS IDEAS CLEARLY IN WELL-ORGANIZED WRITTEN MESSAGES (SLO #1, College Wide SLO – Area 1, and General Education SLO C5a – English Composition).

Express ideas clearly and completely in a variety of written formats.

Utilize correct and appropriate conventions of mechanics, usage, and style in written communication.

Comprehend main ideas and reasonably interpret written information.

Compose and apply properly documented sources of information.

SLO 7 (HONORS PROGRAM SLO 2): ANALYSIS AND CRITICAL THINKING: UTILIZE MODES OF ANALYSIS AND CRITICAL THINKING IN A DISCIPLINE OF STUDY AS APPLIED TO SIGNIFICANT ISSUES AND/OR PROBLEMS (SLO #2, College Wide SLO Area 3).

Analyze reasoning processes to evaluate issues, value judgments or conclusions that determine the quality, validity, and/or reliability of information.

Construct an accurate and/or logical interpretation of reasoning while applying a framework of analytic concepts.

Communicate a complex understanding of content matter of a major discipline of study.

Explain the importance of the major discipline of study in the broader picture of society.

SLO 8 (HONORS PROGRAM SLO 3): INTELLECTUAL INQUIRY: ACTIVELY ENGAGE IN INTELLECTUAL INQUIRY BEYOND THAT REQUIRED IN ORDER TO PASS A COURSE OF STUDY (SLO #3, College Wide SLO – Area 4).

Apply information and resources necessary to develop academically and personally.

Utilize skills from one’s “academic tool kit” including time management, study skills, etc.

SLO 9 (HONORS PROGRAM SLO 4): ETHICAL REASONING: RECOGNIZE THE ETHICAL DIMENSIONS OF DECISIONS AND ACTIONS (SLO #4, College Wide SLO – Area 5).

Demonstrate the ability to engage in ethical reasoning necessary to exercise responsibility as an ethical individual, professional, local and global citizen.

SLO 10 (HONORS PROGRAM SLO 5): ARTICULATE AN AWARENESS OF A VARIETY OF PERSPECTIVES WITHIN A DISCIPLINE AND THE RELEVANCE OF THESE PERSPECTIVES TO ONE’S OWN LIFE (SLO #5, College Wide SLO – Area 2).
Horticulture | Cosumnes River College

These CRC programs offer students the opportunity to blend the disciplines of horticulture, construction, drafting and business into a unique professional opportunity. A wide variety of employment opportunities are available in the Sacramento area for students completing the associate’s degree or one of the certificate programs. The continued growth of the area and the need for specialized training are creating a demand for qualified individuals. A student majoring in a degree option program should, upon completion, be able to meet the standards imposed by local industries for proper placement within the selected job area of the student’s choice. It should, however, be noted that each employment situation may require that additional standards be met.

Dean
Nancy Reitz

(916) 691-7391
reitzn@crc.losrios.edu

Associate Degrees

A.S. in General Agriculture

Agriculture is a vital component of our local, state, and national economies and offers many exciting employment opportunities. In addition to the production of a wide range of valuable agricultural commodities, the Sacramento region is home to numerous multi-national agricultural corporations and statewide governmental agencies. It is also a center for international agricultural trade and commerce.

This program is designed for students majoring in Agriculture while also allowing the student to select courses that fit his/her individual needs and desires.

As a General Agriculture major, you will:

*Study a general agriculture curriculum representing all of the departments of the Cosumnes River College agriculture program including: agriculture business, horticulture, welding, veterinary technology and plant science.

*Develop your leadership and communication skills.

*Identify the agricultural career you are most interested in and build a course of study to better qualify you for a profession.

HIGHLIGHTS

*As the only community college agriculture program in the Sacramento region, the CRC General Agriculture program provides an excellent opportunity for individuals who wish to pursue a career in agriculture and receive a General Agriculture Associate of Science degree.

*The faculty in this program works closely with the five California agricultural degree offering universities to provide a quality program for students interested in agriculture business, management and economics.

*The Sacramento region is fortunate to have some of the best high school agriculture programs in California. The faculty in the CRC Ag program works closely with these feeder schools to articulate coursework and facilitate the successful transition of agriculture students from high school to the university.

*Internships in agriculture are available for students interested in work experience opportunities.

NOTE TO TRANSFER STUDENTS: If you are interested in transferring to a four-year college or university to pursue a bachelor’s degree in this major, it is critical that you meet with a CRC counselor to select and plan the courses for your major. Schools vary widely in terms of the required preparation. The courses that CRC requires for an Associate’s degree in this major may be different from the requirements needed for the Bachelor’s degree.

Catalog Date: June 1, 2020

Degree Requirements
<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGB 310</td>
<td>Agriculture Computer Applications</td>
<td>3</td>
</tr>
<tr>
<td>AGB 320</td>
<td>Agriculture Accounting</td>
<td>3</td>
</tr>
<tr>
<td>AGB 321</td>
<td>Agriculture Economics</td>
<td>3</td>
</tr>
<tr>
<td>AMT 306</td>
<td>Small Engine Repair</td>
<td>3</td>
</tr>
<tr>
<td>HORT 300</td>
<td>Introduction to Horticulture</td>
<td>3</td>
</tr>
<tr>
<td>PLTS 310</td>
<td>Soils, Soil Management, and Plant Nutrition (3)</td>
<td>3</td>
</tr>
<tr>
<td>or HORT 302</td>
<td>Soils, Soil Management, and Plant Nutrition (3)</td>
<td>3</td>
</tr>
<tr>
<td>ANSC 300</td>
<td>Introduction to Animal Science</td>
<td>3</td>
</tr>
<tr>
<td>PLTS 300</td>
<td>Introduction to Plant Science</td>
<td>3</td>
</tr>
<tr>
<td>WELD 100</td>
<td>Introduction to Welding</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>A minimum of 2 units from the following:</td>
<td>2</td>
</tr>
<tr>
<td>WEXP 498</td>
<td>Work Experience in (Subject) (1 - 4)</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Subtotal Units:</td>
<td>29</td>
</tr>
</tbody>
</table>

### Agriculture Business

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGB 300</td>
<td>Introduction to Agriculture Business</td>
<td>3</td>
</tr>
<tr>
<td>AGB 330</td>
<td>Agriculture Sales and Communication</td>
<td>3</td>
</tr>
<tr>
<td>AGB 331</td>
<td>Agriculture Marketing</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Agriculture Business Units:</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td>Total Units:</td>
<td>38</td>
</tr>
</tbody>
</table>

### Horticulture

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>HORT 305</td>
<td>Plant Identification-Fall Selections</td>
<td>3</td>
</tr>
<tr>
<td>HORT 312</td>
<td>Plant Propagation</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Horticulture Units:</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>Total Units:</td>
<td>35</td>
</tr>
</tbody>
</table>

### Landscape

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>HORT 320</td>
<td>Sustainable Landscape Construction</td>
<td>3</td>
</tr>
<tr>
<td>HORT 324</td>
<td>Sustainable Landscape Maintenance</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Landscape Units:</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>Total Units:</td>
<td>35</td>
</tr>
</tbody>
</table>
Welding

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>WELD 110</td>
<td>Advanced Shielded Metal Arc Welding</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Welding Units:</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Total Units:</td>
<td>33</td>
</tr>
</tbody>
</table>

1 This major requires that you complete all courses in the required program plus one area of concentration.

The General Agriculture Associate in Science (A.S.) degree may be obtained by completion of the required program, plus general education requirements, plus sufficient electives to meet a 60-unit total. See CRC graduation requirements.

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- PSLO 1: Demonstrate knowledge and hands-on experience in the basic concepts of all aspects of agriculture.
- PSLO 2: Demonstrate the ability to logically breakdown aspects of a project/problem and be able to resolve an issue in the agriculture industry.
- PSLO 3: Demonstrate independent & group learning expressing effective communication skills, both orally & written.
- PSLO 4: Participate in leadership opportunities to develop life-long learning traits.

Career Information

Management; Supervision; Finance; Insurance; Government; Marketing; Distribution; International Trade; Sales and Service; Nursery Management and Operations; Park Maintenance; Landscape Design, Teaching, Communication; Contracting & Maintenance; Fertilizer & Insecticide Application; Research; Retail/Wholesale; Estimator; Consultant; Government Agency employee; Welding Technician; Inspection; Welding Engineering; Sculpting; Home/Handicraft & Hobby; Construction; Trucking & Automotive. Some positions, however, require a four-year degree for which CRC's program is a good base for transfer.

A.S. in Horticulture, Sustainable Landscape

A variety of professional career opportunities are available to those who wish to provide professional landscape installation and/or support services. Landscapers design, install, and maintain private and public outdoor spaces in which people live, work, and play. The Sustainable Landscape A.S. Degree concentrates on those courses that develop the knowledge, skills, and attitudes essential to creating, constructing, and maintaining functional and sustainable landscapes, green spaces, and irrigation systems, as well as for careers in arboriculture, and landscape material, supply, and specialty services. The courses of this degree focus on sound horticultural science and principles, plant identification, proper soil development and management, sustainable landscape and irrigation design, water conservation, sustainable construction and landscape and turf maintenance practices, tree care, integrated pest management, licensing and certification, and horticultural business practices.

Catalog Date: June 1, 2020

Degree Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>HORT 105</td>
<td>Pest Control Licensing or Certification</td>
<td>2</td>
</tr>
<tr>
<td>HORT 300</td>
<td>Introduction to Horticulture</td>
<td>3</td>
</tr>
<tr>
<td>HORT 302</td>
<td>Soils, Soil Management, and Plant Nutrition (3)</td>
<td>3</td>
</tr>
<tr>
<td>or PLTS 310</td>
<td>Soils, Soil Management, and Plant Nutrition (3)</td>
<td></td>
</tr>
<tr>
<td>HORT 303</td>
<td>Integrated Pest Management (3)</td>
<td>3</td>
</tr>
<tr>
<td>or PLTS 332</td>
<td>Integrated Pest Management (3)</td>
<td></td>
</tr>
<tr>
<td>COURSE CODE</td>
<td>COURSE TITLE</td>
<td>UNITS</td>
</tr>
<tr>
<td>-------------</td>
<td>--------------------------------------------------</td>
<td>-------</td>
</tr>
<tr>
<td>HORT 305</td>
<td>Plant Identification-Fall Selections (3)</td>
<td>3</td>
</tr>
<tr>
<td>HORT 306</td>
<td>Plant Identification-Spring Selections (3)</td>
<td>3</td>
</tr>
<tr>
<td>HORT 307</td>
<td>Plant Identification - Sustainable and CA Native Selections (3)</td>
<td>3</td>
</tr>
<tr>
<td>HORT 320</td>
<td>Sustainable Landscape Construction</td>
<td>3</td>
</tr>
<tr>
<td>HORT 324</td>
<td>Sustainable Landscape Maintenance (3)</td>
<td>3</td>
</tr>
<tr>
<td>HORT 340</td>
<td>Landscape and Irrigation Graphics and Design</td>
<td>3</td>
</tr>
<tr>
<td>HORT 350</td>
<td>Landscape Irrigation</td>
<td>3</td>
</tr>
<tr>
<td>HORT 351</td>
<td>Drip and Subsurface Irrigation</td>
<td>2</td>
</tr>
<tr>
<td>HORT 353</td>
<td>Sustainable Water Management</td>
<td>3</td>
</tr>
<tr>
<td>HORT 360</td>
<td>Introduction to Tree Care and Urban Forestry</td>
<td>3</td>
</tr>
<tr>
<td>HORT 498</td>
<td>Work Experience in Horticulture (1 - 4)</td>
<td>3</td>
</tr>
</tbody>
</table>

A minimum of 6 units from the following:

A minimum of 2 units from the following:

Total Units: 39

1Horticulture 100 at American River College meets the Hort 303 course requirement.
2Horticulture 322 at American River College meets the Hort 340 course requirement.

The Horticulture, Sustainable Landscape Associate in Science (A.S.) degree may be obtained by completion of the required program, plus general education requirements, plus sufficient electives to meet a 60-unit total. See CRC graduation requirements.

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- PSLO 1: Demonstrate a fundamental understanding of basic horticultural principles and practices.
- PSLO 2: Demonstrate a fundamental understanding of soils, soil development, soil building and preparation, and sustainable soil management.
- PSLO 3: Demonstrate a fundamental understanding of plant identification, selection, use, and maintenance of plant material best suited for conventional and sustainable landscapes.
- PSLO 4: Demonstrate a fundamental understanding of basic landscape design principles and practices.
- PSLO 5: Demonstrate proficiency at implementing sustainable landscape construction principles and practices to install landscapes and landscape systems.
- PSLO 6: Demonstrate proficiency at implementing sustainable tree care, landscape maintenance, and integrated pest management principles and practices to care for and maintain landscapes and green spaces.
- PSLO 7: Demonstrate proficiency at implementing the principles and practices of irrigation design and installation to design, install, and manage water efficient irrigation systems.

Career Information

Students who complete the Sustainable Landscape A.S. degree may find employment in a wide range of areas including landscape contracting, landscape construction and installation, landscape and grounds maintenance, turf management, arboriculture and tree care, parks and recreation, landscape irrigation and water management, landscape design and consulting, nurseries and garden centers, landscape pest management, horticulture materials supply and power equipment servicing, and/or in a variety of other horticultural specialties.

Certificates of Achievement

Horticulture, General Horticulture Certificate
This program provides students with the essential knowledge and skills for entry level employment in the Horticulture industry. Students gain core knowledge and skills in basic plant science, soil science, integrated pest management, and plant identification and use. Students then complete two advanced horticulture courses of their choice. This is the base certificate in a stackable series that leads to an additional certificate or degree in Horticulture.

Catalog Date: June 1, 2020

Certificate Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>HORT 300</td>
<td>Introduction to Horticulture</td>
<td>3</td>
</tr>
<tr>
<td>HORT 302</td>
<td>Soils, Soil Management, and Plant Nutrition (3)</td>
<td>3</td>
</tr>
<tr>
<td>or PLTS 310</td>
<td>Soils, Soil Management, and Plant Nutrition (3)</td>
<td></td>
</tr>
<tr>
<td>HORT 303</td>
<td>Integrated Pest Management (3)</td>
<td>3</td>
</tr>
<tr>
<td>or PLTS 332</td>
<td>Integrated Pest Management (3)</td>
<td></td>
</tr>
<tr>
<td>A minimum of 3 units from the following:</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>HORT 306</td>
<td>Plant Identification-Spring Selections (3)</td>
<td></td>
</tr>
<tr>
<td>or HORT 305</td>
<td>Plant Identification-Fall Selections (3)</td>
<td></td>
</tr>
<tr>
<td>or HORT 307</td>
<td>Plant Identification - Sustainable and CA Native Selections (3)</td>
<td></td>
</tr>
<tr>
<td>A minimum of 6 units from the following:</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>HORT 498</td>
<td>Work Experience in Horticulture (1 - 4)</td>
<td></td>
</tr>
<tr>
<td>or HORT 495</td>
<td>Independent Studies in Horticulture (1 - 3)</td>
<td></td>
</tr>
<tr>
<td>or HORT 324</td>
<td>Sustainable Landscape Maintenance (3)</td>
<td></td>
</tr>
<tr>
<td>or HORT 320</td>
<td>Sustainable Landscape Construction (3)</td>
<td></td>
</tr>
<tr>
<td>or HORT 340</td>
<td>Landscape and Irrigation Graphics and Design (3)</td>
<td></td>
</tr>
<tr>
<td>or HORT 350</td>
<td>Landscape Irrigation (3)</td>
<td></td>
</tr>
<tr>
<td>or HORT 351</td>
<td>Drip and Subsurface Irrigation (2)</td>
<td></td>
</tr>
<tr>
<td>or HORT 105</td>
<td>Pest Control Licensing or Certification (2)</td>
<td></td>
</tr>
<tr>
<td>or HORT 360</td>
<td>Introduction to Tree Care and Urban Forestry (3)</td>
<td></td>
</tr>
<tr>
<td>Total Units:</td>
<td></td>
<td>18</td>
</tr>
</tbody>
</table>

1Horticulture 100 at American River College meets the HORT 303 course requirement.

2Horticulture 322 at American River College meets the HORT 340 course requirement.

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- **PSLO 1**: Demonstrate a fundamental understanding of basic horticultural principles and practices.
- **PSLO 2**: Demonstrate the knowledge and skills required to perform basic landscape and nursery operations.
- **PSLO 3**: Demonstrate the knowledge and skills required to design and implement a successful integrated pest management program.
- **PSLO 4**: Demonstrate the ability to identify selected plant material and make appropriate recommendations for its use in the landscape.
- **PSLO 5**: Demonstrate knowledge and skills in one or more horticulture specialties through advanced coursework, and/or a combination of courses, work experience in horticulture, or independent studies in horticulture.
A multitude of entry-level opportunities await those who earn a certificate in General Horticulture. Students may find gainful employment opportunities in landscape construction and maintenance, irrigation systems installation and maintenance, landscape planning, tree care, wholesale or retail nursery sales and support, landscape materials sales and/or services, or other specialty areas in Horticulture.

Horticulture, Sustainable Irrigation and Water Management Technology Certificate

The certificate in Sustainable Irrigation and Water Management Technology concentrates on those courses that develop the knowledge, skills, and attitudes essential to designing, installing, and managing water efficient irrigation systems that are compliant with current California state and local ordinances. The required courses are designed to develop a strong foundational understanding of basic botany and plant growth requirements, and provide advanced education and training in sound principles of soil/water relationship testing and evaluation, soil development and management, proper sprinkler and drip irrigation design, irrigation systems troubleshooting and retrofitting, and irrigation systems management for water conservation. Students will have the opportunity to become QWEL (Qualified Water Efficient Landscaper) certified through this certificate program. QWEL is an EPA WaterSense Partnership program.

Catalog Date: June 1, 2020

Certificate Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>HORT 300</td>
<td>Introduction to Horticulture</td>
<td>3</td>
</tr>
<tr>
<td>HORT 302</td>
<td>Soils, Soil Management, and Plant Nutrition (3)</td>
<td>3</td>
</tr>
<tr>
<td>or PLTS 310</td>
<td>Soils, Soil Management, and Plant Nutrition (3)</td>
<td></td>
</tr>
<tr>
<td>HORT 350</td>
<td>Landscape Irrigation</td>
<td>3</td>
</tr>
<tr>
<td>HORT 351</td>
<td>Drip and Subsurface Irrigation</td>
<td>2</td>
</tr>
<tr>
<td>HORT 353</td>
<td>Sustainable Water Management</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>A minimum of 2 units from the following:</td>
<td></td>
</tr>
<tr>
<td>HORT 498</td>
<td>Work Experience in Horticulture (1 - 4)</td>
<td></td>
</tr>
<tr>
<td>Total Units:</td>
<td></td>
<td>16</td>
</tr>
</tbody>
</table>

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- PSLO 1: Demonstrate a fundamental understanding of basic horticultural principles and practices.
- PSLO 2: Demonstrate the knowledge and skills required to sustainably manage landscape soils.
- PSLO 3: Demonstrate the knowledge and skills required to perform basic tasks related to landscape irrigation systems design, installation, and maintenance.
- PSLO 4: Demonstrate the knowledge and skills required to perform advanced tasks related to sustainable irrigation systems design, installation, retrofitting, and troubleshooting.
- PSLO 5: Demonstrate the knowledge and skills required to perform advanced tasks related to landscape water use efficiency and sustainable water management.

Career Information
Students who complete a certificate in Sustainable Irrigation and Water Management Technology can find employment opportunities in sprinkler and surface/subsurface irrigation design, consultation, installation, maintenance and irrigation/water management. Students may be self-employed, or find employment with landscape and/or irrigation design firms, landscape maintenance companies, golf courses, parks departments, water agencies, or other water/water service providers. This certificate will also prepare students for advanced training and certification through industry sponsored programs such as the Irrigation Association's (IA) Certified Irrigation Designer, Certified Irrigation Contractor, Certified Water Auditor, and Certified Water Manager programs, as well as the California Landscape Contractors Association (CLCA) Water Management Certification program.

Horticulture, Sustainable Landscape Design Certificate

The certificate in Sustainable Landscape Design concentrates on those courses that develop the knowledge, skills, and attitudes essential to creating landscape and irrigation designs that make best use of local resources including soil, water, and construction materials. The courses of this certificate focus on sound horticultural science and principles, proper soil development and management, sustainable landscape and irrigation design, water conservation, sustainable landscape construction and maintenance practices, and integrated pest management.

Catalog Date: June 1, 2020

Certificate Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>HORT 300</td>
<td>Introduction to Horticulture</td>
<td>3</td>
</tr>
<tr>
<td>HORT 302</td>
<td>Soils, Soil Management, and Plant Nutrition (3)</td>
<td>3</td>
</tr>
<tr>
<td>or PLTS 310</td>
<td>Soils, Soil Management, and Plant Nutrition (3)</td>
<td></td>
</tr>
<tr>
<td>HORT 303</td>
<td>Integrated Pest Management (3)</td>
<td>3^1</td>
</tr>
<tr>
<td>or PLTS 332</td>
<td>Integrated Pest Management (3)</td>
<td></td>
</tr>
<tr>
<td>HORT 305</td>
<td>Plant Identification-Fall Selections (3)</td>
<td>3</td>
</tr>
<tr>
<td>or HORT 306</td>
<td>Plant Identification-Spring Selections (3)</td>
<td></td>
</tr>
<tr>
<td>or HORT 307</td>
<td>Plant Identification - Sustainable and CA Native Selections (3)</td>
<td></td>
</tr>
<tr>
<td>HORT 340</td>
<td>Landscape and Irrigation Graphics and Design</td>
<td>3^2</td>
</tr>
<tr>
<td>HORT 350</td>
<td>Landscape Irrigation</td>
<td>3</td>
</tr>
<tr>
<td>HORT 351</td>
<td>Drip and Subsurface Irrigation</td>
<td>2</td>
</tr>
<tr>
<td>A minimum of 2 units from the following:</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>HORT 498</td>
<td>Work Experience in Horticulture (1 - 4)</td>
<td>2</td>
</tr>
<tr>
<td>Total Units:</td>
<td>22</td>
<td></td>
</tr>
</tbody>
</table>

^1Horticulture 100 at American River College meets the Hort 303 course requirement.

^2Horticulture 322 at American River College meets the Hort 340 course requirement.

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- PSLO 1. Demonstrate a fundamental understanding of basic horticultural principles and practices.
- PSLO 2. Demonstrate a fundamental understanding of soils, soil development, soil building and preparation, and sustainable soil management.
- PSLO 3. Demonstrate a fundamental understanding of plant identification, selection, and use of plant material best suited for sustainable landscapes.
- PSLO 4. Demonstrate a fundamental understanding of basic landscape design principles and practices.
- PSLO 5. Demonstrate a fundamental understanding of hydraulics and irrigation design, installation, and water management principles and practices.
Career Information

The certificate in Sustainable Landscape Design provides a strong horticulture foundation, along with the specialized skills and technical knowledge to prepare students for employment opportunities in the field of sustainable landscape planning and irrigation design. Students who complete a certificate in Sustainable Landscape Design find employment in landscape and irrigation design, planning, consultation, installation management, and water systems management. Students may be self-employed, or find employment with landscape design firms, landscape contractors, landscape maintenance firms, or other related service providers. Students will have the opportunity to become QWEL (Qualified Water Efficient Landscaper) certified through this certificate program. QWEL is an EPA WaterSense Partnership program. This certificate will also prepare students for advanced training and certification through industry sponsored programs such as the Irrigation Association (IA) Certified Water Auditor and Certified Water Manager programs.

Horticulture, Sustainable Landscape Certificate

A variety of professional career opportunities are available to those who wish to provide professional landscape installation and/or support services. Landscapers design, install, and maintain private and public outdoor spaces in which people live, work, and play. The Sustainable Landscape Certificate concentrates on those courses that develop the knowledge, skills, and attitudes essential for entry-level careers in developing, constructing, and maintaining functional and sustainable landscapes, green spaces, and irrigation systems, as well as careers in tree care, and landscape material, supply, and specialty services. The courses in this certificate focus on sound horticultural science and principles, plant identification, proper soil development and management, sustainable landscape and irrigation design, water conservation, sustainable construction and landscape maintenance, tree care, and integrated pest management.

Catalog Date: June 1, 2020

Certificate Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>HORT 300</td>
<td>Introduction to Horticulture</td>
<td>3</td>
</tr>
<tr>
<td>HORT 302</td>
<td>Soils, Soil Management, and Plant Nutrition (3)</td>
<td>3</td>
</tr>
<tr>
<td>or PLTS 310</td>
<td>Soils, Soil Management, and Plant Nutrition (3)</td>
<td></td>
</tr>
<tr>
<td>HORT 303</td>
<td>Integrated Pest Management (3)</td>
<td>3(^1)</td>
</tr>
<tr>
<td>or PLTS 332</td>
<td>Integrated Pest Management (3)</td>
<td></td>
</tr>
<tr>
<td>HORT 305</td>
<td>Plant Identification-Fall Selections (3)</td>
<td>3</td>
</tr>
<tr>
<td>or HORT 306</td>
<td>Plant Identification-Spring Selections (3)</td>
<td></td>
</tr>
<tr>
<td>or HORT 307</td>
<td>Plant Identification - Sustainable and CA Native Selections (3)</td>
<td></td>
</tr>
<tr>
<td>HORT 320</td>
<td>Sustainable Landscape Construction (3)</td>
<td>3</td>
</tr>
<tr>
<td>or HORT 324</td>
<td>Sustainable Landscape Maintenance (3)</td>
<td></td>
</tr>
<tr>
<td>or HORT 360</td>
<td>Introduction to Tree Care and Urban Forestry (3)</td>
<td></td>
</tr>
<tr>
<td>HORT 350</td>
<td>Landscape Irrigation</td>
<td>3</td>
</tr>
<tr>
<td>A minimum of 2 units from the following:</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>HORT 498</td>
<td>Work Experience in Horticulture (1 - 4)</td>
<td></td>
</tr>
<tr>
<td>Total Units:</td>
<td>20</td>
<td></td>
</tr>
</tbody>
</table>

\(^1\)Horticulture 100 at American River College meets the Hort 303 course requirement.

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- PSLO 1: Demonstrate a fundamental understanding of basic horticultural principles and practices.
• PSLO 2: Demonstrate a fundamental understanding of soils, soil development, soil building and preparation, and sustainable soil management.

• PSLO 3: Demonstrate a fundamental understanding of plant identification, selection, use, and maintenance of plant material best suited for sustainable landscapes.

• PSLO 4: Demonstrate proficiency at implementing the principles and practices of Integrated Pest Management for sustainable landscapes.

• PSLO 5: Demonstrate proficiency at implementing the principles and practices of sustainable landscape construction, sustainable landscape maintenance, or arboriculture to install and/or maintain sustainable landscapes.

• PSLO 6: Demonstrate proficiency at implementing the principles and practices of irrigation design and water efficiency to design, install, and manage landscape irrigation systems.

Career Information

Students who complete a certificate in Landscape Technology may find entry-level employment in a wide range of areas including landscape contracting, landscape construction and installation, landscape and grounds maintenance, turf management, tree care, parks and recreation, landscape irrigation, landscape design and consulting, nurseries and garden centers, landscape pest management, and horticulture materials supply and power equipment servicing.

Plant-Based Nutrition and Sustainable Agriculture Certificate

The Plant-Based Nutrition and Sustainable Agriculture Certificate Program brings farm-to-fork into the classroom. It provides the science that supports the benefits of whole plant-based foods to the health of the individual as well as the environment. Students will gain knowledge in the function of plant-based foods towards the treatment and prevention of chronic diseases. The program addresses the environmental and social concerns with strategies and principles of sustainable agriculture. Students will master the theories and skills of plant-based food preparation bringing the food to the fork and into everyday food choices.

Contact the CRC Nutrition and Foods, Horticulture, and/or Ag Counselor regarding transferable courses.

Catalog Date: June 1, 2020

Certificate Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>NUTRI 303</td>
<td>Plant-Based Nutrition</td>
<td>3</td>
</tr>
<tr>
<td>NUTRI 331</td>
<td>Plant-Based Food Principles and Preparation</td>
<td>3</td>
</tr>
<tr>
<td>HORT 313</td>
<td>Sustainable Agriculture</td>
<td>3</td>
</tr>
<tr>
<td>Total Units:</td>
<td></td>
<td>9</td>
</tr>
</tbody>
</table>

Student Learning Outcomes

Upon completion of this program, the student will be able to:

• PSLO 1: Demonstrate independent learning and effective communication skills.

• Demonstrate responsibility for personal action and choices.

• Communicate effectively both orally and in writing.

• PSLO 2: Explain the principles of nutrition and its effect on health.

• Relate the dietary causes of chronic diseases.

• Evaluate the role of plant-based foods on health and the environment.

• PSLO 3: Demonstrate a fundamental understanding of health behaviors on nutritional and health status.

• Schematize the effects of personal food choice on health, the environment and public policy.

• PSLO 4: Basic and advanced plant science/horticulture skills development and improvement.
This course covers the laws, regulations, and safety requirements for individuals preparing to obtain a Qualified Applicator's Certificate (QAC) in California Department of Pesticide Regulation (CDPR) category Q or a Qualified Applicator's License (QAL) in CDPR category B. This course will also cover the requirements and process of obtaining a Maintenance Gardener Pest Control Business License. Topics include pesticide safety and application, pesticide modes of action, pesticide regulation, applicator licensing and certification, accepted standards for integrated pest management, and the methods and practices of preventing and controlling common landscape weeds, invertebrate and vertebrate pests, nematodes, and infectious and noninfectious plant diseases. Environmental concerns regarding pesticide resistance, surface and groundwater contamination, and other exposures will be covered. Field trips may be required.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- Demonstrate and apply the theories of sustainable and organic agriculture.
- Demonstrate a fundamental understanding of soils, soil development, soil building and preparation and sustainable soil management.
- Demonstrate a fundamental understanding of hydraulics and irrigation design, installation, and water management principles and practices.
- Create agriculture design concepts based on sound, sustainable soil management, water conservation, construction and maintenance, and integrated pest management best practices.
- PSLO 5: Effectively and accurately prepare and analyze raw ingredients and prepared foods.
- Evaluate food through sensory evaluation of texture, taste, color, presentation, smell and umami.
- Identify optimal cooking procedures/heat transfer to maximize nutrient content as well as the quality of the ingredients and dish as a whole.
- Analyze quality defects in cooked products and specify possible errors in techniques or ingredient selection.
- PSLO 6: Implement proper sanitary and safety techniques.
- Demonstrate a fundamental understanding of soils, soil development, soil building and preparation and sustainable soil management.
- Demonstrate a fundamental understanding of hydraulics and irrigation design, installation, and water management principles and practices.
- Create agriculture design concepts based on sound, sustainable soil management, water conservation, construction and maintenance, and integrated pest management best practices.
- Utilize kitchen tools/equipment appropriately.

Career Information

In restaurants, food service facilities, farms, urban farms, sustainable/organic farms, school garden, health education. Some of these career options may require more than the certificate and two years of college study. Classes beyond the associate degree may be required to fulfill some career options or for preparation for transfer to a university program.

Horticulture (HORT)

HORT 105 Pest Control Licensing or Certification

Units: 2
Hours: 36 hours LEC
Prerequisite: None.
Advisory: HORT 300, HORT 303, PLTS 300, or PLTS 332
Catalog Date: June 1, 2020

This course covers the laws, regulations, and safety requirements for individuals preparing to obtain a Qualified Applicator's Certificate (QAC) in California Department of Pesticide Regulation (CDPR) category Q or a Qualified Applicator's License (QAL) in CDPR category B. This course will also cover the requirements and process of obtaining a Maintenance Gardener Pest Control Business License. Topics include pesticide safety and application, pesticide modes of action, pesticide regulation, applicator licensing and certification, accepted standards for integrated pest management, and the methods and practices of preventing and controlling common landscape weeds, invertebrate and vertebrate pests, nematodes, and infectious and noninfectious plant diseases. Environmental concerns regarding pesticide resistance, surface and groundwater contamination, and other exposures will be covered. Field trips may be required.
Demonstrate a fundamental understanding of the safe and efficient use of pesticides, adjuvants, and neutralizers.

SLO 3: Demonstrate a fundamental understanding of California pesticide laws and regulations.

Evaluate the requirements and process for obtaining a Qualified Applicators Certificate

Evaluate the requirements and process for obtaining a Maintenance Gardener Pest Control Business License.

Demonstrate a fundamental understanding of the exams and testing procedures of the California Department of Pesticide Regulation (DPR).

Demonstrate a fundamental understanding of license and certificate maintenance requirements and procedures.

SLO 4: Demonstrate a fundamental understanding of integrated pest management (IPM).

Demonstrate the ability to identify weed, invertebrate, and vertebrate pests, as well as nematodes and disease causing pathogens visually or through symptom identification.

Demonstrate the ability to identify beneficial organisms affecting pest management decisions.

Demonstrate a fundamental understanding of invertebrate pest prevention and management.

Demonstrate a fundamental understanding of weed pest prevention and management.

Demonstrate a fundamental understanding of disease prevention and management.

Demonstrate a fundamental understanding of nematode prevention and management.

Demonstrate a fundamental understanding of vertebrate pest prevention and management.

SLO 5: Demonstrate a fundamental understanding of pesticides and pesticide function and use.

Differentiate pesticide categories and modes of action.

Assess various pesticide formulations and methods of application.

Demonstrate a fundamental understanding of pesticide storage, transportation, and disposal.

Explain the legal requirements of pesticide labels, material safety data sheets, and the worker safety standard with regards to the legal obligations of the end-user.

SLO 6: Demonstrate a fundamental understanding of pesticide application equipment and use.

Assess various types of pesticide application equipment.

Calculate appropriate amounts of pesticide material to apply to a given landscape area.

Examine methods for calibrating pesticide application equipment.

Discuss the approved methods for cleaning and neutralizing pesticide application equipment.

SLO 7: Demonstrate a fundamental understanding of business and professional standards in pest management.

Compile a list of requirements for registering a license with the county Department of Agriculture.

Demonstrate a fundamental understanding and ability to complete and file pesticide application reports as required by each county Department of Agriculture.

Demonstrate success on practice certification and licensing exams.

Recognize and explain the standard practices of various types of landscape construction/maintenance businesses, including estimating and bidding procedures, business practices, and working with state agencies.

**HORT 300 Introduction to Horticulture**

- **Units:** 3
- **Hours:** 54 hours LEC
- **Prerequisite:** None.
- **Transferable:** CSU; UC
- **General Education:** AA/AS Area IV
- **Catalog Date:** June 1, 2020

Introduction to Horticulture is a general, entry level course into environmental horticulture with an emphasis on basic plant science, plant use and care, and the landscape and nursery industries. Topics include basic botany, cultural practices, propagation, structures and layout, pest management, planting, container gardening, plant identification, turfgrass installation and care, and a survey of career opportunities.
Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO 1: Demonstrate independent learning and effective communication skills.
- Operate independently by attending or logging into class regularly.
- Utilize time management effectively and prioritize tasks to meet deadlines.
- Demonstrate effective oral and written communication.
- SLO 2: Demonstrate a fundamental understanding of the California horticulture industry.
- Identify the major markets of the horticulture industry and verify how these markets function in their county in the state of California.
- Identify and evaluate the various horticultural occupations and the associated employment requirements and opportunities.
- Identify and evaluate common practices of various horticultural business types.
- SLO 3: Demonstrate a fundamental understanding of scientific investigation and basic botany as it relates to gardening and landscaping.
- Apply the Scientific Method of research to appropriate horticulture and/or agriculture applications.
- Assess the role of plant cells, cells structures, and basic genetics in vegetative development, plant growth, and plant production.
- Recognize the major structures of plants and explain the function of each major plant structure.
- Identify and explain the requirements of plant growth.
- Utilize effectively plant identification and botanical terminology.
- Assess plant propagation through sexual and asexual methods.
- SLO 4: Demonstrate a fundamental understanding of soils and water in the garden/landscape.
- Explain soil development and structure, and describe sustainable soil maintenance practices.
- Formulate soils and container media.
- Evaluate various plant species and nutritional needs, and explain how to measure, mix, and apply fertilizers.
- Evaluate soil-water relationships.
- Assess water efficient irrigation methods and estimate watering needs.
- SLO 5: Demonstrate a fundamental understanding of common horticultural practices.
- Identify common horticulture tools and equipment.
- Identify common horticulturally related injuries when using tools incorrectly, and explain the safe and effective use of common horticulture tools and equipment.
- Identify the various types of horticultural structures and uses.
- Describe the methods utilized to plant and care for horticultural crops.
- Compare various cultural practices, and the resulting effect of each on plant health and development.
- Describe the process of plant selection and use.
- Recognize symptoms and signs of plant diseases and pests, and identify pest damage.
- Identify and explain common integrated pest management practices.
- Identify and explain common turf installation and maintenance practices.
- Identify and explain common pruning methods and practices.
- Identify and explain common sustainable landscape design methods.
- Describe the methods utilized in interiorscaping and indoor plant establishment and care.
- Identify and explain common vegetable and flower gardening practices.
- Formulate appropriate solutions for various garden/landscape scenarios.
HORT 302 Soils, Soil Management, and Plant Nutrition

This course provides a basic knowledge of the physical, chemical, and biological properties of soils. The course includes factors of: fundamental soil properties, soil and plant relationships, principles of soil formation, fertilizers and soil management, salinity, pH, erosion management, and non-agricultural uses. Field trips may be required. This course is the same as PLTS 310, and only one may be taken for credit.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO 1: Demonstrate independent learning and effective communication skills.
  - Operate independently by attending and / or logging into class regularly when the course is offered online or an online component is utilized as part of the course.
  - Utilize time management effectively and prioritize tasks to meet deadlines.
  - Demonstrate effective oral and written communication.

- SLO 2: Demonstrate a fundamental understanding of the physical and chemical properties of soils
  - Apply the Scientific Method of research through soils and plant specific laboratory applications.
  - Compare the textural classes of soil through laboratory analysis.
  - Explain the role of soil structure and evaluate the effects of tillage management in soil productivity.
  - Analyze the physical, chemical, and biological properties of soils, and understand their formation and how they are reservoirs for nutrients, water, and microscopic life.
  - Assess the physical and chemical properties of soil through laboratory analysis.

- SLO 3: Demonstrate a fundamental understanding of the role of soil in plant nutrition.
  - Identify the chemical elements necessary for plant growth through laboratory analysis.
  - Diagnose common chemical deficiency and toxicity symptoms.
  - Examine common cultural practices utilized to keep a soil's nutritional elements the in an adequate supply and proper balance.
  - Validate the fundamentals of plant nutrition through laboratory analysis.

- SLO 4: Demonstrate a fundamental understanding of best soil management practices in sustainable horticulture.
  - Explain why our soils, as a natural resource, must be managed and preserved.
  - Demonstrate how to effectively manage the physical, chemical, and biological properties of soils for sustained productivity.
  - Examine the methods and means of utilizing organic matter to improve soil structure, support soil biology, and to maintain and stimulate soil health.
  - Analyze the effects of soil compaction in crop production and horticultural situations, and explain common methods utilized to alleviate soil compaction.
  - Analyze the effects of soil erosion in crop production and horticultural situations, and explain common methods utilized to prevent soil erosion.
  - Explain why irrigated soils must be managed in special ways to preserve its productivity.
  - Explain the effects of salts and high sodium levels on soil structure, pH, drainage, and plant productivity.
  - Validate the fundamentals of soil management through laboratory analysis.
HORT 303 Integrated Pest Management

This course is a study of local plant pests including weeds, diseases, invertebrates, and vertebrates. It includes recognition of symptoms and causes, life cycle of the pests, host and habitat relationships, and the integrated pest management strategies and best management practices to achieve control. Field trips may be required. This course is the same as PLTS 332, and only one may be taken for credit.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO 1: Demonstrate independent learning and effective communication skills.
  - Operate independently by attending or logging into class regularly.
  - Utilize time management effectively and prioritize tasks to meet deadlines.
  - Demonstrate effective oral and written communication.

- SLO 2: Demonstrate a fundamental understanding of jobsite safety and effective and efficient work habits.
  - Validate and demonstrate safety consciousness in work dress/apparel, tool use, jobsite demeanor, and personal protective equipment use.
  - Assess jobsite hazards, reduce work related risks, and influence others to work in a safe and efficient manner.
  - Select appropriate personal protective equipment for a given pesticide.
  - Demonstrate the safe and efficient use of pesticide application equipment.

- SLO 3: Assess, evaluate, and implement the principles and practices of integrated pest management.
  - Evaluate the economic significance of plant pest problems in horticulture.
  - Assess the reasons conventional pest control options are no longer desirable.
  - Demonstrate the ability to diagnose and analyze pest damage, recommend integrated pest management strategies, and select proper control measures.
  - Identify insects and closely related plant pests, common diseases and abiotic plant disorders, weed species, and beneficial organisms as evident from existing signs and symptoms.
  - Compare and contrast various methods of conventional and integrated pest management strategies.
  - Demonstrate the ability to safely and accurately prepare pesticide application equipment.
  - Demonstrate the ability to safely and efficiently operate pesticide application equipment through the application of pesticide materials during a simulated exercise.
  - Formulate a seasonal pest management plan using the principles of integrated pest management.

- SLO 4: Demonstrate a fundamental understanding of licensing and/or certification, and business and professional standards in integrated pest management.
  - Analyze landscape pest management professions and identify and explain requirements for employment and/or licensing or certification.
  - Recognize and explain the benefits of additional/supplemental licensing and certification through state agencies and professional associations.
  - Examine and explain the California state Department of Pesticide Regulation laws and regulations, and the CDPR rules governing the Qualified Applicator’s Certificate and Landscape Maintenance Gardener’s pesticide license.
  - Validate and demonstrate the importance of professionalism in the landscape industry, and described the professional industry associations and certification programs.
  - Recognize and explain the standard practices of various types of landscape construction/maintenance businesses, including estimating and bidding procedures, business practices, and working with state agencies.
HORT 305 Plant Identification-Fall Selections

This course is the identification and study of the growth habits, cultural practices, and ornamental uses of landscape and indoor plants adapted to climates of California. Plants emphasized will come from the current California Association of Nurseries and Garden Centers (CANGC) and California Landscape Contractors Association (CLCA) certification exams plant lists. The focus will be on those plants best observed and studied during California’s fall and/or winter seasons. Field trips may be required.

Upon completion of this course, the student will be able to:

- **SLO 1:** Demonstrate independent learning and effective communication skills.
  - Operate independently by attending or logging into class regularly.
  - Utilize time management effectively and prioritize tasks to meet deadlines.
  - Demonstrate effective oral and written communication.

- **SLO 2:** Demonstrate a fundamental understanding of jobsite safety and effective and efficient work habits.
  - Validate and demonstrate safety consciousness in work dress/apparel, tool use, jobsite demeanor, and personal protective equipment use.
  - Assess jobsite hazards, reduce work related risks, and influence others to work in a safe and efficient manner.
  - Select appropriate personal protective equipment for given landscape operations.
  - Identify potential hazards created by improper pruning and training and/or poor cultural practices.

- **SLO 3:** Assess, evaluate, and implement the principles and practices of plant identification and use.
  - Recognize, explain, and utilize the binomial method of plant nomenclature.
  - Recognize, explain, and utilize plant identification and botanical terminology.
  - Identify by leaf, bark, flower, fruit, and growth habit those plants best observed and studied during California’s fall and/or winter seasons.
  - Examine, compare, and explain soil requirements and ecology of different plants.
  - Analyze the various uses of plants in the home and commercial landscape.
  - Propose landscape uses for those plants possessing desirable characteristics during California’s fall and/or winter seasons.
  - Identify plants whose requirements fit selected criteria.
  - Examine, formulate, and utilize plant keys to identify those plants best observed and studied during California’s fall and/or winter seasons.
  - Assemble a professional herbarium utilizing collected and preserve plant materials, scans, and/or pictures.
  - Recognize ideal characteristics of plants best observed and studied during California’s fall and/or winter seasons, and select quality plant material from nursery stock.
  - Evaluate plant health and identify plant damage caused by pests, diseases, environmental conditions, nutritional deficiencies, or poor cultural practices.
  - Examine, evaluate, and compare computerized plant selection software programs.
  - Develop a plant characteristics key for future design work.

- **SLO 4:** Demonstrate a fundamental understanding of licensing and/or certification, and business and professional standards as related to plant identification in horticulture.
  - Recognize and explain the benefits of additional/supplemental licensing and certification through state agencies and professional associations.

3 Units: 36 hours LEC; 54 hours LAB
Prerequisite: None.
Advisory: HORT 300
Transferable: CSU; UC (HORT 305 and 306 combined: maximum transfer credit is one course)
C-ID: C-ID AG - EH 112L
Catalog Date: June 1, 2020
- Validate and demonstrate the importance of professionalism in the landscape industry, and described the professional industry associations and certification programs.

**HORT 306 Plant Identification-Spring Selections**

**Units:** 3  
**Hours:** 36 hours LEC; 54 hours LAB  
**Prerequisite:** None.  
**Advisory:** HORT 300  
**Transferable:** CSU; UC (HORT 305 and 306 combined: maximum transfer credit is one course)  
**C-ID:** C-ID AG - EH 108L  
**Catalog Date:** June 1, 2020

This course is the identification and study of the growth habits, cultural practices, and ornamental uses of landscape and indoor plants adapted to climates of California. Plants emphasized will come from the current California Association of Nurseries and Garden Centers (CANGC) and California Landscape Contractors Association (CLCA) certification exams plant lists. The focus will be on those plants best observed and studied during California’s spring and/or summer seasons. Field trips may be required.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- **SLO 1:** Demonstrate independent learning and effective communication skills.
  - Operate independently by attending or logging into class regularly.
  - Utilize time management effectively and prioritize tasks to meet deadlines.
  - Demonstrate effective oral and written communication.

- **SLO 2:** Demonstrate a fundamental understanding of jobsite safety and effective and efficient work habits.
  - Validate and demonstrate safety consciousness in work dress/apparel, tool use, jobsite demeanor, and personal protective equipment use.
  - Assess jobsite hazards, reduce work related risks, and influence others to work in a safe and efficient manner.
  - Select appropriate personal protective equipment for given landscape operations.
  - Identify potential hazards created by improper pruning and training and/or poor cultural practices.

- **SLO 3:** Assess, evaluate, and implement the principles and practices of plant identification and use.
  - Recognize, explain, and utilize the binomial method of plant nomenclature.
  - Recognize, explain, and utilize plant identification and botanical terminology.
  - Identify by leaf, bark, flower, fruit, and growth habit those plants best observed and studied during California’s spring and/or summer seasons.
  - Examine, compare, and explain soil requirements and ecology of different plants.
  - Analyze the various uses of plants in the home and commercial landscape.
  - Propose landscape uses for those plants possessing desirable characteristics during California’s spring and/or summer seasons.
  - Identify plants whose requirements fit selected criteria.
  - Examine, formulaic, and utilize plant keys to identify those plants best observed and studied during California’s spring and/or summer seasons.
  - Assemble a professional herbarium utilizing collected and preserve plant materials, scans, and/or pictures.
  - Recognize ideal characteristics of plants best observed and studied during California’s spring and/or summer seasons, and select quality plant material from nursery stock.
  - Evaluate plant health and identify plant damage caused by pests, diseases, environmental conditions, nutritional deficiencies, or poor cultural practices.
  - Examine, evaluate, and compare computerized plant selection software programs.
  - Develop a plan characteristics key for future design work.

- **SLO 4:** Demonstrate a fundamental understanding of licensing and/or certification, and business and professional standards as related to plant identification in horticulture.
Recognize and explain the benefits of additional/supplemental licensing and certification through state agencies and professional associations.

Validate and demonstrate the importance of professionalism in the landscape industry, and described the professional industry associations and certification programs.

HORT 307 Plant Identification - Sustainable and CA Native Selections

Units: 3
Hours: 36 hours LEC; 54 hours LAB
Prerequisite: None.
Advisory: HORT 300
Transferable: CSU; UC
Catalog Date: June 1, 2020

This course is the identification and study of the growth habits, cultural practices, and ornamental uses of California native plants, as well as plant material appropriate for sustainable landscaping. Plants emphasized will come from the current California Native Plant Society (CNPS), California Association of Nurseries and Garden Centers (CANGC), and California Landscape Contractors Association (CLCA) plant lists. Field trips may be required.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO 1: Demonstrate independent learning and effective communication skills.
  - Operate independently by attending or logging into class regularly.
  - Utilize time management effectively and prioritize tasks to meet deadlines.
  - Demonstrate effective oral and written communication.
- SLO 2: Demonstrate a fundamental understanding of jobsite safety and effective and efficient work habits.
  - Validate and demonstrate safety consciousness in work dress/apparel, tool use, jobsite demeanor, and personal protective equipment use.
  - Assess jobsite hazards, reduce work related risks, and influence others to work in a safe and efficient manner.
  - Select appropriate personal protective equipment for given landscape operations.
  - Identify potential hazards created by improper pruning and training and/or poor cultural practices.
- SLO 3: Assess, evaluate, and implement the principles and practices of plant identification and use.
  - Recognize, explain, and utilize the binomial method of plant nomenclature.
  - Recognize, explain, and utilize plant identification and botanical terminology.
  - Identify by leaf, bark, flower, fruit, and growth habit of California native and sustainable plant material.
  - Examine, compare, and explain soil requirements and ecology of different plants.
  - Analyze the various uses of plants in the home and commercial landscape.
  - Propose landscape uses for California native and sustainable plant material possessing desirable characteristics.
  - Identify plants whose requirements fit selected criteria.
  - Examine, formulate, and utilize plant keys to identify California native and sustainable plant material.
  - Assemble a professional herbarium utilizing collected and preserve plant materials, scans, and/or pictures.
  - Recognize ideal characteristics of California native and sustainable plant material, and select quality plant material from nursery stock.
  - Evaluate plant health and identify plant damage caused by pests, diseases, environmental conditions, nutritional deficiencies, or poor cultural practices.
  - Examine, evaluate, and compare computerized plant selection software programs.
  - Develop a plant characteristics key for future design work.
SLO 4: Demonstrate a fundamental understanding of licensing and/or certification, and business and professional standards as related to plant identification in horticulture.

Recognize and explain the benefits of additional/supplemental licensing and certification through state agencies and professional associations.

Validate and demonstrate the importance of professionalism in the landscape industry, and described the professional industry associations and certification programs.

**HORT 312 Plant Propagation**

**Units:** 3

**Hours:** 36 hours LEC; 54 hours LAB

**Prerequisite:** None.

**Advisory:** HORT 300

**Transferable:** CSU

**C-ID:** C-ID AG - EH 116L

**Catalog Date:** June 1, 2020

Plant Propagation is a study and practice of the sexual and asexual reproduction of landscape plant species. The emphasis of Horticulture 312 will be on the preparation and use of propagating and planting mediums, planting, transplanting, fertilizing, propagation facility pest and disease control, propagation structure utilization and site layout. Additional topics include the maintenance of common tools and equipment, and the laws and regulations pertaining to plant propagation and nursery production.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- **SLO 1:** Demonstrate independent learning and effective communications skills.

- Operate independently by attending or logging into class regularly if and when an online component is integrated into this course.

- Utilize time management effectively and prioritize tasks to meet deadlines.

- Communicate effectively (orally and/or written).

- **SLO 2:** Demonstrate a fundamental understanding of jobsite safety and effective and efficient work habits.

- Validate and demonstrate safety consciousness in work dress/apparel, tool use, jobsite demeanor, and personal protective equipment use.

- Assess jobsite hazards, reduce work related risks, and influence others to work in a safe and efficient manner.

- Identify and safely use specialized nursery tools and equipment.

- **SLO 3:** Demonstrate a fundamental understanding of the wholesale and retail nursery industry.

- Identify and assess the major markets of the nursery industry and verify how these markets function within the local horticulture industry and in the county and state economy.

- Identify and evaluate the various nursery occupations and the associated employment requirements.

- Explain the industry accepted cultural practices utilized in the production, growth, and care of nursery and container stock.

- Assess and exhibit the personal skills (attitude, work habits, etc.) for successful employment in the wholesale and retail nursery industry.

- Evaluate and describe the various types of wholesale plant production industries.

- Analyze and assess the major federal and state laws governing plant propagation and protection.

- **SLO 4:** Demonstrate a fundamental understanding of plant propagation principles and practices.

- Evaluate and explain the effect of temperature, water, humidity, and fertility on plant growth.

- Assess and describe the principles of sexual and asexual plant reproduction.

- Compare the various propagation methods and select the most appropriate method for a given plant species.
Create and implement a propagation program, and grow plants from propagation stage to salable size including:

- Mastering the procedures of plant propagation including seed, cuttings, layering, and division;
- Practicing the procedures of plant propagation including budding, grafting, and micro-propagation;
- Calculating the proper timing for the various propagation and production techniques appropriate to the plant species and propagation method;
- Formulating and preparing specialized planting and propagating media;
- Calculating, measuring, blending, and applying fertilizers;
- Planting and transplanting a variety of plants into appropriate containers.

Select and explain common integrated pest management procedures for common garden, landscape, and greenhouse pests.

Devise and implement a marketing plan, and demonstrate proper merchandising techniques.

Identify common propagation, nursery, and landscape tools and equipment, and demonstrate the ability to use and maintain nursery tools and equipment.

Create a retail nursery layout plan.

Evaluate and select appropriate methods used to construct nursery facilities.

Demonstrate various methods of plant propagation.

**HORT 313 Sustainable Agriculture**

**Units:** 3
**Hours:** 36 hours LEC; 54 hours LAB
**Prerequisite:** None.
**Transferable:** CSU; UC
**General Education:** AA/AS Area IV
**Catalog Date:** June 1, 2020

This course provides a comprehensive study of sustainable agriculture that addresses many environmental and social concerns while providing innovative and economically viable techniques for growers. It integrates the theoretical aspects of sustainable agriculture, principles and practices with field-based laboratory and participatory learning of sustainable agriculture practices. This course may include field trips.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- **SLO 1:** Demonstrate independent learning and effective communication skills.
- Demonstrate responsibility for personal actions and choices.
- Communicate effectively both orally and in writing.
- **SLO 2:** Demonstrate basic and advanced plant science/horticulture skills development and improvement.
- Demonstrate and apply the theories of sustainable and organic agriculture.
- Demonstrate a fundamental understanding of soils, soil development, soil building and preparation and sustainable soil management.
- Demonstrate a fundamental understanding of hydraulics and irrigation design, installation, and water management principles and practices.
- Create agriculture design concepts based on sound, sustainable soil management, water conservation, construction and maintenance, and integrated pest management best practices.
- Describe the development and dissemination of modern agricultural technologies and land use practices.
- Detail the extent of agricultural land use today and how trends in human population growth have and may continue to place additional demands upon agricultural ecosystems.
- Explain the agro-ecosystem, environmental quality and human health risks associated with the technologies and land use practices common in modern US agriculture.
- Explain the differences and similarities of several types of sustainable agriculture.
- Describe the basic plant anatomy and physiology as it relates to crop production.
- Explain and apply the scientific method to sustainable agriculture production practices.
This course covers the fundamentals of landscape construction, including soil preparation, paving and construction materials, hand and power tool use, turf and plant installation, plan reading, estimating, and bid preparation. It will emphasize approved traditional industry construction methods, as well as sustainable alternative and techniques. Local codes and state requirements will also be covered. This course is an initial step in preparation for the California State C-27 Landscape Contractor License exam. Field trips may be required.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- **SLO 1:** Demonstrate independent learning and effective communication skills.
  - Operate independently by attending or logging into class regularly.
  - Utilize time management effectively and prioritize tasks to meet deadlines.
  - Demonstrate effective oral and written communication.

- **SLO 2:** Demonstrate a fundamental understanding of jobsite safety and effective and efficient work habits.
  - Validate and demonstrate safety consciousness in work dress/apparel, tool use, jobsite demeanor, and personal protective equipment use.
  - Assess jobsite hazards, reduce work related risks, and influence others to work in a safe and efficient manner.
  - Select appropriate hand and/or power tools for a variety of landscape projects.
  - Demonstrate the safe and efficient use of hand, power, and powder-actuated tools to construct wood, masonry, and concrete projects.
  - Demonstrate the safe and efficient use of gas/fuel powered landscape equipment.

- **SLO 3:** Assess, evaluate, and implement the principles and practices of sustainable landscape construction.
  - Select appropriate soil preparation methods for various soil conditions.
  - Select and utilize appropriate measuring and leveling devices to alter landforms, establish finish grades, calculate proper slope, and control drainage and runoff.
  - Analyze and explain the fundamentals of construction material selection, including the use of recycled materials.
  - Analyze and explain the fundamentals of walk, deck, patio, and fence construction.
  - Analyze and explain the fundamentals of water feature installation.
  - Analyze and explain the fundamentals of landscape lighting design and installation.
  - Plan and install a water efficient, automated irrigation system.
  - Compare and appraise the use of seed, sprigs, sod, and artificial turf as a means of lawn establishment.
  - Explain and demonstrate the steps required when installing lawn seed, sod, and artificial turf.
  - Examine and select the appropriate shrub and tree planting method and staking system for a given slope, environment, and soil condition.
  - Utilize a complete set of landscape plans to estimate material quantities, material and supply costs, and labor costs.
  - Analyze a complete set of landscape plans, and prepare a construction estimate and/or bid.

- **SLO 4:** Demonstrate a fundamental understanding of state contractor licensing, supplemental certification, and business and professional standards in the landscape industry.
  - Analyze landscape professions and identify and explain licensing requirements.
  - Recognize and explain the requirements and procedures for procuring a C-27 landscape contracting license.
  - Recognize and explain the benefits of additional/supplemental licensing and certification through state agencies and professional associations.
Examine and explain the California state contracting laws and regulations, and the California State License Board rules governing the C-27 landscape contractor's specialty license.

Validate and demonstrate the importance of professionalism in the landscape industry, and described the professional industry associations and certification programs.

Recognize and explain the standard practices of various types of landscape construction/maintenance businesses, including estimating and bidding procedures, business practices, and working with state agencies.

**HORT 324 Sustainable Landscape Maintenance**

**Units:** 3
**Hours:** 36 hours LEC; 54 hours LAB
**Prerequisite:** None.
**Advisory:** HORT 300 with a grade of "C" or better
**Transferable:** CSU
**Catalog Date:** June 1, 2020

This course is a study of sustainable landscape maintenance and management of exterior and interior residential and commercial landscapes, parks, highways, and public buildings. Topics include planting and transplanting, pruning, water conservation and use, sustainable plant nutrition and soils management, integrated pest management, and the safe operation and maintenance of power equipment for the trade. Field trips may be required.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- **SLO 1**: Demonstrate independent learning and effective communication skills.
  - Operate independently by attending or logging into class regularly.
  - Utilize time management effectively and prioritize tasks to meet deadlines.
  - Demonstrate effective oral and written communication.

- **SLO 2**: Demonstrate a fundamental understanding of jobsite safety and effective and efficient work habits.
  - Validate and demonstrate safety consciousness in work dress/apparel, tool use, jobsite demeanor, and personal protective equipment use.
  - Assess jobsite hazards, reduce work related risks, and influence others to work in a safe and efficient manner.
  - Select appropriate hand and/or power tools for a variety of landscape maintenance activities.
  - Demonstrate the safe and efficient use of gas/fuel powered landscape equipment.
  - **SLO 3**: Assess, evaluate, and implement the principles and practices of sustainable landscape maintenance.
    - Select appropriate soil preparation methods for various soil conditions.
    - Analyze soil conditions and formulate a sustainable program of soil maintenance and improvement through the use of organic amendments.
    - Recognize and demonstrate the appropriate management strategies, including mowing, fertilizing, watering, and pest management for a given turf species.
    - Evaluate and discuss the steps required in the renovation and repair of a given turf planting.
    - Evaluate and describe basic pruning systems applied to shade trees, shrubs, vines, perennials, roses, and fruit trees.
    - Utilize irrigation and water auditing techniques and select equipment to correctly irrigate, schedule, and conserve water in the landscape.
    - Recognize inappropriate irrigation equipment and/or faulty irrigation components and make basic repairs, replacements, and/or adjustments to a system.
    - Design a water efficient irrigation schedule based on landscape environments and microclimates.
    - Demonstrate the ability to program a variety of commonly used irrigation controllers.
    - Discuss and demonstrate the proper steps and planting various container grown, balled and burlapped, bare-root, groundcover, and bedding plants.
    - Analyze landscape plantings and select appropriate staking/guying systems.
Evaluate plant health, and identify symptoms of plant damage by common pests, diseases, and abiotic factors.

Analyze and discuss integrated pest management strategies for controlling selected weeds, insect pests, and diseases.

Identify common landscape weeds, insect pests, and diseases, and propose an integrated pest management plan.

Select, mix, and safely apply pesticides according to label directions, and in accordance with state and federal laws and regulations, through properly calibrated application equipment.

Utilize a complete set of landscape plans to estimate required maintenance activities, material, supply, and labor costs, and create an annual maintenance calendar of operations for a selected landscape.

Analyze a complete set of landscape plans or an actual landscape site, and prepare a maintenance estimate and/or bid.

SLO 4: Demonstrate a fundamental understanding of licensing and/or certification, and business and professional standards in the landscape industry.

Analyze landscape maintenance professions and identify and explain requirements for employment and/or licensing or certification.

Recognize and explain the benefits of additional/supplemental licensing and certification through state agencies and professional associations.

Examine and explain the California state Department of Pesticide Regulation laws and regulations, and the CDPR rules governing the Qualified Applicator's Certificate and Landscape Maintenance Gardener’s pesticide license.

Validate and demonstrate the importance of professionalism in the landscape industry, and described the professional industry associations and certification programs.

Recognize and explain the standard practices of various types of landscape construction/maintenance businesses, including estimating and bidding procedures, business practices, and working with state agencies.

HORT 340 Landscape and Irrigation Graphics and Design

<table>
<thead>
<tr>
<th>Units:</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hours:</td>
<td>36 hours LEC; 54 hours LAB</td>
</tr>
<tr>
<td>Prerequisite:</td>
<td>HORT 300 with a grade of “C” or better</td>
</tr>
<tr>
<td>Advisory:</td>
<td>HORT 305, 306, or 307</td>
</tr>
<tr>
<td>Transferable:</td>
<td>CSU</td>
</tr>
<tr>
<td>Catalog Date:</td>
<td>June 1, 2020</td>
</tr>
</tbody>
</table>

This course is the study of technical drafting skills and freehand graphics, including line quality, lettering, and organization of the design space as it relates to landscape and irrigation design. It includes hand drafting techniques, plant database software, introduction to Computer-Aided Drafting and Design (CADD) for landscape, and the use of a variety of graphics skills and media. Irrigation design for landscapes studies water hydraulics, irrigation equipment, including irrigation heads, pipes, pumps, controllers and valves, and water conservation. The course includes preparing landscape and irrigation plans, plan presentation, and reprographics. Field trips may be required.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO 1: Demonstrate independent learning and effective communication skills.
- Operate independently by attending class regularly.
- Utilize time management effectively and prioritize tasks to meet deadlines.
- Demonstrate effective oral, written, and graphic communication.
- SLO 2: Assess, evaluate, and implement the principles and practices of water efficient landscape design through graphic presentation.
- Assess and apply the use of drafting equipment and techniques as they relate to landscape design and landscape architecture.
- Assess and evaluate plant data software, plant materials web sites, and landscape CADD programs.
- Demonstrate a basic understanding of local architectural requirements and covenants, codes, and restrictions, and assess the needs of the client.
- Produce graphic representations of various landscape elements and systems to scale.
- Analyze the existing landscape through systematic site and environmental data collection.
- Appraise the landscape design potential of a site utilizing site inventory and analysis data.
• Employ the basic principles of irrigation design
• Identify and correctly apply sprinkler components for a landscape irrigation design.
• Produce an irrigation design that complies with water conservation regulations for our industry.
• Create landscape design concepts utilizing the principles of water efficient landscape design.
• Develop the components included in a set of landscape plans and construction drawings.
• Create an elevation view of a landscape design.
• Create and present a full set of landscape drawings based on a client's criteria, needs and budget.
• Create a portfolio of design work.

HORT 350 Landscape Irrigation

Units: 3
Hours: 36 hours LEC; 54 hours LAB
Prerequisite: None.
Advisory: HORT 300 and 340; Hort 322 from ARC with a grade of "C" or better satisfies the Hort 340 advisory.
Transferable: CSU
Catalog Date: June 1, 2020

This course prepares students to design, install and maintain water efficient landscape irrigation systems. Topics include current California State water use regulations and ordinances, water supply, basic hydraulics, component identification and terminology, system layout, pipe sizing, water application devices, valves, and controllers. Students can earn QWEL (Qualified Water Efficient Landscaper) certification by achieving a passing score on the final exam. (Minimum passing score will be announced in class). Field trips may be required.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• SLO 1: Demonstrate independent learning and effective communication skills.
  Operate independently by attending and / or logging into class regularly when the course is offered online or an online component is utilized as part of the course.
  Utilize time management effectively and prioritize tasks to meet deadlines.
  Demonstrate effective oral and written communication.
  Demonstrate the ability to read and interpret irrigation plans.
  Utilize appropriate graphic irrigation symbols and terminology in irrigation design.
• SLO 2: Demonstrate a fundamental understanding of water sources, delivery systems, and how water is utilized in the landscape.
  Explain and analyze California’s water storage and delivery system.
  Evaluate the percent of the state’s developed water supply used for landscape irrigation.
  Explain how irrigation water is made available to plants through the soil.
  Identify professional organizations and certification pertaining to landscape irrigation.
• SLO 3: Demonstrate a fundamental understanding of landscape irrigation system components and hydraulics.
  Identify system components on an irrigation plan.
  Explain the basic concepts of water pressure, flow, velocity, and friction loss.
  Calculate static and dynamic water pressure and flow at key points in a system.
  Explain the function of backflow prevention devices and assess the proper application for each device.
  Appraise the major types of sprinkler heads, valves, and controllers.
• SLO 4: Demonstrate a fundamental understanding of irrigation design, installation, and troubleshooting.
  Select the proper irrigation equipment for a given application.
  Calculate sprinkler head spacing for uniform application and precipitation rates.
- Arrange irrigation laterals and calculate pipe size based on application, water pressure, and flow velocity.
- Identify and select pipe fittings.
- Design and construct an irrigation system utilizing industry approved equipment and techniques.
- Devise a water-efficient program and manage controller system operation.
- Evaluate the need for pumping/filtering irrigation water from city mains and private wells.
- Measure irrigation system efficiency.
- Diagnose and solve irrigation system problems.
- Prepare and present a cost estimate for an irrigation system.

**HORT 351 Drip and Subsurface Irrigation**

**Units:** 2  
**Hours:** 27 hours LEC; 27 hours LAB  
**Prerequisite:** None.  
**Advisory:** HORT 300, 340, and 350  
**Transferable:** CSU  
**Catalog Date:** June 1, 2020

This course prepares students to design, install and maintain water efficient, surface and subsurface drip irrigation systems. Topics include component identification and terminology, system layout, pipe sizing, water application equipment. Field trips may be required.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- SLO 1: Demonstrate independent learning and effective communication skills.
- Operate independently by attending and / or logging into class regularly when the course is offered online or an online component is utilized as part of the course.
- Utilize time management effectively and prioritize tasks to meet deadlines.
- Demonstrate effective oral and written communication.
- Utilize appropriate graphic irrigation symbols and terminology in irrigation design.
- SLO 2: Demonstrate a fundamental understanding of surface and subsurface micro-irrigation (drip) system components and hydraulics.
- Identify system components on an irrigation plan.
- Explain the basic concepts of water pressure, flow, velocity, and friction loss in drip systems.
- Calculate static and dynamic water pressure and flow at key points in a system.
- Explain the function of backflow prevention devices and assess the proper application for each device.
- Appraise the major types of drip tubing, emitters, and other micro-irrigation application devices.
- SLO 4: Demonstrate a fundamental understanding of surface and subsurface micro-irrigation (drip) design, installation, and troubleshooting.
- Select the proper micro-irrigation equipment for a given application.
- Calculate emitter spacing for uniform application and precipitation rates.
- Arrange irrigation laterals and calculate pipe size based on application, water pressure, and flow velocity.
- Identify and select drip fittings.
- Design and construct a micro-irrigation system utilizing industry approved equipment and techniques.
- Devise a water-efficient program and manage controller system operation.
- Evaluate the need for pressure regulation and filtering of irrigation water from city mains and private wells.
- Measure micro-irrigation system efficiency.
Diagnose and solve micro-irrigation system problems.
Prepare and present a cost estimate for a micro-irrigation system.

**HORT 353 Sustainable Water Management**

**Units:** 3
**Hours:** 36 hours LEC; 54 hours LAB
**Prerequisite:** HORT 350 with a grade of "C" or better; Hort 105 from ARC with a grade of "C" or better satisfies the HORT 350 prerequisite.
**Advisory:** HORT 300
**Transferable:** CSU
**Catalog Date:** June 1, 2020

This course prepares students to maintain and manage water efficient landscape irrigation systems utilizing the latest irrigation technology including water efficient application equipment, traditional and smart controllers, and environmental sensors. Topics include the review of the current California State Model Water Efficient Landscape Ordinance, inspection and performance assessment of irrigation systems, determining sprinkler precipitation and consumption rates, calculating water budgets, assessing soil/water relationships of the landscape, installing smart controllers and environmental sensors, controller programming, developing water schedules, and irrigation system management for efficient water use. Students can earn QWEL (Qualified Water Efficient Landscaper) certification by achieving a passing score on the final exam. (Minimum passing score will be announced in class). Field trips may be required.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- SLO 1: Demonstrate independent learning and effective communication skills.
- Operate independently by attending and / or logging into class regularly if an online component is utilized as part of the course.
- Utilize time management effectively and prioritize tasks to meet deadlines.
- Demonstrate effective oral and written communication.
- Demonstrate the ability to read and interpret irrigation plans and equipment manuals.
- Utilize appropriate graphic irrigation symbols and terminology used in irrigation design.
- SLO 2: Demonstrate a fundamental understanding of current model water efficient landscape standards.
- Analyze and explain the current California State Model Water Efficient Landscape Ordinance.
- Analyze and explain current local ordinances regulating the use of water in the landscape.
- Identify professional organizations and certification pertaining to efficient landscape irrigation.
- SLO 3: Demonstrate a fundamental understanding of landscape irrigation system performance and factors that affect performance.
- Evaluate and assess irrigation system water demand, precipitation rate, and coverage.
- Calculate landscape irrigation coefficients and landscape evapotranspiration.
- Calculate a water budget.
- Evaluate the soil/water relationships for a landscape and determine water infiltration and percolation rates.
- Assess methods of water capture.
- SLO 4: Demonstrate a fundamental understanding of the use, installation, programming, and management of water efficient landscape irrigation equipment.
- Evaluate and assess the latest models of water efficient sprinkler heads and micro-irrigation application devices.
- Select the proper water application devices for a given landscape site.
- Evaluate and assess the latest models of water efficient controllers and environmental sensors.
- Demonstrate the ability to install various models of water efficient controllers and environmental sensors.
- Demonstrate the ability to program various models of water efficient controllers and sensor input devices.
- Demonstrate the ability to program various models of traditional controllers for water efficient operation.
• Evaluate soil moisture content and perform system adjustments as required to maintain system efficiency.
• Evaluate real-time evapotranspiration data and perform system adjustments as required to maintain system efficiency.
• Analyze system flow rates and calculate water usage.

HORT 360 Introduction to Tree Care and Urban Forestry

Units: 3
Hours: 36 hours LEC; 54 hours LAB
Prerequisite: None.
Advisory: HORT 300 with a grade of “C” or better
Transferable: CSU
Catalog Date: June 1, 2020

This course is an introductory study and application of the principles and practices of tree care and urban forestry. This course will focus on tree biology, tree identification, plant health care, soils, plant nutrition, planting, worker safety, climbing, pruning, and the safe and effective use of tree-care tools and equipment. This course prepares the student to obtain a Certified Arborist designation through the International Society of Arboriculture. Field trips may be required.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• SLO 1: Demonstrate independent learning and effective communication skills.
  • Operate independently by attending class regularly.
  • Utilize time management effectively and prioritize tasks to meet deadlines.
  • Demonstrate effective oral and written communication.
• SLO 2: Demonstrate a fundamental understanding of the California Tree Care industry.
  • Support urban forestry and the environmental, economic, aesthetic, and social benefits of trees.
  • Analyze the various costs associated with establishing and maintaining landscape trees and how value can be placed on the urban forest as a resource.
  • Research the various careers in Arboriculture and Urban Forestry and associated employment requirements and opportunities.
• SLO 3: Demonstrate a fundamental understanding of scientific investigation and basic botany as it relates to trees and tree care.
  • Apply the Scientific Method of research to appropriate Arboriculture and Urban Forestry applications.
  • Recognize the major structures of trees and explain their function.
  • Investigate plant growth requirements.
  • Explain how water, minerals, and nutrients are necessary for tree health and growth.
  • Describe the basic composition of a tree’s vascular system and explain how water, minerals, carbohydrates, and plant growth regulators are transported within this system.
  • Describe how all plants are classified and how scientific names are based on the classification system.
  • Explain how plant characteristics such as growth habit, texture, and color can be used in tree identification.
  • Demonstrate the ability to identify trees based on a tree’s physical characteristics.
• SLO 4: Demonstrate a fundamental understanding of soils, soil management, plant nutrition, and water management in tree care.
  • Explain the relationship among soil moisture, absorption of essential elements, and plant growth.
  • Explain the importance of irrigation and water management for urban landscapes.
  • Assess the advantages and disadvantages of different landscape irrigation systems and recommend appropriate and efficient methods for specific landscape scenarios.
  • Describe the essential elements for plant and tree growth, the different methods of fertilizer application, and the advantages and disadvantages of each.
SLO 5: Demonstrate a fundamental understanding of common tree care practices.
Formulate criteria for selecting healthy, vigorous planting stock.
Validate how using proper planting techniques can improve tree survival and accelerate establishment.
Demonstrate and explain the techniques and procedures used to plant and transplant trees.
Assess the procedures and techniques used in tree pruning.
Explain how trees respond to pruning and describe the effects of severe or improper pruning.
Identify and discuss various tree hazards.
Distinguish when a tree might be helped by the installation of cables, guys, bracing rods, and/or props.
Describe the various physiological disorders and injuries that can affect trees.
Recognize symptoms and signs of plant diseases and identify the cause of plant damage.
Classify treatments that are appropriate for common tree disorders and injuries.
Explain the concept of Compartmentalization of Decay in Trees (CODIT).
Explain the philosophy of Plant Health Care (PHC) and describe its relationship with Integrated Pest Management (IPM).

SLO 6: Demonstrate a fundamental understanding of safe and effective tree care operations.
Identify common horticulture and tree care tools and equipment.
Identify appropriate safety standards and safety equipment for tree care operations.
Identify common injuries when using tools incorrectly and explain the safe and effective use of common horticulture tools and equipment.
Identify the tools, ropes, and knots used for climbing and working in trees.
Demonstrate the ability to safely and effectively use appropriate tools and equipment in tree care operations.

HORT 495 Independent Studies in Horticulture

Units: 1 - 3
Hours: 54 - 162 hours LAB
Prerequisite: None.
Transferable: CSU
Catalog Date: June 1, 2020

An independent studies project involves an individual student or small group of students in study, research, or activities beyond the scope of regularly offered courses. See the current catalog section of "Special Studies" for full details of Independent Studies.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO #1: Actively engage in intellectual inquiry beyond that required in order to pass a course of study (College Wide Learning Outcome – Area 4).
- Discuss and outline a proposal of study (that can be accomplished within one semester term) with a supervising instructor qualified within the discipline.
- Design an independent study (to be completed individually or by collaboration of a small group) to foster special knowledge, skills, and experience that are not available in any one regularly scheduled course.
- Use information resources to gather discipline-specific information.
- SLO #2: Utilize modes of analysis and critical thinking to apply theoretical perspectives and/or concepts in the major discipline of study to significant problems and/or educational activities (College Wide Learning Outcome – Area 3).
- Analyze and apply the knowledge, skills and experience that are involved in the independent study to theoretical perspectives and/or concepts in the major discipline of study.
- Explain the importance of the major discipline of study in the broader picture of society.
- SLO #3: Communicate a complex understanding of content matter of the major discipline of study (College Wide Outcome – Area 3).
Demonstrate competence in the skills essential to mastery of the major discipline of study that are necessary to accomplish the independent study.

SLO #4: Identify personal goals and pursue these goals effectively (College Wide Outcome – Area 4).

Utilize skills from the "academic tool kit" including time management, study skills, etc., to accomplish the independent study within one semester term.

HORT 498 Work Experience in Horticulture

<table>
<thead>
<tr>
<th>Units:</th>
<th>1 - 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hours:</td>
<td>60 - 300 hours LAB</td>
</tr>
<tr>
<td>Prerequisite:</td>
<td>None.</td>
</tr>
<tr>
<td>Enrollment Limitation:</td>
<td>Students must be in a paid or unpaid internship, volunteer position or job related to career goals in Horticulture.</td>
</tr>
<tr>
<td>Transferrable:</td>
<td>CSU</td>
</tr>
<tr>
<td>General Education:</td>
<td>AA/AS Area III(b)</td>
</tr>
<tr>
<td>Catalog Date:</td>
<td>June 1, 2020</td>
</tr>
</tbody>
</table>

This course provides students with opportunities to develop marketable skills in preparation for employment in their major field of study or advancement within their career. It is designed for students interested in work experience and/or internships in transfer level degree occupational programs. Course content includes understanding the application of education to the workforce; completion of required forms which document the student's progress and hours spent at the work site; and developing workplace skills and competencies. Appropriate level learning objectives are established by the student and the employer. During the semester, the student is required to participate in a weekly orientation and 75 hours of related paid work experience, or 60 hours of unpaid work experience for one unit. An additional 75 or 60 hours of related work experience is required for each additional unit. Work Experience may be taken for a total of 16 units when there are new or expanded learning objectives. Only one Work Experience course may be taken per semester.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- **DEMONSTRATE AN UNDERSTANDING AND APPLICATION OF PROFESSIONAL WORKPLACE BEHAVIOR IN A FIELD OF STUDY RELATED ONE'S CAREER.(SLO 1)**
  - Understand the effects time, stress, and organizational management have on performance.
  - Demonstrate an understanding of consistently practicing ethics and confidentiality in a workplace.
  - Examine the career/life planning process and relate its relevancy to the student.
  - Demonstrate an understanding of basic communication tools and their appropriate use.
  - Demonstrate an understanding of workplace etiquette.

- **DESCRIBE THE CAREER/LIFE PLANNING PROCESS AND RELATE ITS RELEVANCY TO ONE’S CAREER.(SLO 2)**
  - Link personal goals to long term achievement.
  - Display an understanding of creating a professional first impression.
  - Understand how networking is a powerful job search tool.
  - Understand necessary elements of a résumé.
  - Understand the importance of interview preparation.
  - Identify how continual learning increases career success.

- **DEMONSTRATE APPLICATION OF INDUSTRY KNOWLEDGE AND THEORETICAL CONCEPTS AS WRITTEN IN LEARNING OBJECTIVES IN PARTNERSHIP WITH THE EMPLOYER WORK SITE SUPERVISOR.(SLO 3)**
Human Services  
| Cosumnes River College

This CRC program prepares students for employment as para-professionals with agencies such as youth group homes, youth and family services agencies, schools, probation, welfare, and mental health departments.

Dean  
Collin Pregliasco

(916) 691-7261
PregliC@crc.losrios.edu

Associate Degrees

A.A. in Chemical Dependency Studies Degree

The program in Chemical Dependency Studies centers around the specific skills and abilities necessary to provide comprehensive drug and alcohol counseling. Course work include the twelve counselor core function applications in addiction screening, intake, assessment, orientation, counseling, crisis intervention, consultation, client education, client rights, confidentiality, professional ethics and reports and record keeping.

Catalog Date: June 1, 2020

Degree Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>HSER 300</td>
<td>Introduction to Human Services</td>
<td>3</td>
</tr>
<tr>
<td>HSER 302</td>
<td>Introduction to Psychology of Human Relations</td>
<td>3</td>
</tr>
<tr>
<td>HSER 340</td>
<td>Introduction to Chemical Dependency</td>
<td>3</td>
</tr>
<tr>
<td>HSER 341</td>
<td>Physiology and Pharmacology: Alcohol &amp; Other Drugs</td>
<td>3</td>
</tr>
<tr>
<td>HSER 342</td>
<td>Alcoholism: Intervention, Treatment &amp; Recovery</td>
<td>3</td>
</tr>
<tr>
<td>HSER 350</td>
<td>Employment Skills in Human Services</td>
<td>3</td>
</tr>
<tr>
<td>HSER 360</td>
<td>Techniques of Interviewing and Counseling</td>
<td>3</td>
</tr>
<tr>
<td>HSER 362</td>
<td>Practices in Human Services</td>
<td>3</td>
</tr>
<tr>
<td>HSER 364</td>
<td>Techniques of Group Counseling</td>
<td>4</td>
</tr>
<tr>
<td>PSYC 300</td>
<td>General Principles</td>
<td>3</td>
</tr>
<tr>
<td>HSER 498</td>
<td>Work Experience in Human Services</td>
<td>1 - 4¹</td>
</tr>
<tr>
<td>PSYC 368</td>
<td>Cross Cultural Psychology (3)</td>
<td>3</td>
</tr>
<tr>
<td>or SOC 321</td>
<td>Race, Ethnicity and Inequality in the United States (3)</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 340</td>
<td>Abnormal Behavior</td>
<td>3</td>
</tr>
<tr>
<td>Total Units:</td>
<td></td>
<td>38 - 41</td>
</tr>
</tbody>
</table>
Students must complete a minimum of 255 internship hours for HSER 498.

The Chemical Dependency Studies Degree Associate in Arts (A.A.) degree may be obtained by completion of the required program, plus general education requirements, plus sufficient electives to meet a 60-unit total. See CRC graduation requirements.

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- Evaluate the components of a quality chemical dependency counseling program
- Demonstrate the twelve essential counseling skills as they apply to chemical dependency and recovery processes
- Utilize counseling strategies based on examination of scientific theories of addiction
- Identify the community resources used in assisting clients with addiction issues
- Appraise and apply the knowledge of California Professional Codes of Ethics for Drug and Alcohol counselors
- Evaluate one's own values and attitudes as they apply to ethical decision making
- Demonstrate appropriate interpersonal and social skills in interactions with a diverse population using principles of equity, justice, and inclusion

Career Information

Substance Abuse Counselor; Mental Health Social Worker; Social Worker; Child and Family Counselor; Child Protective Worker; Adult Protective Worker; Employee Assistance Counselor

A.A. in Human Services, General

This CRC program prepares students for employment as para-professionals with agencies such as youth group homes, youth and family services agencies, schools, probation, welfare, and mental health departments.

Highlights include:
* Individual and group counseling
* Interviews with employers
* Employment training, including resumes, cover letters, and interviews

This degree is designed for persons who are seeking careers as youth group home workers, family welfare and health agencies workers, count or state eligibility workers, and other para-professional positions. Graduates will have a broad range of human service skills, including group counseling, client interviewing, communication, problem solving, and employment.

Note to Transfer Students:
If you are interested in transferring to a four-year college or university to pursue a bachelor's degree in this major, it is critical that you meet with a CRC counselor to select and plan the courses for your major. Schools vary widely in terms of the required preparation. The courses that CRC requires for an Associate's degree in this major may be different from the requirements needed for the Bachelor's degree.

Catalog Date: June 1, 2020

Degree Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>HSER 300</td>
<td>Introduction to Human Services</td>
<td>3</td>
</tr>
<tr>
<td>HSER 302</td>
<td>Introduction to Psychology of Human Relations</td>
<td>3</td>
</tr>
<tr>
<td>HSER 350</td>
<td>Employment Skills in Human Services</td>
<td>3</td>
</tr>
<tr>
<td>HSER 360</td>
<td>Techniques of Interviewing and Counseling</td>
<td>3</td>
</tr>
<tr>
<td>HSER 364</td>
<td>Techniques of Group Counseling</td>
<td>4</td>
</tr>
<tr>
<td>PSYC 300</td>
<td>General Principles</td>
<td>3</td>
</tr>
<tr>
<td>HSER 362</td>
<td>Practices in Human Services</td>
<td>3</td>
</tr>
<tr>
<td>HSER 498</td>
<td>Work Experience in Human Services</td>
<td>1-4</td>
</tr>
</tbody>
</table>
A minimum of 6 units from the following:

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>SOC 321</td>
<td>Race, Ethnicity and Inequality in the United States (3)</td>
<td>6</td>
</tr>
<tr>
<td>PSYC 320</td>
<td>Social Psychology (3)</td>
<td></td>
</tr>
<tr>
<td>SOC 300</td>
<td>Introductory Sociology (3)</td>
<td></td>
</tr>
</tbody>
</table>

Total Units: 29 - 32

1Students must complete a minimum of 108 internship hours for HSER 498.

The Human Services, General Associate in Arts (A.A.) degree may be obtained by completion of the required program, plus general education requirements, plus sufficient electives to meet a 60-unit total. See CRC graduation requirements.

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- compete for employment as paraprofessionals with agencies such as youth group homes; youth and family service agencies; schools; probation, welfare and mental health departments.

Career Information

Peer Support Group Facilitator; Youth Group Home Worker; Family, Welfare, and Health Agencies Worker; Consumer Consultant; County or State Eligibility Worker; Conflict Containment Workers

Certificates of Achievement

Chemical Dependency Studies Certificate

The program in Chemical Dependency Studies centers around the specific skills and abilities necessary to provide comprehensive drug and alcohol counseling. Course work include the twelve counselor core function applications in addiction screening, intake, assessment, orientation, counseling, crisis intervention, consultation, client education, client rights, confidentiality, professional ethics and reports and record keeping.

Catalog Date: June 1, 2020

Certificate Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>HSER 300</td>
<td>Introduction to Human Services</td>
<td>3</td>
</tr>
<tr>
<td>HSER 302</td>
<td>Introduction to Psychology of Human Relations</td>
<td>3</td>
</tr>
<tr>
<td>HSER 340</td>
<td>Introduction to Chemical Dependency</td>
<td>3</td>
</tr>
<tr>
<td>HSER 341</td>
<td>Physiology and Pharmacology: Alcohol &amp; Other Drugs</td>
<td>3</td>
</tr>
<tr>
<td>HSER 342</td>
<td>Alcoholism: Intervention, Treatment &amp; Recovery</td>
<td>3</td>
</tr>
<tr>
<td>HSER 350</td>
<td>Employment Skills in Human Services</td>
<td>3</td>
</tr>
<tr>
<td>HSER 360</td>
<td>Techniques of Interviewing and Counseling</td>
<td>3</td>
</tr>
<tr>
<td>HSER 362</td>
<td>Practices in Human Services</td>
<td>3</td>
</tr>
<tr>
<td>HSER 364</td>
<td>Techniques of Group Counseling</td>
<td>4</td>
</tr>
<tr>
<td>HSER 498</td>
<td>Work Experience in Human Services</td>
<td>1-4¹</td>
</tr>
<tr>
<td>PSYC 300</td>
<td>General Principles</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 340</td>
<td>Abnormal Behavior</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 368</td>
<td>Cross Cultural Psychology (3)</td>
<td>3</td>
</tr>
</tbody>
</table>
Student Learning Outcomes

Upon completion of this program, the student will be able to:

- Evaluate the components of a quality chemical dependency counseling program
- Demonstrate the twelve essential counseling skills as they apply to chemical dependency and recovery processes
- Utilize counseling strategies based on examination of scientific theories of addiction
- Identify the community resources used in assisting clients with addiction issues
- Appraise and apply the knowledge of California Professional Codes of Ethics for Drug and Alcohol counselors
- Evaluate one’s own values and attitudes as they apply to ethical decision making
- Demonstrate appropriate interpersonal and social skills in interactions with a diverse population using principles of equity, justice, and inclusion

Career Information

Substance Abuse Counselor; Mental Health Social Worker; Social Worker; Child and Family Counselor; Child Protective Worker; Adult Protective Worker; Employee Assistance Counselor

Human Services, General Certificate

This CRC program prepares students for employment as para-professionals with agencies such as youth group homes, youth and family services agencies, schools, probation, welfare, and mental health departments.

Highlights include:
* Individual and group counseling
* Interviews with employers
* Employment training, including resumes, cover letters, and interviews

This certificate is designed for persons who are seeking careers as youth group home workers, family welfare and health agency workers, county or state eligibility workers, and other para-professional positions. Completers will have a foundation in human service skills, including group counseling, client interviewing, and employment.

Catalog Date: June 1, 2020

Certificate Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>HSER 300</td>
<td>Introduction to Human Services</td>
<td>3</td>
</tr>
<tr>
<td>HSER 302</td>
<td>Introduction to Psychology of Human Relations</td>
<td>3</td>
</tr>
<tr>
<td>HSER 350</td>
<td>Employment Skills in Human Services</td>
<td>3</td>
</tr>
<tr>
<td>HSER 360</td>
<td>Techniques of Interviewing and Counseling</td>
<td>3</td>
</tr>
<tr>
<td>HSER 364</td>
<td>Techniques of Group Counseling</td>
<td>4</td>
</tr>
<tr>
<td>PSYC 300</td>
<td>General Principles</td>
<td>3</td>
</tr>
<tr>
<td>HSER 362</td>
<td>Practices in Human Services</td>
<td>3</td>
</tr>
<tr>
<td>HSER 498</td>
<td>Work Experience in Human Services</td>
<td>1-4*</td>
</tr>
</tbody>
</table>

A minimum of 6 units from the following:

6
<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>SOC 321</td>
<td>Race, Ethnicity and Inequality in the United States (3)</td>
<td></td>
</tr>
<tr>
<td>PSYC 320</td>
<td>Social Psychology (3)</td>
<td></td>
</tr>
<tr>
<td>SOC 300</td>
<td>Introductory Sociology (3)</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Total Units:</strong></td>
<td><strong>29 - 32</strong></td>
</tr>
</tbody>
</table>

1Students must complete a minimum of 108 internship hours for HSER 498.

**Student Learning Outcomes**

Upon completion of this program, the student will be able to:

- compete for employment as paraprofessionals with agencies such as youth group homes; youth and family service agencies; schools; probation, welfare and mental health departments.

**Career Information**

Peer Support Group Facilitator; Youth Group Home Worker; Family, Welfare, and Health Agencies Worker; Consumer Consultant; County or State Eligibility Worker; Conflict Containment Workers

**Human Services (HSER)**

**HSER 300 Introduction to Human Services**

- **Units:** 3
- **Hours:** 54 hours LEC
- **Prerequisite:** None.
- **Advisory:** Eligibility for ENGWR 300 or equivalent skills demonstrated through the assessment process.
- **Transferable:** CSU
- **Catalog Date:** June 1, 2020

This course is a comprehensive overview of the field of Human Services in private and public agencies. This course includes learning of agency functions and worker activities through reading, class discussion, and class speakers. The emphasis of this course is understanding the roles and skills of associate professionals such as health workers, activity directors for the elderly, and adolescent and child welfare assistants.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- SLO-1: Develop a comprehensive overview of the field of Human Services in both the public and private sector.
- discuss the role of the Human Services worker in a variety of environments and populations.
- understand diverse client populations served by Human Services workers.
- explain the career possibilities in the field of Human Services.
- analyze the core principles and values, communication skills, and self-care in Human Services.

**HSER 302 Introduction to Psychology of Human Relations**

- **Units:** 3
- **Hours:** 54 hours LEC
- **Prerequisite:** None.
- **Transferable:** CSU
- **General Education:** AA/AS Area III(b); CSU Area E1
- **Catalog Date:** June 1, 2020
This course is an introduction to attitudes, values, and methods that enhance communication skills in human relations. It is required for all students in the Human Services major and open to all students.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- Demonstrate appropriate physical, tonal and verbal interpersonal responses in an individual or group counseling setting (SLO 1).  
- Students will be able to define a contradiction between client's spoken words and between client's spoken words, body language and attitude in an interpersonal setting.  
- Students will be able to identify the differences between poor responses and effective responses.  
- Describe the innate emotional basis influencing the individual response patterns of different persons which affect how they respond to their environment. (SLO 2)  
- Utilize the introspective approach to specific human relations topics. (SLO 3)

HSER 304 Introduction to Counseling Children

Units: 3  
Hours: 54 hours LEC  
Prerequisite: None.  
Transferable: CSU  
Catalog Date: June 1, 2020  

A study of the tools children use daily to cope with feelings, adjust to changes, overcome disappointment and trauma, make sense out of the world around them and grow in their various relationships. Children's play medium will be experienced, with special emphasis on the importance of imagination and the use of fantasy. Assignments will require association with children.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- demonstrate understanding of children's issues.
- demonstrate understanding of the role and importance of play and fantasy.
- demonstrate understanding of the role of family dynamics and its influence upon the child's behavior and adaption.
- demonstrate ability to effectively use children's techniques with children: storytelling, puppets, art, active play, sand play, clay, table games, and puzzles.

HSER 340 Introduction to Chemical Dependency

Units: 3  
Hours: 54 hours LEC  
Prerequisite: None.  
Transferable: CSU  
Catalog Date: June 1, 2020  

A survey course that examines the psychological and physiological effects of chemical dependency on the individual. Also included is an analysis of the effects of substance abuse on the family; the sociological and economic conditions contributing to substance abuse, and a description of communication efforts at prevention and treatment.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO 1: DEVELOP AN UNDERSTANDING OF THE PSYCHOLOGICAL AND PHYSIOLOGICAL EFFECTS OF ALCOHOL AND OTHER DRUGS OF ADDICTION ON THE HUMAN BODY AND HUMAN BEHAVIOR.
- SLO 2: DEVELOP AN UNDERSTANDING OF INTERVENTION AND TREATMENT PLANS FOR ALCOHOL AND DRUGS OF ADDICTION.
- develop a comprehensive understanding of the physiological, sociological, economical and historical conditions contributing to substance abuse.
- describe the psychological and physiological progression of substance abuse.
identify the key components of assessment and recovery programs for alcoholism and drug abuse including AA, NA, ALANON, ACA, private and public in/outpatient therapy.

- identify the family dynamics inherent in substance abuse situations, including ACA and co-dependency issues.
- develop an understanding of prevention and treatment efforts used in the field of chemical dependency

HSER 341 Physiology and Pharmacology: Alcohol & Other Drugs

**Units:** 3  
**Hours:** 54 hours LEC  
**Prerequisite:** HSER 340 with a grade of “C” or better  
**Transferable:** CSU  
**Catalog Date:** June 1, 2020

This course is a study of the chemical composition of alcohol, and the mechanism of action of alcohol and other psychoactive drugs in the human body including opiates, stimulants, depressants, psychotherapeutics, and psychedelics. The physiological and psychological mechanisms associated with tolerance, habituation, and withdrawal that occur during the addiction phase of drug use will be studied.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- SLO 1: DEVELOP AN UNDERSTANDING OF THE PSYCHOLOGICAL AND PHYSIOLOGY EFFECTS OF ALCOHOL AND OTHER DRUGS OF ADDICTION ON THE HUMAN BODY AND HUMAN BEHAVIOR.
- SLO 2: DEVELOP AN UNDERSTANDING OF INTERVENTION AND TREATMENT PLANS FOR ALCOHOL AND DRUGS OF ADDICTION.
- compare the effects of each class of psychoactive drugs upon the human body.
- define the biological, social, and psychological implications of psychoactive drug use, misuse, and abuse.
- describe the effects of psychoactive drugs on behavior.
- analyze treatment issues and challenges.
- compare intervention and treatment approaches.
- examine alternatives to drug use.

HSER 342 Alcoholism: Intervention, Treatment & Recovery

**Units:** 3  
**Hours:** 54 hours LEC  
**Prerequisite:** HSER 341 with a grade of “C” or better  
**Transferable:** CSU  
**Catalog Date:** June 1, 2020

This course is a study and evaluation of techniques used in the treatment of chemical dependency. Topics include intervention, individual and group counseling, detoxification, twelve-step programs, therapeutic communities, and aftercare programs.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- SLO 1: DEVELOP AN UNDERSTANDING OF TREATMENT OPTIONS FOR DRUG AND ALCOHOL ADDICTION.
- analyze drug and alcohol use, misuse, abuse, and addiction
- compare various theories of drug and alcohol addiction
- differentiate treatment issues of drug and alcohol use, misuse, abuse, and addiction
- describe treatment methods and counseling approaches of drug and alcohol use, misuse, abuse, and addiction
HSER 350 Employment Skills in Human Services

This course is an introduction to interviewing and counseling with adults and children; family system dynamics; family and drug interventions; crisis intervention training; court mandated reporting laws; code of ethics and conduct; and laws pertaining to counseling minors and other client populations within the Human Services field.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO-1: Implement those skills required of a working professional in the helping profession.
- SLO-2: Comply with reporting laws for children and adults in the helping profession, as well as duty to care and harm to self or others.
- SLO-3: Comply with the professional code of ethics and standards of practice in the helping profession.
- SLO-4: Understand and implement the protocol for crisis intervention, mental health assessment, and client treatment planning.
- SLO-5: Understand and put into practice the concepts of client confidentiality and limits to confidentiality as they pertain to the helping profession.

HSER 360 Techniques of Interviewing and Counseling

This course is a survey of effective interviewing and counseling techniques as applied to the paraprofessional experiences of counselor aides, group counselor aides, mental health workers, social service technicians, case management workers, and other human service related fields. This course is an integral part of the Human Services curriculum.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO 1: Demonstrate the ability to provide basic empathetic responses in a dyad setting as described in the course text and simulated situations including case management.
- SLO 2: Demonstrate the techniques of interviewing and counseling appropriate for helpers in social service agency settings
- Construct and express basic empathetic responses in a dyad setting in dealing with a variety of human problems
- Demonstrate appropriate approaches in dealing with a variety of human problems
- Demonstrate awareness of your own reactions based on past experiences, reactions to clients and reactions to client’s experiences.
- Develop a case file for case management and follow-up services.
- Write case histories, summaries of case conferences of paraprofessional counseling sessions, and develop appropriate goal setting and follow-up services after interviews with clients.

HSER 362 Practices in Human Services
This course provides advanced study and lecture of the helping profession in settings that include: public and/or private agencies that provide mental health services; corrections and rehabilitation; alcohol and other drugs; and child/adolescent treatment services. This is a lecture-based course that integrates both the theory and concepts of the helping profession, as well as discussion of the practical application of experiences in the field. Student evaluation is competency-based.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO-1: Develop an understanding of the function of a community based organization (CBO), and put into practice those skills learned in the classroom.
- Show evidence of understanding agency structure, intake, documentation, and case management skills.
- Demonstrate insight and the understanding of working with a diverse client population.
- Demonstrate a working knowledge of community resources and the proper referral process.
- Demonstrate the necessary competencies for successful employment in the field of human services by knowing the concepts of confidentiality, by knowing and utilizing sound clinical judgment in responding to ethical dilemma, and by responding appropriately to crisis.

HSER 364 Techniques of Group Counseling

This course provides an overview of basic group counseling and facilitation skills including ethical issues as used by Human Services paraprofessionals. Topics explored will include communication skills within group dynamics, theories of group counseling, best practices guidelines and diversity issues. Laboratory exercises will include group work with outside groups and evaluation methods.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO 1: DEVELOP AN OVERVIEW OF THE TECHNIQUES AND SKILLS NEEDED FOR GROUP COUNSELING FACILITATION.
- SLO 2: DEMONSTRATE MULTIPLE GROUP COUNSELING TECHNIQUES
- categorize the general goals of the group counseling experience
- assess and discuss ethical and professional issues in group experiences
- compare and identify the rights of group participants and/or obligations of group facilitators
- distinguish the theoretical and practical orientations with which they feel most successful as group facilitators
- list areas of growth in self-understanding and in communicating with others

HSER 494 Topics in Human Services

This course provides an overview of basic group counseling and facilitation skills including ethical issues as used by Human Services paraprofessionals. Topics explored will include communication skills within group dynamics, theories of group counseling, best practices guidelines and diversity issues. Laboratory exercises will include group work with outside groups and evaluation methods.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO 1: DEVELOP AN OVERVIEW OF THE TECHNIQUES AND SKILLS NEEDED FOR GROUP COUNSELING FACILITATION.
- SLO 2: DEMONSTRATE MULTIPLE GROUP COUNSELING TECHNIQUES
- categorize the general goals of the group counseling experience
- assess and discuss ethical and professional issues in group experiences
- compare and identify the rights of group participants and/or obligations of group facilitators
- distinguish the theoretical and practical orientations with which they feel most successful as group facilitators
- list areas of growth in self-understanding and in communicating with others

HSER 494 Topics in Human Services

This course provides an overview of basic group counseling and facilitation skills including ethical issues as used by Human Services paraprofessionals. Topics explored will include communication skills within group dynamics, theories of group counseling, best practices guidelines and diversity issues. Laboratory exercises will include group work with outside groups and evaluation methods.
This course is an exploration of those topics and issues which are most relevant for future and present workers in human services. Emphasis will be on those issues which are not consistently covered by other required human services courses. These issues may include: chemical dependency, interventions in poverty, stress management, child neglect and abuse, patient rights, and organization for advocacy.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- analyze the most up-to-date information in areas which community human services employers feel are necessary exposure for students seeking employment within the agency. (SLO #1)

HSER 495 Independent Studies in Human Services

Units: 1 - 3  
Hours: 54 - 162 hours LAB  
Prerequisite: None.  
Transferable: CSU  
Catalog Date: June 1, 2020

An independent studies project involves an individual student or small group of students in study, research, or activities beyond the scope of regularly offered courses. See the current catalog section of "Special Studies" for full details of Independent Studies.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO #1: Actively engage in intellectual inquiry beyond that required in order to pass a course of study (College Wide Learning Outcome – Area 4).
- Discuss and outline a proposal of study (that can be accomplished within one semester term) with a supervising instructor qualified within the discipline.
- Design an independent study (to be completed individually or by collaboration of a small group) to foster special knowledge, skills, and experience that are not available in any one regularly scheduled course.
- Use information resources to gather discipline-specific information.
- SLO #2: Utilize modes of analysis and critical thinking to apply theoretical perspectives and/or concepts in the major discipline of study to significant problems and/or educational activities (College Wide Learning Outcome – Area 3).
- Analyze and apply the knowledge, skills and experience that are involved in the independent study to theoretical perspectives and/or concepts in the major discipline of study.
- Explain the importance of the major discipline of study in the broader picture of society.
- SLO #3: Communicate a complex understanding of content matter of the major discipline of study (College Wide Outcome – Area 3).
- Demonstrate competence in the skills essential to mastery of the major discipline of study that are necessary to accomplish the independent study.
- SLO #4: Identify personal goals and pursue these goals effectively (College Wide Outcome – Area 4).
- Utilize skills from the "academic tool kit" including time management, study skills, etc., to accomplish the independent study within one semester term.

HSER 498 Work Experience in Human Services

Units: 1 - 4  
Hours: 60 - 300 hours LAB  
Prerequisite: None.  
Enrollment Limitation: Students must be in a paid or unpaid internship, volunteer position or job related to career goals in Human Services.  
Transferable: CSU  
General Education: AA/AS Area III(b)  
Catalog Date: June 1, 2020
This course provides students with opportunities to develop marketable skills in preparation for employment in their major field of study or advancement within their career. It is designed for students interested in work experience and/or internships in transfer level degree occupational programs. Course content includes understanding the application of education to the workforce; completion of required forms which document the student's progress and hours spent at the work site; and developing workplace skills and competencies. Appropriate level learning objectives are established by the student and the employer. During the semester, the student is required to participate in a weekly orientation and 75 hours of related paid work experience, or 60 hours of unpaid work experience for one unit. An additional 75 or 60 hours of related work experience is required for each additional unit. Work Experience may be taken for a total of 16 units when there are new or expanded learning objectives. Only one Work Experience course may be taken per semester.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- **DEMONSTRATE AN UNDERSTANDING AND APPLICATION OF PROFESSIONAL WORKPLACE BEHAVIOR IN A FIELD OF STUDY RELATED ONE’S CAREER.**(SLO 1)
  - Understand the effects time, stress, and organizational management have on performance.
  - Demonstrate an understanding of consistently practicing ethics and confidentiality in a workplace.
  - Examine the career/life planning process and relate its relevancy to the student.
  - Demonstrate an understanding of basic communication tools and their appropriate use.
  - Demonstrate an understanding of workplace etiquette.

- **DESCRIBE THE CAREER/LIFE PLANNING PROCESS AND RELATE ITS RELEVANCY TO ONE’S CAREER.**(SLO 2)
  - Link personal goals to long term achievement.
  - Display an understanding of creating a professional first impression.
  - Understand how networking is a powerful job search tool.
  - Understand necessary elements of a résumé.
  - Understand the importance of interview preparation.
  - Identify how continual learning increases career success.

- **DEMONSTRATE APPLICATION OF INDUSTRY KNOWLEDGE AND THEORETICAL CONCEPTS AS WRITTEN IN LEARNING OBJECTIVES IN PARTNERSHIP WITH THE EMPLOYER WORK SITE SUPERVISOR.**(SLO 3)
Human/Career Development courses are designed to assist students with recognizing their full potential through developing self awareness, educational management and lifelong independent career planning skills. Instruction includes obtaining skills necessary to succeed in college and make positive and productive work/life decisions.

Dean
Collin Pregliasco

(916) 691-7261
PregliC@crc.losrios.edu

Human/Career Development (HCD)

HCD 89 Study Strategies Lab

| Units: | 0.5 - 1 |
| Hours: | 27 - 54 hours LAB |
| Prerequisite: | None. |
| Catalog Date: | June 1, 2020 |

This course will provide non-traditional instructional support for students with disabilities who are enrolled in other college classes. Graded on a credit/no credit basis. This is an open-entry, open-exit class that can be taken for 0.5-1.0 units.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- identify and utilize pertinent learning strategy skills from the following areas (research methods; textbook reading strategies; note taking strategies; organization of written assignments; editing and proofing of papers; test preparation and test-taking strategies; and time management.) (SLO #1)
- utilize lab time to complete homework assignments, accessing peer and tutorial support when necessary.
- learn how to advocate for themselves and to use DSPS Program services and accommodations.

HCD 110 Building Foundations for Success

| Units: | 3 |
| Hours: | 54 hours LEC |
| Prerequisite: | None. |
| General Education: | AA/AS Area III(b) |
| Catalog Date: | June 1, 2020 |

This course provides success strategies and support services to entry level students. The strategies and support services are threaded through three critical areas that enhance student success: academic skills, personal life management, and educational navigation.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- Learn beginning level student success strategies (SLO #1)
- Apply appropriate strategies for time management, goal setting, and note taking.
- Analyze attitudes toward studying and current study habits.
- Recognize personal learning styles.
- Apply study techniques to enhance classroom success.
- Apply test-taking strategies to prepare for and take exams.
- Develop analytical and problem solving skills with regard to circumstances occurring in personal, educational, and workplace environments.
- Demonstrate an ability to create a lifestyle balance plan.
- Demonstrate ability to apply, at a basic level, principles and practices of stress management.
- Apply techniques to improve and enhance physical and emotional wellness.
- Identify healthy support networks.
- Identify him- or her-self through communication and understanding as a racial person in a diverse state.
- Identify college programs and services.
- Describe her or his rights and responsibilities as a college student.
- Demonstrate an understanding of college procedures and policies (e.g. petitioning, probation, withdrawing, etc.).

HCD 112 College Survival

| Units: | 0.25 - 1 |
| Hours: | 4.5 - 18 hours LEC |
| Prerequisite: | None. |
| General Education: | AA/AS Area III(b) |
| Catalog Date: | June 1, 2020 |

The purpose of this course is to help the entry-level college student develop the confidence, knowledge, and skills necessary to become successful in college. Topics covered in College Survival include campus resources, academic planning, self-esteem and motivation, assertiveness and interpersonal relationships, as well as the principles of time and stress management.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- Demonstrate skills in the application of the universal tools utilized by all successful learners (SLO #1).
- Learn how to set personal and academic goals and maintain the motivation to achieve them.
- Develop a personalized student educational plan (SEP).
- Identify the locations and become knowledgeable about the services provided by the critical student support service programs.
- Explain the principles and tools of time and stress management and demonstrate skill in the application of the techniques of time and stress management.
- Learn and practice the basic skills needed to be appropriately assertive and develop and maintain positive interpersonal relationships.

HCD 122 Study Skills

| Units: | 1 |
| Hours: | 18 hours LEC |
| Prerequisite: | None. |
| General Education: | AA/AS Area III(b) |
| Catalog Date: | June 1, 2020 |

This course covers specific study skills strategies. It provides the opportunity to analyze attitudes toward studying, and current study skill habits. Topics include specific learning styles, strategies for time management, goal setting, note-taking, memory improvement, reading skills, and how to prepare for, and take exams.
Upon completion of this course, the student will be able to:

- SLO: Understand the skills, attitudes and abilities needed to be an informed and successful college student.
- Demonstrate appropriate time management and goal setting skills.
- Describe personal learning style and how it impacts study methods.
- Apply note-taking methodology and incorporate these techniques into lecture notes.
- Learn how to utilize the Survey, Question, Read, Recite & Write, Review (SQ4R) reading technique and know how to systematically mark and take study notes on a college level textbook.
- Recognize the components of memorization and then employ memory and concentration techniques.
- Demonstrate test-taking strategies including how to prepare for, and take exams.
- Demonstrate the ability to use basic library resources.

**HCD 132 Career Exploration**

**Units:** 1
**Hours:** 18 hours LEC
**Prerequisite:** None.
**General Education:** AA/AS Area III(b)
**Catalog Date:** June 1, 2020

Students learn how to balance career and personal life when making career decisions, become skilled in the use of career information resources, understand the nature of the changing labor market, and when appropriate, acquire job search skills. Topics covered include assessment of values, skills, interests, and personality factors relevant to career and life planning. Student will gain insight into the relationship between career and academic/educational planning. Career assessments may be required.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- Analyze principles of decision making (SLO1).
- Apply decision making principles to career planning.
- Describe personal decision-making style.
- Describe relevant aspects of career and life planning (SLO2).
- Identify her/his interests, personal characteristics, skills and work values and how those relate to career and life planning.
- Explain the organization of the world of work.
- Demonstrate skills in researching accurate and current occupational information (SLO3).
- Demonstrate ability to use Career Services.
- Use appropriate resources to obtain information about the changing labor market and its impact upon career planning strategies.
- Distinguish between primary and secondary sources of labor market information.
- Describe the goal-setting process and apply to life and career planning (SLO4).
- Identify occupations/occupational clusters consistent with her/his interests, skills, work values, personal characteristics.
- Identify a major or majors that are consistent with occupations/occupational clusters.
- Create, or update, as appropriate, an educational plan consistent with occupational goals.

**HCD 310 College Success**

**Units:** 1
**Hours:** 18 hours LEC
**Prerequisite:** AA/AS Area III(b)
**General Education:** AA/AS Area III(b)
**Catalog Date:** June 1, 2020

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- Analyze principles of decision making (SLO1).
- Apply decision making principles to career planning.
- Describe personal decision-making style.
- Describe relevant aspects of career and life planning (SLO2).
- Identify her/his interests, personal characteristics, skills and work values and how those relate to career and life planning.
- Explain the organization of the world of work.
- Demonstrate skills in researching accurate and current occupational information (SLO3).
- Demonstrate ability to use Career Services.
- Use appropriate resources to obtain information about the changing labor market and its impact upon career planning strategies.
- Distinguish between primary and secondary sources of labor market information.
- Describe the goal-setting process and apply to life and career planning (SLO4).
- Identify occupations/occupational clusters consistent with her/his interests, skills, work values, personal characteristics.
- Identify a major or majors that are consistent with occupations/occupational clusters.
- Create, or update, as appropriate, an educational plan consistent with occupational goals.
This course is designed to assist students in obtaining the skills and knowledge necessary to reach their educational objectives. Topics to be covered include: motivation and discipline, memory development, time management, communication skills, career planning, study skills and techniques, question-asking skills and personal issues that face many college students. Campus resources and information competency will also be covered. It is highly recommended for first time college students; however, continuing students also benefit from this course. The course may be offered for specific populations. Career and/or Learning Styles assessments may be required, and a field trip may be required.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- DEVELOP SELF DISCOVERY AND UNDERSTANDING (SLO #1)
  - Evaluate various self-discovery assessment techniques
  - Analyze learning styles such as auditory, visual and kinesthetic
- DEVELOP CRITICAL THINKING AND LIFE PLANNING SKILLS (SLO #2)
  - Demonstrate critical and creative thinking skills
  - Apply effective time management, study skills and life planning techniques
  - Incorporate interpersonal relationship skills and conflict resolution strategies
  - Differentiate factors involved in life planning and career decision making
- LOCATE AND UTILIZE CAMPUS RESOURCES (SLO #3)
  - Identify and investigate various campus resources, including programs and support services
  - Demonstrate information competency

HCD 320 Skills for Online Student Success

This course is designed to familiarize students with the skills required to succeed in an online course. Students will explore how to use various Internet tools to effectively learn in an online environment. Topics include online course equipment needs; using a word processor to support class assignments; sending email attachments; effective use of discussion groups, email, and synchronous chat sessions; researching on the Internet; evaluating Internet sources; working collaboratively online. This course is graded on a pass/no pass basis.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- USE THE COLLEGE’S LEARNING MANAGEMENT SYSTEM (LMS). (SLO #1)
  - locate content available within the college's LMS.
  - contribute to online discussion taking place within the college's LMS.
  - complete assessments conducted using tools available in the college's LMS.
- DEMONSTRATE SKILLS THAT SUPPORT SUCCESS IN AN ONLINE LEARNING ENVIRONMENT. (SLO #2)
  - create a personal schedule that includes time for online coursework.
  - conceive an online identity through regular participation in class discussion.
  - cooperate effectively in online group activities.
• ASSESS ONLINE LEARNING ISSUES. (SLO #3)

• recommend guidelines for ethical behavior in an online learning environment.

• analyze information found online.

• evaluate the effects of emerging technologies on the online learning environment.

HCD 340 Job Search Portfolio Development

<table>
<thead>
<tr>
<th>Units:</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hours:</td>
<td>18 hours LEC</td>
</tr>
<tr>
<td>Prerequisite:</td>
<td>None.</td>
</tr>
<tr>
<td>Transferable:</td>
<td>CSU</td>
</tr>
<tr>
<td>General Education:</td>
<td>AA/AS Area III(b)</td>
</tr>
<tr>
<td>Catalog Date:</td>
<td>June 1, 2020</td>
</tr>
</tbody>
</table>

This course is designed to help students create a job search portfolio for their internship or job search and to assist students in developing successful job search strategies. Through assignments, practice interviews and in-class activities, students will create and finalize necessary documents for a job search portfolio and participate in a series of mock interviews.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• DEVELOP EFFECTIVE JOB SEARCH MARKETING TOOLS AND EVALUATION SKILLS BY ANALYZING VARIOUS JOB SEARCH APPROACHES.

• Develop a personal job search portfolio including an application, cover letter, resume, letters of reference, work samples, certificates/awards and other examples of accomplishments.

• Demonstrate successful presentation, interviewing and negotiating skills.

HCD 346 Career and Workforce Skills

<table>
<thead>
<tr>
<th>Units:</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hours:</td>
<td>18 hours LEC</td>
</tr>
<tr>
<td>Prerequisite:</td>
<td>None.</td>
</tr>
<tr>
<td>Transferable:</td>
<td>CSU</td>
</tr>
<tr>
<td>General Education:</td>
<td>AA/AS Area III(b)</td>
</tr>
<tr>
<td>Catalog Date:</td>
<td>June 1, 2020</td>
</tr>
</tbody>
</table>

This course provides students with opportunities to develop marketable skills in preparation for employment and assists students in learning about the world of work. Course content includes understanding the application of education to the workforce, developing workplace skills and competencies. The content of this course covers the orientation materials and meets the orientation requirement for Work Experience 198, 298 and 498 at Cosumnes River College.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• DEMONSTRATE AN UNDERSTANDING AND APPLICATION OF PROFESSIONAL WORKPLACE BEHAVIOR.(SLO 1)

• Understand the effects time, stress, and organizational management have on performance.

• Demonstrate an understanding of consistently practicing ethics and confidentiality in a workplace.

• Demonstrate an understanding of basic communication tools and their appropriate use.

• Demonstrate an understanding of workplace etiquette.

• DESCRIBE THE CAREER/LIFE PLANNING PROCESS AND RELATE ITS RELEVANCY TO ONE'S CAREER.(SLO 2)

• Link personal goals to long term achievement.

• Display an understanding of creating a professional first impression.

• Understand how networking is a powerful job search tool.
HCD 362 Work/Life Management

Units: 2
Hours: 36 hours LEC
Prerequisite: None.
Transferable: CSU
Catalog Date: June 1, 2020

This course explores planning for personal work/life management. Includes training in life problem-solving with relationship to personal, educational, and workplace productivity. Topics include exploration of one’s own values, interests and abilities; stress reduction, wellness, and leisure; building family and social support; and educational and career management. The course will provide activities which will assist students with decision-making, goal setting, and learning to use tools for dealing with change.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO #1: DEVELOP ANALYTICAL AND DECISION-MAKING SKILLS TO EVALUATE PRESENT CIRCUMSTANCES AND FUTURE POSSIBILITIES.
- Discuss the changing nature of today's workforce, its impact and lifestyles.
- SLO #2: IDENTIFY OCCUPATIONAL, PERSONAL, AND EDUCATIONAL GOALS.
- Demonstrate knowledge and application of organizational strategies for effective time and personal management.
- Demonstrate the ability to construct an individual work/lifestyle balance plan.

HCD 382 Learning Strategies for College and Life

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Transferable: CSU
General Education: AA/AS Area III(b) (effective Summer 2020)
Catalog Date: June 1, 2020

This course provides a universal learning environment that supports students with specific learning differences, through adaptive strategies and techniques essential for achieving academic and personal success. Topics include adaptive technology, organization, learning modalities, time management, memory development, motivation, note-taking, personal wellness, study skills, testing techniques, and critical thinking methods. Also covered are communication approaches, personal and academic barriers, and disability awareness. Additionally, campus/community resources, college regulations, and proficiency expectations are covered.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO 1: EVALUATE INDIVIDUAL STRENGTHS AND WEAKNESSES FOR LEARNING, AND DESCRIBE STRATEGIES AND APPROPRIATE EDUCATIONAL INTERVENTIONS TO FACILITATE ACADEMIC SUCCESS.
- Describe the rationale behind specific learning strategies and accommodations.
- Identify and apply strategies for academic and personal success: life planning skills, organization, time management, self-advocacy, general and adaptive technology, critical thinking, interpersonal communication, and personal wellness.
- Locate and utilize applicable campus and community resources, online resources, and study groups.
- SLO 2: DEMONSTRATE KNOWLEDGE OF CAMPUS POLICIES AND PROCEDURES.
- SLO 3: ANALYZE THE PSYCHOLOGY OF MOTIVATION AND GOAL SETTING TO CHANGE MOTIVATION AND SET APPROPRIATE EDUCATIONAL AND LIFE GOALS.
- SLO 4: EXAMINE THE HUMAN MEMORY SYSTEM AND APPLY MEMORY STRATEGIES COMPATIBLE WITH PERSONAL LEARNING STYLE.
HCD 495 Independent Studies in Human Career Development

An independent studies project involves an individual student or small group of students in study, research, or activities beyond the scope of regularly offered courses. See the current catalog section of “Special Studies” for full details of Independent Studies.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- **SLO #1:** Actively engage in intellectual inquiry beyond that required in order to pass a course of study (College Wide Learning Outcome – Area 4).
- Discuss and outline a proposal of study (that can be accomplished within one semester term) with a supervising instructor qualified within the discipline.
- Design an independent study (to be completed individually or by collaboration of a small group) to foster special knowledge, skills, and experience that are not available in any one regularly scheduled course.
- Use information resources to gather discipline-specific information.
- **SLO #2:** Utilize modes of analysis and critical thinking to apply theoretical perspectives and/or concepts in the major discipline of study to significant problems and/or educational activities (College Wide Learning Outcome – Area 3).
- Analyze and apply the knowledge, skills and experience that are involved in the independent study to theoretical perspectives and/or concepts in the major discipline of study.
- Explain the importance of the major discipline of study in the broader picture of society.
- **SLO #3:** Communicate a complex understanding of content matter of the major discipline of study (College Wide Outcome – Area 3).
- Demonstrate competence in the skills essential to mastery of the major discipline of study that are necessary to accomplish the independent study.
- **SLO #4:** Identify personal goals and pursue these goals effectively (College Wide Outcome – Area 4).
- Utilize skills from the “academic tool kit” including time management, study skills, etc., to accomplish the independent study within one semester term.

HCD 1000 Supervised Tutoring

This course offers individualized tutoring designed to assist students to increase their success in college courses. Students may enroll for support of more than one college course per semester. Content will vary depending upon the adjunct course. Attention will be given to essential study skills and utilization of campus learning resources. May be repeated in subsequent semesters.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- Provide a method of instruction which involves a student tutor and assists one or more students who need special supplemental instruction in the subject or skill.
- demonstrate essential study skills.
- effectively utilize available campus learning resources.
• demonstrate a positive attitude toward continued learning in the subject area.
Humanities | Cosumnes River College

This program offers an interdisciplinary approach to the study of classical, modern, American and non-Western humanities. Cultural understanding and sensitivity are fostered by examining arts, philosophy, religion, politics and social events in cultural context. CRC offers an A.A. Degree in Interdisciplinary Studies, Humanities. Students interested in pursuing a degree in Humanities can find further information in the Interdisciplinary Studies Program.

Dean

Department Chairs  Gabriel Gorman

(916) 691-7142
WilliaL3@crc.losrios.edu

Associate Degrees

A.A. in American Studies

American Studies is the study of American culture, which includes an exploration of the arts, ideas, skills and institutions in US society.

Highlights include:
- A broad foundation for a variety of career or transfer opportunities in the study of culture
- Professional, student-centered, diverse and innovative staff committed to providing the best possible American Studies education
- A diverse set of course offerings which allows students to select based on their interests

Note to Transfer Students:
If you are interested in transferring to a four-year college or university to pursue a bachelor's degree in this major, it is critical that you meet with a CRC counselor to select and plan the courses for your major. Schools vary widely in terms of the required preparation. The courses that CRC requires for an Associate's degree in this major may be different from the requirements needed for the Bachelor's degree.

Catalog Date: June 1, 2020

Degree Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>HUM 332</td>
<td>American Humanities</td>
<td>3</td>
</tr>
<tr>
<td>SOC 321</td>
<td>Race, Ethnicity and Inequality in the United States</td>
<td>3</td>
</tr>
<tr>
<td>HIST 310</td>
<td>History of the United States (3)</td>
<td>3</td>
</tr>
<tr>
<td>or HIST 311</td>
<td>History of the United States (3)</td>
<td></td>
</tr>
<tr>
<td>or HIST 314</td>
<td>Recent United States History (3)</td>
<td></td>
</tr>
<tr>
<td>or HIST 320</td>
<td>History of the United States: African-American Emphasis (3)</td>
<td></td>
</tr>
<tr>
<td>or HIST 321</td>
<td>History of the United States: African-American Emphasis (3)</td>
<td></td>
</tr>
<tr>
<td>or HIST 331</td>
<td>Women in American History (3)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>A minimum of 12 units from the following:</td>
<td>12</td>
</tr>
<tr>
<td>ANTH 334</td>
<td>Native Peoples of North America (3)</td>
<td></td>
</tr>
<tr>
<td>COURSE CODE</td>
<td>COURSE TITLE</td>
<td>UNITS</td>
</tr>
<tr>
<td>------------</td>
<td>-------------------------------------------------------------------------------</td>
<td>-------</td>
</tr>
<tr>
<td>ARTH 325</td>
<td>Native American Art History (3)</td>
<td></td>
</tr>
<tr>
<td>BUS 345</td>
<td>Law and Society (3)</td>
<td></td>
</tr>
<tr>
<td>DANCE 351</td>
<td>Urban Hip Hop I (1)</td>
<td></td>
</tr>
<tr>
<td>or DANCE 310</td>
<td>Jazz Dance I (1)</td>
<td></td>
</tr>
<tr>
<td>DEAF 351</td>
<td>Introduction to American Deaf Culture (3)</td>
<td></td>
</tr>
<tr>
<td>ENGLT 336</td>
<td>Race and Ethnicity in Contemporary American Literature (3)</td>
<td></td>
</tr>
<tr>
<td>or ENGLT 330</td>
<td>African American Literature (3)</td>
<td></td>
</tr>
<tr>
<td>or ENGLT 321</td>
<td>American Literature II (3)</td>
<td></td>
</tr>
<tr>
<td>or ENGLT 320</td>
<td>American Literature I (3)</td>
<td></td>
</tr>
<tr>
<td>ETHNS 300</td>
<td>Introduction to Ethnic Studies (3)</td>
<td></td>
</tr>
<tr>
<td>or ETHNS 320</td>
<td>The African American Experience (3)</td>
<td></td>
</tr>
<tr>
<td>or ETHNS 330</td>
<td>The Asian American Experience in America (3)</td>
<td></td>
</tr>
<tr>
<td>or ETHNS 340</td>
<td>Chicanos/Mexican Americans in the U.S. (3)</td>
<td></td>
</tr>
<tr>
<td>or ETHNS 344</td>
<td>The Latino Experience in America (3)</td>
<td></td>
</tr>
<tr>
<td>HUM 339</td>
<td>African American Humanities (3)</td>
<td></td>
</tr>
<tr>
<td>MUFHL 315</td>
<td>Jazz History (3)</td>
<td></td>
</tr>
<tr>
<td>or MUFHL 308</td>
<td>Introduction to Music: Rock &amp; Roll (3)</td>
<td></td>
</tr>
<tr>
<td>POLS 301</td>
<td>Introduction to Government: United States (3)</td>
<td></td>
</tr>
<tr>
<td>or POLS 481</td>
<td>Introduction to Government: United States - Honors (3)</td>
<td></td>
</tr>
<tr>
<td>SPAN 427</td>
<td>Introduction to Spanish American Literature (3)</td>
<td></td>
</tr>
<tr>
<td>TA 306</td>
<td>Diversity in American Drama (1960 to Present) (3)</td>
<td></td>
</tr>
<tr>
<td>Total Units:</td>
<td></td>
<td>21</td>
</tr>
</tbody>
</table>

The American Studies Associate in Arts (A.A.) degree may be obtained by completion of the required program, plus general education requirements, plus sufficient electives to meet a 60-unit total. See CRC graduation requirements.

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- PSLO 1: Synthesize multiple disciplines focusing on U.S. society, such as history, art appreciation, music appreciation, and philosophy to achieve cultural literacy.
- PSLO 2: Practice college level critical thinking and writing in the interdisciplinary courses within the American Studies major.
- PSLO 3: Evaluate cross-cultural links between multiple disciplines focusing on U.S. society, with an emphasis on commonalities of cultural expression between different subcultures in the U.S.
- PSLO 4: Develop a foundation for cultural pluralism, a rejection of previous personal prejudices, and knowledge of and comfort with others unlike themselves.

Career Information

Research; Archivist; Education; Historian; Law; Politics Some career options may require more than two years of college study. Classes beyond the associate degree may be required to fulfill some career options or for preparation for transfer to a university program.

A.A. in Humanities
Humanities is the study of culture. This CRC major is intended for students who wish a general background in the areas of humanities or social science at the community college level. Several options are offered in specific interest areas but all are intended to give the student an interdisciplinary foundation for further study or an overview of the area chosen. Students who also wish to transfer to a four-year college should plan their programs to meet general education and lower division major requirements. All students are encouraged to consult with a counselor.

Highlights include:
* A valuable foundation for a variety of career or transfer opportunities
* Diversified and talented faculty
* Overview of theoretical and cultural principles

Note to Transfer Students:
If you are interested in transferring to a four-year college or university to pursue a bachelor's degree in this major, it is critical that you meet with a CRC counselor to select and plan the courses for your major. Schools vary widely in terms of the required preparation. The courses that CRC requires for an Associate's degree in this major may be different from the requirements needed for the Bachelor's degree.

**Catalog Date:** June 1, 2020

### Degree Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>HUM 300</td>
<td>Classical Humanities</td>
<td>3</td>
</tr>
<tr>
<td>HUM 310</td>
<td>Modern Humanities</td>
<td>3</td>
</tr>
<tr>
<td>HUM 320</td>
<td>Asian Humanities</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>A minimum of 3 units from the following:</td>
<td></td>
</tr>
<tr>
<td>HUM 301</td>
<td>Introduction to the Humanities (3)</td>
<td>3</td>
</tr>
<tr>
<td>HUM 324</td>
<td>Global Islam: Culture and Civilization (3)</td>
<td></td>
</tr>
<tr>
<td>HUM 331</td>
<td>Latin American Humanities (3)</td>
<td></td>
</tr>
<tr>
<td>HUM 332</td>
<td>American Humanities (3)</td>
<td></td>
</tr>
<tr>
<td>HUM 339</td>
<td>African American Humanities (3)</td>
<td></td>
</tr>
<tr>
<td>HUM 370</td>
<td>Women and the Creative Imagination (3)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>A minimum of 9 units from the following:</td>
<td>9</td>
</tr>
<tr>
<td>ARTH 300</td>
<td>Introduction to Art (3)</td>
<td></td>
</tr>
<tr>
<td>ENGCW 400</td>
<td>Creative Writing (3)</td>
<td></td>
</tr>
<tr>
<td>ENGLT 310</td>
<td>English Literature I (3)</td>
<td></td>
</tr>
<tr>
<td>ENGLT 311</td>
<td>English Literature II (3)</td>
<td></td>
</tr>
<tr>
<td>ENGLT 320</td>
<td>American Literature I (3)</td>
<td></td>
</tr>
<tr>
<td>ENGLT 321</td>
<td>American Literature II (3)</td>
<td></td>
</tr>
<tr>
<td>ENGLT 330</td>
<td>African American Literature (3)</td>
<td></td>
</tr>
<tr>
<td>ENGLT 340</td>
<td>World Literature I (3)</td>
<td></td>
</tr>
<tr>
<td>ENGLT 341</td>
<td>World Literature II (3)</td>
<td></td>
</tr>
<tr>
<td>MUFHL 300</td>
<td>Introduction to Music (3)</td>
<td></td>
</tr>
<tr>
<td>MUFHL 310</td>
<td>Survey of Music History and Literature (Greek Antiquity to 1750) (3)</td>
<td></td>
</tr>
<tr>
<td>MUFHL 311</td>
<td>Survey of Music History and Literature (1750 to the present) (3)</td>
<td></td>
</tr>
<tr>
<td>PHIL 300</td>
<td>Introduction to Philosophy (3)</td>
<td></td>
</tr>
<tr>
<td>PHIL 310</td>
<td>Introduction to Ethics (3)</td>
<td></td>
</tr>
<tr>
<td>PHIL 320</td>
<td>Logic and Critical Reasoning (3)</td>
<td></td>
</tr>
<tr>
<td>COURSE CODE</td>
<td>COURSE TITLE</td>
<td>UNITS</td>
</tr>
<tr>
<td>-------------</td>
<td>-------------------------------</td>
<td>-------</td>
</tr>
<tr>
<td>TA 300</td>
<td>Introduction to the Theatre (3)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total Units:</td>
<td>21</td>
</tr>
</tbody>
</table>

The Humanities Associate in Arts (A.A.) degree may be obtained by completion of the required program, plus general education requirements, plus sufficient electives to meet a 60-unit total. See CRC graduation requirements.

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- PSLO 1: Synthesize multiple disciplines such as history, art appreciation, music appreciation, and philosophy to achieve cultural literacy.
- PSLO 2: Use the interdisciplinary nature of Humanities courses to facilitate college level proficiency in critical thinking and writing.
- PSLO 3: Evaluate cross-cultural links between multiple Humanities disciplines, emphasizing commonalities of human expression between different cultures and shared ideas about the human experience.
- PSLO 4: Develop a greater understanding and tolerance of cultures other than the student's own by exposing the student to artistic materials not from their own culture or time period.

Career Information

Archivist; Librarian; Research; Teacher; Law; Administrator; Attorney; Historian; Foreign Service Some career options may require more than two years of college study. Classes beyond the associate degree may be required to fulfill some career options or for preparation for transfer to a university program.

Humanities (HUM)

HUM 300 Classical Humanities

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Transferable: CSU, UC
General Education: AA/AS Area I; CSU Area C2; IGETC Area 3B
Catalog Date: June 1, 2020

The course focuses upon Western culture in its attempt to interpret human experience and identity. The course examines basic human values as exemplified in the arts, philosophy and history. Emphasis is on the Greeks, the Romans, and the Judeo-Christian tradition up to the end of the Middle Ages.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO #1: Identify different artistic styles based on their historical periods, philosophical and or world view.
- Objective 1a: Identify the specific form of art (i.e., sculpture, architecture, literature).
- Objective 1b: Identify the subject matter of the art work and place it in a social and historical context.
- SLO #2: Use methodological skills when interpreting art.
- Objective 2a: Apply concepts of composition, subject, and execution when examining art from different disciplines.
- Objective 2b: Relate the above information to historical change, whether it be technological (i.e., a new technique) or social (i.e., a new understanding of man in the universe).
- SLO #3: Relate different art forms to each other using and understanding if the historical period in which they are created (i.e., a student might be asked to relate 5th century B.C. Greek ideas about perfection to the philosophy of Plato, the Parthenon and classic statuary.)
- Objective 3a: Describe how three works of art in different media each describe the basic ideas of their time.
SLO #4: Use the methodology developed above and apply it to the contemporary culture.

HUM 301 Introduction to the Humanities

Upon completion of this course, the student will be able to:

- SLO 1: Identify art conceptually (What is art?)
  - Objective 1a: Identify the artistic form of a work of art.
  - Objective 1b: Evaluate and analyze the subject of a work of art.
  - Objective 1c: Interpret and criticize a work of art.

- SLO 2: Apply methodologies to analyze a work of visual art (painting, sculpture, mixed media).
  - Objective 2a: Evaluate the principles of composition to different forms of the visual arts.
  - Objective 2b: Compare the elements of three examples from the visual arts (i.e., line, color, texture).
  - Objective 2c: Examine three examples of visual arts identifying their commonalities and differences.

- SLO 3: Apply methodologies to analyze a work of Literary Art.
  - Objective 3a: Identify genres.
  - Objective 3b: Analyze three different literary pieces that share a common theme.
  - Objective 3c: Compare literature and the visual arts.

- SLO 4: Apply methodologies to analyze a work of music or dance.
  - Objective 4a: Identify the elements of music or dance.
  - Objective 4b: Evaluate musical structures (for example what is Sonata Form?) or components of dance structures.
  - Objective 4c: Compare common musical forms or dance forms using themes from two different time periods or cultures.

- SLO 5: Explore the interrelationships between the arts and historic, scientific and philosophic changes.
  - Objective 5a: Evaluate two works of art to historic events (for example the conquests of Alexander the Great and WWI).
  - Objective 5b: Evaluate two works of art to advances in science (for example the work of Sir Issac Newton and Albert Einstein).
  - Objective 5c: Compare two works of art in the context of philosophy (for example the Philosopher Plato of 5th century BC and the Philosopher Jean Paul Sartre of the 20th century AD).

- SLO 6: Interpret contemporary forms of artistic expression.
  - Objective 6a: Apply critical and analytical skills to artistic forms of expression from the student's own culture and another that is contemporary (i.e., a culture not the student's own).
  - Objective 6b: Relate a contemporary work of art to recent historic events, scientific or philosophical changes.
  - Objective 6c: Evaluate the connection between current events and artistic expression.

HUM 310 Modern Humanities
This course focuses upon Western culture in its attempt to interpret human experience and identity. The course examines basic human values as exemplified in the arts, philosophy, and history. Emphasis is on the Renaissance, the Baroque period, and the Modern World.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- **SLO #1**: Identify and analyze different artistic styles based on their historical periods, philosophical and or scientific world view.
  
  - Objective 1a: Identify the specific form of art (i.e., music, painting).
  - Objective 1b: Analyze the subject of the art work and place it in a social and historical context.

- **SLO #2**: Apply methodological skills when interpreting art.
  
  - Objective 2a: Apply concepts of composition, subject, and execution when examining art from different disciplines (i.e., a painting, a film, a photograph).
  - Objective 2b: Relate these concepts to historical change, whether it be technological (i.e., a new technique) or social (i.e., a new understanding of man and his place in the universe).

- **SLO #3**: Compare and contrast different art forms to each other using an understanding of historical period, philosophical outlook (i.e., the ideas of Plato compared to the modern ideas of Karl Marx).
  
  - Objective 3a: Describe how three works of art in different media each describe the basic ideas of their time (i.e., relate a poem, a piece of music and a painting to ideas of Romanticism and the philosophy of Rousseau).

- **SLO #4**: Identify and explain the methodology developed for earlier time periods to the works of art from contemporary culture.
  
  - Objective 4a: Identify the major artistic forces of contemporary culture (i.e., Mass Media and advertising).
  - Objective 4b: Relate artistic works to contemporary philosophical or political understanding (i.e., Existentialism in the 20th century or Postmodern culture in the 21st).

---

**HUM 320 Asian Humanities**

The focus of the course is on ancient Indian, Chinese and Japanese cultures to interpret human experience and identity. The quest for truth is traced in a variety of forms of humanistic self-expression—literature, art, music, philosophy and history.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- Analyze the intersection of art and the development of society in ancient India, China and Japan. (SLO 1)
  
  - 1a. Critique major aspects of arts analysis using specific works of visual art (art, sculpture, architecture).
  - 1b. Assess specific parameters of a social movement.
  - 1c. Diagnose the connection between a specific work of art and a specific social event or movement.

- Criticize specific philosophical and political contributions to ancient Indian, Chinese and Japanese societies. (SLO 2)
  
  - 2a. Critique major aspects of literature (philosophical and political writings).
  - 2b. Research specific parameters of political movements.
  - 2c. Diagnose the relationship between specific political and philosophical writings and the social movements those writings foster.
Analyze the intersection between economics and the development of identity in India, China and Japan. (SLO 3)

3a. Research basic economic principles.

3b. Diagnose the relationship between economics and the development of racial identities, gender identities and caste identities.

HUM 324 Global Islam: Culture and Civilization

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Transferable: CSU; UC
General Education: AA/AS Area I; AA/AS Area VI; CSU Area C2; IGETC Area 3B
Catalog Date: June 1, 2020

The course is an introduction to global Islamic cultures from the 7th century to contemporary times, with emphasis on religious/philosophic concepts, and their expression in literature and the arts. Focus is placed upon Arab, Persian, African, Asian and American contributions. Students may be required to attend a live performance or museum visit.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- EXPRESS INTELLECTUAL AWARENESS AND UNDERSTANDING OF FUNDAMENTAL ASPECTS OF ISLAMIC CULTURE AND CIVILIZATION, AND EXAMINE THEIR RELIGIOUS AND CULTURAL IMPACT UPON WORLD CIVILIZATIONS AND THE WEST AND THE EAST (SLO 1).
  - Recognize and discuss elements of concepts of beliefs, religious tradition and practice, political leadership and succession, within the faith of Islam.
  - Demonstrate understanding of diverse Muslim global cultures and their impact upon world civilizations and modernity.
  - ANALYZE CONCEPTS OF TOLERANCE, JIHAD, WAR AND PEACE WITHIN THE RELIGION OF ISLAM, IDEALLY AND IN HUMAN PRACTICE (SLO 2).
  - Contrast and compare the topics.
  - Apply the argument, weighing the religious ideal with the human practice within the Islamic/Muslim context in medieval and contemporary times.
  - DIFFERENTIATE ISLAMIC AND AMERICAN DEFINITIONS OF RACE, ETHNICITY, GENDER, CLASS, RELIGIOUS AND NON-RELIGIOUS DIFFERENCES (SLO 3).
  - Research, analyze and compare definitions.
  - Create and compose evaluative essays, papers, reports based upon English language and Quranic meanings.
  - IDENTIFY AND RECOGNIZE THE CONTRIBUTIONS OF ARTISTS, POETS, AND WRITERS OF BOTH GENDERS WITHIN THE MULTICULTURAL HERITAGE OF ISLAM (SLO 4).
  - Review, assess, and examine creative works of art and architecture, poetic examples and writings from the Middle East, Asia, Africa, Europe and Muslims in America spanning the 7th century C.E. to contemporary times, a period of 1500 years.
  - DEVELOP CRITICAL THINKING SKILLS NECESSARY FOR FORMULATING AN ANALYTICAL FRAMEWORK RELEVANT TO THE STUDY OF THE GLOBAL CULTURES AND HISTORY OF ISLAM (SLO 5).
  - Research topics to formulate and apply to an analytical framework relevant to the study of the global cultures and history of Islam.
  - Write evaluative essays and papers to apply to an analytical framework relevant to the study of the global cultures and history of Islam.
  - Design book and oral reports of works relevant to the study of the global cultures and history of Islam.
  - Compare and contrast current societal issues in the light of past history.
  - Analyze and contrast cultural components within two separate geographic regions of the Muslim world.
  - Critique and interpret cross-cultural comparative aspects of Islamic and Arab history in the Middle East, and the Muslim historical legacy in Africa, China, South Asia, and within the American experience.
  - IDENTIFY, EVALUATE, AND WEIGH ACHIEVEMENTS OF MUSLIM THEOLOGIANS AND PHILOSOPHERS WITHIN HISTORICAL PERIODS OF NARROW INTERPRETATION AND CREATIVE THOUGHT (SLO 6).
- Define Islamic religious and philosophic systems and critique their effect upon representative art, literary and musical forms.

- OUTLINE THE INTELLECTUAL LEGACY OF LEARNING AND RESEARCH IN MUSLIM URBAN CENTERS DURING THE ABBASID, ANDALUSIAN PERIODS AND CONTEMPORARY TIMES (SLO 7).

- Locate and describe the centers of learning in Baghdad, Cordoba, Samarkand, Alexandria from the 8th Cent. C.E. into the 21st Century and their transmission of knowledge across cultures.

**HUM 331 Latin American Humanities**

**Units:** 3  
**Hours:** 54 hours LEC  
**Prerequisite:** None.  
**Transferable:** CSU, UC  
**General Education:** AA/AS Area I; AA/AS Area VI; CSU Area C2; IGETC Area 3B  
**Catalog Date:** June 1, 2020

This interdisciplinary course focuses on understanding the cultures, societies, economics, politics and artistic expressions of Mexico, Central America and South America. The quest for understanding culture includes an exploration of literature, art, architecture, music, theatre, history, philosophy, politics, race, gender, and class. Emphasis is placed on Pre-Contact, Post-Conquest and Colonial, Post-Independence, Contemporary and Diasporic Latin American humanistic expressions of culture.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- analyze the intersection of art and the development of society in Latin America (Mexico, Central America and South America)- SLO 1
- critique major aspects of arts analysis using specific works of visual art (art, sculpture, architecture)
- assess specific parameters of a social movement
- diagnose the connection between a specific work of art and a specific social event or movement
- criticize specific philosophical and political contributions to Latin American societies - SLO 2
- critique major aspects of literature (philosophical and political writings)
- research specific parameters of political movements
- diagnose the relationship between specific political and philosophical writings and the social movements those writings foster
- evaluate the pattern of language origins and the effects of European colonialism on cultural development in Latin America - SLO 3
- explain colonial movements from Europe to Mexico, Central America and South America
- integrate understanding of the impact of European colonialism on language and indigenous sovereignty
- evaluate race, class and gender through language and the legacies of colonialism
- analyze the intersection between economics and the development of race, gender and class - SLO 4
- research basic economic principles
- diagnose the relationship between economics (indigenous and colonial) and the development of racial identities, gender identities and class inequalities

**HUM 332 American Humanities**

**Units:** 3  
**Hours:** 54 hours LEC  
**Prerequisite:** None.  
**Transferable:** CSU, UC  
**General Education:** AA/AS Area I; AA/AS Area VI; CSU Area C2; IGETC Area 3B  
**Catalog Date:** June 1, 2020
This course examines ideas and values about the American experience in the 20th century by analyzing the literature, art, music, philosophy and history of the past 100 years. The course draws upon the arts of African American, Native American, Asian American, Anglo and Latino cultures as avenues for understanding issues of race, ethnicity, class, and gender as they intersect with mainstream American values in the past 100 years. Students may be required to attend a live performance or museum exhibition.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO #1: synthesize material from various sources and art forms and discuss them in the Historical context of 20th century America in the form of comparison and contrast essays.
  
  Objective 1a: Apply concepts of composition, subject and execution when examining art from different historical periods

- SLO #2: demonstrate an understanding of the history and artistic expression of at least three of the following groups; African American, Native American, Asian American, Anglo or Latino cultures.

- SLO #3: identify major artistic works and important persons of the 20th century.

- SLO #4: analyze the role of ethnicity, ethnocentrism and privilege its impact on American culture and students lives in a series of "hands on" exercises.

- SLO #5: compare and contrast the role of the United States as a leader of civil rights, women's, and minority rights on the world scene after the 1960's with its role in the world today.

- SLO #6: express their own first person experience of the Multi-cultural experience with the historical perspective of the last 100 years

HUM 339 African American Humanities

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Transferable: CSU; UC
Catalog Date: June 1, 2020

This course examines African American experience in the United States through the products of culture created by Black Americans. The course synthesizes the production of music, art, literature, politics and philosophy to understand historic and contemporary influences and experiences of African American identity and expression. Students may be required to attend and analyze at least one live performance of the arts (music, theater, dance) or museum.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO #1: Identify and analyze different artistic styles based on their historical periods, philosophical and or scientific world views.

  Objective 1a: Identify the specific form of cultural production (i.e., arts, ideas, skills and institutions).

  Objective 1b: Analyze the subject of the art work and place it in a social and historical context.

- SLO #2: Apply methodological skills when interpreting art.

  Objective 2a: Apply concepts of composition, subject, and execution when examining cultural production from different disciplines (i.e., a painting, a film, a photograph).

  Objective 2b: Relate these concepts to historical change, whether it be technological (i.e., a new technique) or social (i.e., a new movement).

- SLO #3: Compare and contrast different art forms to each other using an understanding of historical period, philosophical outlook (i.e., the ideas of Phillis Wheatley compared to the contemporary ideas of Nikki Giovanni).

  Objective 3a: Describe how three works of art in different media each describe the basic ideas of their time (i.e., relate a poem, a piece of music and a painting to ideas of the Civil Rights era).

- SLO #4: Identify and analyze the methodology developed for earlier time periods to the works of art from contemporary culture.

  Objective 4a: Evaluate the major artistic forces of contemporary Black artists.

  Objective 4b: Relate artistic works to contemporary philosophical or political understanding (i.e., Black Lives Matter or the rise of Black women in political discourse).
HUM 370 Women and the Creative Imagination

This course examines the creative powers of women throughout the history of art from antiquity to the present. The course offers an interdisciplinary perspective on the contributions of women artists as evidenced in literature and the visual and performing arts. Using gender as the primary lens of analysis, this course seeks to uncover the broader contexts of female experience by probing the relationship women artists had to the historical periods in which they lived and worked. Students may be required to attend a live performance or museum visit.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- **SLO 1:** Interpret through an historical lens the products of culture (arts, ideas, skills and institutions) associated with women.
  - Objective 1a: Evaluate the religious, historical, cultural, economic and technological factors that impact the lives of women artists.
  - Objective 1b: Analyze significant art forms produced by women.
  - Objective 1c: Compare and contrast the artworks created by women artists.
- **SLO 2:** Apply methodological skills when interpreting art.
  - Objective 2a: Apply concepts of composition, subject, and execution when examining art from different disciplines (i.e., a painting, a film, a photograph).
  - Objective 2b: Relate these concepts to historical change, whether it be technological (i.e., a new technique) or social (i.e., a new understanding of man and his place in the universe).
  - Objective 2c: Utilize a feminist critique when interpreting products of culture.
- **SLO 3:** Analyze cultural products by women across time and geography.
  - Objective 3a: Compare and contrast contemporary artists from different regions of the globe.
  - Objective 3b: Evaluate cultural production in relation to regional history and culture.

HUM 495 Independent Studies in Humanities

This course involves an individual student or small group of students in study, research, or activities beyond the scope of regularly offered courses. See the current catalog section of “Special Studies” for full details of Independent Studies.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- **SLO #1:** Actively engage in intellectual inquiry beyond that required in order to pass a course of study (College Wide Learning Outcome – Area 4).
  - Discuss and outline a proposal of study (that can be accomplished within one semester term) with a supervising instructor qualified within the discipline.
- **SLO #3:** Design an independent study (to be completed individually or by collaboration of a small group) to foster special knowledge, skills, and experience that are not available in any one regularly scheduled course.
  - Use information resources to gather discipline-specific information.
• SLO #2: Utilize modes of analysis and critical thinking to apply theoretical perspectives and/or concepts in the major discipline of study to significant problems and/or educational activities (College Wide Learning Outcome – Area 3).

• Analyze and apply the knowledge, skills and experience that are involved in the independent study to theoretical perspectives and/or concepts in the major discipline of study.

• Explain the importance of the major discipline of study in the broader picture of society.

• SLO #3: Communicate a complex understanding of content matter of the major discipline of study (College Wide Outcome – Area 3).

• Demonstrate competence in the skills essential to mastery of the major discipline of study that are necessary to accomplish the independent study.

• SLO #4: Identify personal goals and pursue these goals effectively (College Wide Outcome – Area 4).

• Utilize skills from the “academic tool kit” including time management, study skills, etc., to accomplish the independent study within one semester term.
Interdisciplinary Studies  
| Cosumnes River College

This CRC major is intended for students who wish a general background across several academic disciplines at the community college level. Several areas of interest are offered, but all are intended to supply the student with an interdisciplinary foundation for further study and an overview of the interest area chosen.

Students who also wish to transfer to a four-year college should plan their programs to meet general education and lower division major requirements. All students are encouraged to consult with a counselor.

Dean  
 (916) 691-7142  
 WilliaL3@crc.losrios.edu

Associate Degrees

A.A. in Interdisciplinary Studies, Ethnic Studies

This CRC major is intended for students who wish a general background in the areas of humanities or social science at the community college level. Several options are offered in specific interest areas but all are intended to give the student an interdisciplinary foundation for further study or an overview of the area chosen. Students who also wish to transfer to a four-year college should plan their programs to meet general education and lower division major requirements. All students are encouraged to consult with a counselor.

Highlights include:
* A valuable foundation for a variety of career or transfer opportunities  
* Diversified and talented faculty  
* Overview of theoretical and cultural principles

Note to Transfer Students:
If you are interested in transferring to a four-year college or university to pursue a bachelor's degree in this major, it is critical that you meet with a CRC counselor to select and plan the courses for your major. Schools vary widely in terms of the required preparation. The courses that CRC requires for an Associate's degree in this major may be different from the requirements needed for the Bachelor's degree.

Catalog Date: June 1, 2020

Degree Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>SOC 321</td>
<td>Race, Ethnicity and Inequality in the United States</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>A minimum of 9 units from the following:</td>
<td></td>
</tr>
<tr>
<td>ANTH 334</td>
<td>Native Peoples of North America (3)</td>
<td></td>
</tr>
<tr>
<td>ENGLT 330</td>
<td>African American Literature (3)</td>
<td></td>
</tr>
<tr>
<td>or HIST 320</td>
<td>History of the United States: African-American Emphasis (3)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>A minimum of 9 units from the following:</td>
<td>9^2</td>
</tr>
<tr>
<td>BUS 300</td>
<td>Introduction to Business (3)</td>
<td></td>
</tr>
<tr>
<td>COURSE CODE</td>
<td>COURSE TITLE</td>
<td>UNITS</td>
</tr>
<tr>
<td>-------------</td>
<td>---------------------------------------------------------------------------</td>
<td>-------</td>
</tr>
<tr>
<td>ENGLT 321</td>
<td>American Literature II (3)</td>
<td></td>
</tr>
<tr>
<td>or ENGLT 320</td>
<td>American Literature I (3)</td>
<td></td>
</tr>
<tr>
<td>HIST 331</td>
<td>Women in American History (3)</td>
<td></td>
</tr>
<tr>
<td>or HIST 321</td>
<td>History of the United States: African-American Emphasis (3)</td>
<td></td>
</tr>
<tr>
<td>or HIST 320</td>
<td>History of the United States: African-American Emphasis (3)</td>
<td></td>
</tr>
<tr>
<td>or HIST 314</td>
<td>Recent United States History (3)</td>
<td></td>
</tr>
<tr>
<td>HUM 332</td>
<td>American Humanities (3)</td>
<td></td>
</tr>
<tr>
<td>PHIL 350</td>
<td>Philosophy of Religion (3)</td>
<td></td>
</tr>
<tr>
<td>POLS 301</td>
<td>Introduction to Government: United States (3)</td>
<td></td>
</tr>
<tr>
<td>SOC 301</td>
<td>Social Problems (3)</td>
<td></td>
</tr>
<tr>
<td>or SOC 300</td>
<td>Introductory Sociology (3)</td>
<td></td>
</tr>
</tbody>
</table>

Total Units: 21

1No more than one course from each group (e.g., no more than one History course).

2No more than one course from each group (e.g., no more than one History course).

The Interdisciplinary Studies, Ethnic Studies Associate in Arts (A.A.) degree may be obtained by completion of the required program, plus general education requirements, plus sufficient electives to meet a 60-unit total. See CRC graduation requirements.

Career Information

Religious Service; Human Service Careers; Research; Teacher; Law; Administrator; Attorney; Historian; Foreign Service; Archivist; Social Worker; Public Relations Consultant; Employment Counselor; Probation Officer; Counselor Some career options may require more than two years of college study. Classes beyond the associate degree may be required to fulfill some career options or for preparation for transfer to a university program.

A.A. in Interdisciplinary Studies, Women's Studies

This CRC major is intended for students who wish a general background in the areas of humanities or social science at the community college level. Several options are offered in specific interest areas but all are intended to give the student an interdisciplinary foundation for further study or an overview of the area chosen. Students who also wish to transfer to a four-year college should plan their programs to meet general education and lower division major requirements. All students are encouraged to consult with a counselor.

This program is designed for both men and women, focusing on women and their
* Achievements
* Behavior, Feelings, and Experience
* Historical Significance
* Cultural and Social Contribution
* Roles in Society and the Political System
* Literary Significance, and
* Positions in the Business World

Highlights include:
* A valuable foundation for a variety of career or transfer opportunities
* Diversified and talented faculty
* Overview of theoretical and cultural principles

Note to Transfer Students:
If you are interested in transferring to a four-year college or university to pursue a bachelor's degree in this major, it is critical that you meet with a CRC counselor to select and plan the courses for your major. Schools vary widely in terms of the required preparation. The courses that CRC requires for an Associate's degree in this major may be different from the requirements needed for the Bachelor's degree.

Catalog Date: June 1, 2020

Degree Requirements
<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>A minimum of 9 units from the following:</td>
<td>9</td>
<td></td>
</tr>
<tr>
<td>PSYC 356</td>
<td>Human Sexuality (3)</td>
<td></td>
</tr>
<tr>
<td>or HIST 331</td>
<td>Women in American History (3)</td>
<td></td>
</tr>
<tr>
<td>or ENGLT 360</td>
<td>Women in Literature (3)</td>
<td></td>
</tr>
</tbody>
</table>

A minimum of 12 units from the following:  

| ANTH 334    | Native Peoples of North America (3)                 |       |
| BUS 300     | Introduction to Business (3)                        |       |
| ENGLT 360   | Women in Literature (3)                             |       |
| or ENGLT 330| African American Literature (3)                     |       |
| or ENGLT 310| English Literature I (3)                            |       |
| or ENGLT 321| American Literature II (3)                          |       |
| or ENGLT 311| English Literature II (3)                           |       |
| or ENGLT 340| World Literature I (3)                              |       |
| or ENGLT 341| World Literature II (3)                             |       |
| or ENGLT 320| American Literature I (3)                           |       |
| HIST 331    | Women in American History (3)                        |       |
| or HIST 321 | History of the United States: African-American Emphasis (3) |     |
| or HIST 320 | History of the United States: African-American Emphasis (3) |     |
| or HIST 314 | Recent United States History (3)                    |       |
| HUM 332     | American Humanities (3)                             |       |
| PHIL 338    | Contemporary Philosophy (3)                         |       |
| or PHIL 320 | Logic and Critical Reasoning (3)                    |       |
| or PHIL 310 | Introduction to Ethics (3)                          |       |
| POLS 301    | Introduction to Government: United States (3)       |       |
| PSYC 356    | Human Sexuality (3)                                 |       |
| SOC 321     | Race, Ethnicity and Inequality in the United States (3) |     |
| or SOC 301  | Social Problems (3)                                 |       |
| or SOC 300  | Introductory Sociology (3)                          |       |

Total Units: 21

1No more than one course from each group (e.g. no more than one English course).

The Interdisciplinary Studies, Women’s Studies Associate in Arts (A.A.) degree may be obtained by completion of the required program, plus general education requirements, plus sufficient electives to meet a 60-unit total. See CRC graduation requirements.

Career Information

Religious Service; Human Service Careers; Research; Teacher; Law/Administrator; Attorney; Historian; Foreign Service; Archivist; Social Worker; Public Relations Consultant; Employment Counselor; Probation Officer; Counselor Some career options may require more than two years of college study. Classes beyond the associate degree may be required to fulfill some career options or for preparation for transfer to a university program.
A.A. in Liberal Arts - Arts and Humanities

The Associate Degree in Liberal Arts - Arts and Humanities is designed for students who wish a broad knowledge of the arts and humanities. Students must satisfactorily complete 60 units of collegiate coursework with a "C" (2.0) grade point average in curriculum that the district accepts toward this degree.

Note: If you plan to transfer to a CSU, consider an Associates in Arts for Transfer degree such as the Art History, Art Design, History, Music, Spanish, Studio Arts or Theatre Arts AA-T rather than this degree. Please see a counselor for assistance with selecting the most appropriate transfer courses (i.e. 300 or higher numbered courses). If you plan to transfer to a UC campus or a private college or university, please see a counselor to determine if this degree is the most appropriate choice.

Catalog Date: June 1, 2020

Degree Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>A minimum of 18 units from the following:</td>
<td>18</td>
</tr>
<tr>
<td></td>
<td><strong>Courses must be chosen from at least two disciplines:</strong></td>
<td></td>
</tr>
<tr>
<td>ARCH 310</td>
<td>History of Architecture (3)</td>
<td></td>
</tr>
<tr>
<td>ARCH 332</td>
<td>Design Awareness (3)</td>
<td></td>
</tr>
<tr>
<td>ART 300</td>
<td>Drawing and Composition I (3)</td>
<td></td>
</tr>
<tr>
<td>ART 302</td>
<td>Drawing and Composition II (3)</td>
<td></td>
</tr>
<tr>
<td>ART 304</td>
<td>Figure Drawing I (3)</td>
<td></td>
</tr>
<tr>
<td>ART 305</td>
<td>Figure Drawing II (3)</td>
<td></td>
</tr>
<tr>
<td>ART 312</td>
<td>Portrait Drawing (3)</td>
<td></td>
</tr>
<tr>
<td>ART 320</td>
<td>Design: Fundamentals (3)</td>
<td></td>
</tr>
<tr>
<td>ART 323</td>
<td>Design: Color Theory (3)</td>
<td></td>
</tr>
<tr>
<td>ART 324</td>
<td>Collage and Assemblage (3)</td>
<td></td>
</tr>
<tr>
<td>ART 327</td>
<td>Painting I (3)</td>
<td></td>
</tr>
<tr>
<td>ART 328</td>
<td>Painting II (3)</td>
<td></td>
</tr>
<tr>
<td>ART 361</td>
<td>Printmaking: Survey (3)</td>
<td></td>
</tr>
<tr>
<td>ART 370</td>
<td>Three Dimensional Design (3)</td>
<td></td>
</tr>
<tr>
<td>ART 372</td>
<td>Sculpture (3)</td>
<td></td>
</tr>
<tr>
<td>ART 430</td>
<td>Art and Children (3)</td>
<td></td>
</tr>
<tr>
<td>ARTH 300</td>
<td>Introduction to Art (3)</td>
<td></td>
</tr>
<tr>
<td>ARTH 303</td>
<td>Art Survey: Ancient to 14th Century (3)</td>
<td></td>
</tr>
<tr>
<td>ARTH 309</td>
<td>Art Survey: Renaissance to 19th Century (3)</td>
<td></td>
</tr>
<tr>
<td>ARTH 311</td>
<td>Art Survey: Modern Art (3)</td>
<td></td>
</tr>
<tr>
<td>ARTH 312</td>
<td>Women in Art (3)</td>
<td></td>
</tr>
<tr>
<td>ARTH 324</td>
<td>Art of the Americas (3)</td>
<td></td>
</tr>
<tr>
<td>ARTH 325</td>
<td>Native American Art History (3)</td>
<td></td>
</tr>
<tr>
<td>ARTH 328</td>
<td>Survey of African Art (3)</td>
<td></td>
</tr>
<tr>
<td>ARTH 332</td>
<td>Asian Art (3)</td>
<td></td>
</tr>
<tr>
<td>ARTH 333</td>
<td>Introduction to Islamic Art (3)</td>
<td></td>
</tr>
<tr>
<td>DEAF 310</td>
<td>American Sign Language I (4)</td>
<td></td>
</tr>
<tr>
<td>COURSE CODE</td>
<td>COURSE TITLE</td>
<td>UNITS</td>
</tr>
<tr>
<td>-------------</td>
<td>------------------------------------------------------------------</td>
<td>-----------------</td>
</tr>
<tr>
<td>DEAF 314</td>
<td>American Sign Language III (4)</td>
<td></td>
</tr>
<tr>
<td>DEAF 316</td>
<td>American Sign Language IV (4)</td>
<td></td>
</tr>
<tr>
<td>ENGCW 400</td>
<td>Creative Writing (3)</td>
<td></td>
</tr>
<tr>
<td>ENGCW 410</td>
<td>Fiction Writing Workshop (3)</td>
<td></td>
</tr>
<tr>
<td>ENGCW 480</td>
<td>Honors Seminar: Creative Writing and Culture (3)</td>
<td></td>
</tr>
<tr>
<td>ENGLT 303</td>
<td>Introduction to the Short Story (3)</td>
<td></td>
</tr>
<tr>
<td>ENGLT 310</td>
<td>English Literature I (3)</td>
<td></td>
</tr>
<tr>
<td>ENGLT 311</td>
<td>English Literature II (3)</td>
<td></td>
</tr>
<tr>
<td>ENGLT 320</td>
<td>American Literature I (3)</td>
<td></td>
</tr>
<tr>
<td>ENGLT 321</td>
<td>American Literature II (3)</td>
<td></td>
</tr>
<tr>
<td>ENGLT 330</td>
<td>African American Literature (3)</td>
<td></td>
</tr>
<tr>
<td>ENGLT 336</td>
<td>Race and Ethnicity in Contemporary American Literature (3)</td>
<td></td>
</tr>
<tr>
<td>ENGLT 340</td>
<td>World Literature I (3)</td>
<td></td>
</tr>
<tr>
<td>ENGLT 341</td>
<td>World Literature II (3)</td>
<td></td>
</tr>
<tr>
<td>ENGLT 343</td>
<td>Contemporary Third World Literature (3)</td>
<td></td>
</tr>
<tr>
<td>ENGLT 345</td>
<td>Mythologies of the World (3)</td>
<td></td>
</tr>
<tr>
<td>ENGLT 360</td>
<td>Women in Literature (3)</td>
<td></td>
</tr>
<tr>
<td>ENGLT 370</td>
<td>Children and Literature (3)</td>
<td></td>
</tr>
<tr>
<td>ENGLT 402</td>
<td>Introduction to Shakespeare and Film (3)</td>
<td></td>
</tr>
<tr>
<td>ENGW 301</td>
<td>College Composition and Literature (3)</td>
<td></td>
</tr>
<tr>
<td>FMS 300</td>
<td>Introduction to Film Studies (3)</td>
<td></td>
</tr>
<tr>
<td>FMS 305</td>
<td>Film History (3)</td>
<td></td>
</tr>
<tr>
<td>FMS 320</td>
<td>Film Genre (3)</td>
<td></td>
</tr>
<tr>
<td>FMS 488</td>
<td>Honors Seminar: Introduction to Critical Theory (3)</td>
<td></td>
</tr>
<tr>
<td>HIST 364</td>
<td>Asian Civilization (3)</td>
<td></td>
</tr>
<tr>
<td>HIST 365</td>
<td>Asian Civilization (3)</td>
<td></td>
</tr>
<tr>
<td>HIST 380</td>
<td>History of the Middle East (3)</td>
<td></td>
</tr>
<tr>
<td>HONOR 350</td>
<td>Honors Seminar: Introduction to Critical Theory (3)</td>
<td></td>
</tr>
<tr>
<td>HUM 300</td>
<td>Classical Humanities (3)</td>
<td></td>
</tr>
<tr>
<td>HUM 301</td>
<td>Introduction to the Humanities (3)</td>
<td></td>
</tr>
<tr>
<td>HUM 310</td>
<td>Modern Humanities (3)</td>
<td></td>
</tr>
<tr>
<td>HUM 320</td>
<td>Asian Humanities (3)</td>
<td></td>
</tr>
<tr>
<td>HUM 324</td>
<td>Global Islam: Culture and Civilization (3)</td>
<td></td>
</tr>
<tr>
<td>HUM 331</td>
<td>Latin American Humanities (3)</td>
<td></td>
</tr>
<tr>
<td>HUM 332</td>
<td>American Humanities (3)</td>
<td></td>
</tr>
<tr>
<td>MUFHL 300</td>
<td>Introduction to Music (3)</td>
<td></td>
</tr>
<tr>
<td>MUFHL 308</td>
<td>Introduction to Music: Rock &amp; Roll (3)</td>
<td></td>
</tr>
<tr>
<td>COURSE CODE</td>
<td>COURSE TITLE</td>
<td>UNITS</td>
</tr>
<tr>
<td>-------------</td>
<td>-------------------------------------------------------------------------------</td>
<td>---------</td>
</tr>
<tr>
<td>MUFHL 310</td>
<td>Survey of Music History and Literature (Greek Antiquity to 1750)</td>
<td>(3)</td>
</tr>
<tr>
<td>MUFHL 311</td>
<td>Survey of Music History and Literature (1750 to the present)</td>
<td>(3)</td>
</tr>
<tr>
<td>MUFHL 315</td>
<td>Jazz History</td>
<td>(3)</td>
</tr>
<tr>
<td>MUFHL 321</td>
<td>Basic Musicianship</td>
<td>(3)</td>
</tr>
<tr>
<td>MUFHL 330</td>
<td>World Music</td>
<td>(3)</td>
</tr>
<tr>
<td>MUFHL 400</td>
<td>Music Theory and Musicianship I</td>
<td>(4)</td>
</tr>
<tr>
<td>MUIVI 310</td>
<td>Voice Class I</td>
<td>(2)</td>
</tr>
<tr>
<td>MUIVI 311</td>
<td>Voice Class II</td>
<td>(2)</td>
</tr>
<tr>
<td>MUIVI 340</td>
<td>Beginning Piano</td>
<td>(2)</td>
</tr>
<tr>
<td>MUIVI 341</td>
<td>Piano II</td>
<td>(2)</td>
</tr>
<tr>
<td>MUIVI 350</td>
<td>Intermediate Piano</td>
<td>(2)</td>
</tr>
<tr>
<td>MUIVI 351</td>
<td>Piano IV</td>
<td>(2)</td>
</tr>
<tr>
<td>MUIVI 370</td>
<td>Beginning Guitar</td>
<td>(2)</td>
</tr>
<tr>
<td>MUIVI 371</td>
<td>Intermediate Guitar</td>
<td>(2)</td>
</tr>
<tr>
<td>MUIVI 495</td>
<td>Independent Studies in Music Instrumental/Voice Instruction</td>
<td>(1 - 3)</td>
</tr>
<tr>
<td>MUSM 370</td>
<td>Music for Children</td>
<td>(3)</td>
</tr>
<tr>
<td>MUP 310</td>
<td>Orchestra</td>
<td>(2)</td>
</tr>
<tr>
<td>MUP 320</td>
<td>Jazz Band</td>
<td>(2)</td>
</tr>
<tr>
<td>MUP 350</td>
<td>Concert Choir I</td>
<td>(2)</td>
</tr>
<tr>
<td>MUP 357</td>
<td>College Chorus</td>
<td>(2)</td>
</tr>
<tr>
<td>MUP 360</td>
<td>Chamber Singers</td>
<td>(2)</td>
</tr>
<tr>
<td>PHIL 300</td>
<td>Introduction to Philosophy</td>
<td>(3)</td>
</tr>
<tr>
<td>PHIL 304</td>
<td>Introduction to Asian Philosophy</td>
<td>(3)</td>
</tr>
<tr>
<td>PHIL 310</td>
<td>Introduction to Ethics</td>
<td>(3)</td>
</tr>
<tr>
<td>PHIL 330</td>
<td>History of Classical Philosophy</td>
<td>(3)</td>
</tr>
<tr>
<td>PHIL 331</td>
<td>History of Modern Philosophy</td>
<td>(3)</td>
</tr>
<tr>
<td>PHIL 338</td>
<td>Contemporary Philosophy</td>
<td>(3)</td>
</tr>
<tr>
<td>PHIL 350</td>
<td>Philosophy of Religion</td>
<td>(3)</td>
</tr>
<tr>
<td>PHIL 352</td>
<td>Introduction to World Religions</td>
<td>(3)</td>
</tr>
<tr>
<td>PHIL 356</td>
<td>Introduction to the Bible</td>
<td>(3)</td>
</tr>
<tr>
<td>PHIL 360</td>
<td>Social/Political Philosophy</td>
<td>(3)</td>
</tr>
<tr>
<td>PHOTO 301</td>
<td>Beginning Photography</td>
<td>(3)</td>
</tr>
<tr>
<td>PHOTO 420</td>
<td>History of Photography</td>
<td>(3)</td>
</tr>
<tr>
<td>RTVF 305</td>
<td>Film History</td>
<td>(3)</td>
</tr>
<tr>
<td>RTVF 378</td>
<td>Acting for the Camera</td>
<td>(3)</td>
</tr>
<tr>
<td>SPAN 401</td>
<td>Elementary Spanish</td>
<td>(4)</td>
</tr>
</tbody>
</table>
### COURSE CODE | COURSE TITLE | UNITS
--- | --- | ---
SPAN 402 | Elementary Spanish (4) |  
SPAN 411 | Intermediate Spanish (4) |  
SPAN 412 | Intermediate Spanish (4) |  
SPAN 413 | Spanish for Native Speakers I (4) |  
SPAN 415 | Spanish for Native Speakers II (4) |  
SPAN 425 | Advanced Reading and Conversation (3) |  
SPAN 426 | Introduction to Mexican American Literature (3) |  
SPAN 427 | Introduction to Spanish American Literature (3) |  
TA 300 | Introduction to the Theatre (3) |  
TA 302 | History and Theory of the Theatre I (3) |  
TA 303 | History and Theory of the Theatre II (3) |  
TA 306 | Diversity in American Drama (1960 to Present) (3) |  
TA 350 | Theory and Techniques of Acting I (3) |  
TA 356 | Acting for the Camera I (3) |  
TA 401 | Children's Literature and Creative Drama (3) |  
VIET 401 | Elementary Vietnamese (4) |  
VIET 402 | Elementary Vietnamese (4) |  
VIET 411 | Intermediate Vietnamese (4) |  
VIET 412 | Intermediate Vietnamese (4) |  
**Total Units:** | **18** |

*The Liberal Arts - Arts and Humanities Associate in Arts (A.A.) degree may be obtained by completion of the required program, plus general education requirements, plus sufficient electives to meet a 60-unit total. See CRC graduation requirements.*

**Student Learning Outcomes**

Upon completion of this program, the student will be able to:

- Demonstrate an appreciation of artistic endeavors, cultural expressions, ideas and/or institutions through nonempirical, analytic, interpretive studies and critical thinking projects. (PSLO 1)

- Articulate the development of and relationships between different civilizations, cultural traditions, ideas and/or institutions through the application of non-empirical, analytical reasoning. (PSLO 2)

- Evaluate critically the analyses and interpretations by others (including significant historical or contemporary analyses and interpretations) of arts, ideas, skills (including language), and/or institutions. (PSLO 3)

- Express clearly her or his own analyses and interpretations of arts, ideas, skills (including language), and/or institutions, and will properly use the vocabulary appropriate to the field. (PSLO 4)

**A.A. in Liberal Arts - Communication and Writing**

The Associate Degree in Liberal Arts - Communication and Writing is designed for students who wish a broad knowledge of communication studies and writing. Students must satisfactorily complete 60 units of collegiate coursework with a “C” (2.0) grade point average in curriculum that the district accepts toward this degree.

Note: If you plan to transfer to a CSU, consider completing an Associates in Arts for Transfer degree such as the Communications Studies, English, or Journalism AA-T rather than this degree. Please see a counselor for assistance with selecting the most appropriate transfer courses (i.e. 300 or higher numbered courses). If you plan to transfer to a UC campus or a private college or university, please see a counselor to determine if this degree is the most appropriate choice.
Degree Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>A minimum of 18 units from the following:</td>
<td>18</td>
<td></td>
</tr>
<tr>
<td>Courses must be chosen from at least two disciplines:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>COMM 301</td>
<td>Introduction to Public Speaking (3)</td>
<td></td>
</tr>
<tr>
<td>COMM 311</td>
<td>Argumentation and Debate (3)</td>
<td></td>
</tr>
<tr>
<td>COMM 315</td>
<td>Persuasion (3)</td>
<td></td>
</tr>
<tr>
<td>COMM 331</td>
<td>Group Discussion (3)</td>
<td></td>
</tr>
<tr>
<td>COMM 361</td>
<td>The Communication Experience (3)</td>
<td></td>
</tr>
<tr>
<td>ENGWR 300</td>
<td>College Composition (3)</td>
<td></td>
</tr>
<tr>
<td>ENGWR 301</td>
<td>College Composition and Literature (3)</td>
<td></td>
</tr>
<tr>
<td>ENGWR 302</td>
<td>Advanced Composition and Critical Thinking (3)</td>
<td></td>
</tr>
<tr>
<td>ENGRD 310</td>
<td>Critical Reading as Critical Thinking (3)</td>
<td></td>
</tr>
<tr>
<td>HONOR 341</td>
<td>Honors Seminar: Persuasion within Social Issues (3)</td>
<td></td>
</tr>
<tr>
<td>PHIL 300</td>
<td>Introduction to Philosophy (3)</td>
<td></td>
</tr>
<tr>
<td>PHIL 320</td>
<td>Logic and Critical Reasoning (3)</td>
<td></td>
</tr>
<tr>
<td>PHIL 325</td>
<td>Symbolic Logic (3)</td>
<td></td>
</tr>
<tr>
<td>SOC 305</td>
<td>Critical Thinking in the Social Sciences (3)</td>
<td></td>
</tr>
<tr>
<td>Total Units:</td>
<td></td>
<td>18</td>
</tr>
</tbody>
</table>

The Liberal Arts - Communication and Writing Associate in Arts (A.A.) degree may be obtained by completion of the required program, plus general education requirements, plus sufficient electives to meet a 60-unit total. See CRC graduation requirements.

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- Conduct audience analysis to design an appropriate purpose, topic, style and speech structure within formal presentations. Express their ideas clearly in well-organized written messages. (PSLO 1)
- Construct an effective presentation to a specific topic by collecting relevant information and employing credible evidence with proper documentation. (PSLO 2)
- Determine and use appropriate communications technologies to convey information. (PSLO 3)
- Use correct and appropriate conventions of mechanics, usage, and style in written communication. (PSLO 4)

A.S. in Liberal Arts - Math and Science

The Associate Degree in Liberal Arts - Math and Science is designed for students who wish a broad knowledge of mathematics and the sciences. Students must satisfactorily complete 60 units of collegiate coursework with a “C” (2.0) grade point average in curriculum that the district accepts toward this degree.

Note: If you plan to transfer to the CSU after completing this degree, consider an Associates in Science for Transfer degree such as the Biology, Geography, Geology, Math, or Physics AS-T rather than this degree. Please see a counselor for assistance with selecting the most appropriate transfer courses (i.e. 300 or higher numbered courses). If you plan to transfer to a UC campus or a private college or university, please see a counselor to determine if this degree is the most appropriate choice.

Catalog Date: June 1, 2020
<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>A minimum of 18 units from the following:</td>
<td>18</td>
</tr>
</tbody>
</table>

Students must select 3 - 6 units in mathematics/statistics and 12 - 15 units in the remaining science disciplines.

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANTH 300</td>
<td>Biological Anthropology (3)</td>
<td></td>
</tr>
<tr>
<td>ANTH 301</td>
<td>Biological Anthropology Laboratory (1)</td>
<td></td>
</tr>
<tr>
<td>ASTR 300</td>
<td>Introduction to Astronomy (3)</td>
<td></td>
</tr>
<tr>
<td>ASTR 400</td>
<td>Astronomy Laboratory (1)</td>
<td></td>
</tr>
<tr>
<td>BIOL 300</td>
<td>The Foundations of Biology (3)</td>
<td></td>
</tr>
<tr>
<td>BIOL 307</td>
<td>Biology of Organisms (4)</td>
<td></td>
</tr>
<tr>
<td>BIOL 310</td>
<td>General Biology (4)</td>
<td></td>
</tr>
<tr>
<td>BIOL 342</td>
<td>The New Plagues: New and Ancient Infectious Diseases Threatening World Health (3)</td>
<td></td>
</tr>
<tr>
<td>BIOL 350</td>
<td>Environmental Biology (3)</td>
<td></td>
</tr>
<tr>
<td>BIOL 352</td>
<td>Conservation Biology (3)</td>
<td></td>
</tr>
<tr>
<td>BIOL 400</td>
<td>Principles of Biology (5)</td>
<td></td>
</tr>
<tr>
<td>BIOL 410</td>
<td>Principles of Botany (5)</td>
<td></td>
</tr>
<tr>
<td>BIOL 420</td>
<td>Principles of Zoology (5)</td>
<td></td>
</tr>
<tr>
<td>BIOL 430</td>
<td>Anatomy and Physiology (5)</td>
<td></td>
</tr>
<tr>
<td>BIOL 431</td>
<td>Anatomy and Physiology (5)</td>
<td></td>
</tr>
<tr>
<td>BIOL 440</td>
<td>General Microbiology (4)</td>
<td></td>
</tr>
<tr>
<td>BIOL 462</td>
<td>Genetics in Contemporary Human Society (3)</td>
<td></td>
</tr>
<tr>
<td>BIOL 485</td>
<td>Honors Seminar in Genetics (3)</td>
<td></td>
</tr>
<tr>
<td>or HONOR 385</td>
<td>Honors Seminar in Genetics (3)</td>
<td></td>
</tr>
<tr>
<td>CHEM 300</td>
<td>Beginning Chemistry (4)</td>
<td></td>
</tr>
<tr>
<td>CHEM 305</td>
<td>Introduction to Chemistry (5)</td>
<td></td>
</tr>
<tr>
<td>CHEM 306</td>
<td>Introduction to Organic and Biological Chemistry (5)</td>
<td></td>
</tr>
<tr>
<td>CHEM 309</td>
<td>Integrated General, Organic, and Biological Chemistry (5)</td>
<td></td>
</tr>
<tr>
<td>CHEM 321</td>
<td>Environmental Chemistry (3)</td>
<td></td>
</tr>
<tr>
<td>CHEM 322</td>
<td>Environmental Chemistry Laboratory (1)</td>
<td></td>
</tr>
<tr>
<td>CHEM 400</td>
<td>General Chemistry I (5)</td>
<td></td>
</tr>
<tr>
<td>CHEM 401</td>
<td>General Chemistry II (5)</td>
<td></td>
</tr>
<tr>
<td>CHEM 420</td>
<td>Organic Chemistry I (5)</td>
<td></td>
</tr>
<tr>
<td>CHEM 421</td>
<td>Organic Chemistry II (5)</td>
<td></td>
</tr>
<tr>
<td>GEOG 300</td>
<td>Physical Geography: Exploring Earth's Environmental Systems (3)</td>
<td></td>
</tr>
<tr>
<td>GEOG 301</td>
<td>Physical Geography Laboratory (1)</td>
<td></td>
</tr>
<tr>
<td>GEOG 305</td>
<td>Global Climate Change (3)</td>
<td></td>
</tr>
<tr>
<td>GEOG 306</td>
<td>Weather and Climate (3)</td>
<td></td>
</tr>
<tr>
<td>COURSE CODE</td>
<td>COURSE TITLE</td>
<td>UNITS</td>
</tr>
<tr>
<td>------------</td>
<td>----------------------------------------------</td>
<td>-------</td>
</tr>
<tr>
<td>GEOL 300</td>
<td>Physical Geology (3)</td>
<td></td>
</tr>
<tr>
<td>GEOL 301</td>
<td>Physical Geology Laboratory (1)</td>
<td></td>
</tr>
<tr>
<td>GEOL 305</td>
<td>Earth Science (3)</td>
<td></td>
</tr>
<tr>
<td>GEOL 310</td>
<td>Historical Geology (3)</td>
<td></td>
</tr>
<tr>
<td>GEOL 311</td>
<td>Historical Geology Laboratory (1)</td>
<td></td>
</tr>
<tr>
<td>GEOL 330</td>
<td>Introduction to Oceanography (3)</td>
<td></td>
</tr>
<tr>
<td>MATH 300</td>
<td>Introduction to Mathematical Ideas (3)</td>
<td></td>
</tr>
<tr>
<td>MATH 310</td>
<td>Mathematical Discovery (3)</td>
<td></td>
</tr>
<tr>
<td>MATH 335</td>
<td>Trigonometry with College Algebra (5)</td>
<td></td>
</tr>
<tr>
<td>MATH 341</td>
<td>Calculus for Business and Economics (4)</td>
<td></td>
</tr>
<tr>
<td>MATH 343</td>
<td>Modern Business Mathematics (4)</td>
<td></td>
</tr>
<tr>
<td>MATH 350</td>
<td>Calculus for the Life and Social Sciences I (3)</td>
<td></td>
</tr>
<tr>
<td>MATH 351</td>
<td>Calculus for the Life and Social Sciences II (3)</td>
<td></td>
</tr>
<tr>
<td>MATH 355</td>
<td>Calculus for Biology and Medicine I (4)</td>
<td></td>
</tr>
<tr>
<td>MATH 356</td>
<td>Calculus for Biology and Medicine II (4)</td>
<td></td>
</tr>
<tr>
<td>MATH 370</td>
<td>Pre-Calculus Mathematics (5)</td>
<td></td>
</tr>
<tr>
<td>MATH 400</td>
<td>Calculus I (5)</td>
<td></td>
</tr>
<tr>
<td>MATH 401</td>
<td>Calculus II (5)</td>
<td></td>
</tr>
<tr>
<td>MATH 402</td>
<td>Calculus III (5)</td>
<td></td>
</tr>
<tr>
<td>MATH 410</td>
<td>Introduction to Linear Algebra (3)</td>
<td></td>
</tr>
<tr>
<td>MATH 420</td>
<td>Differential Equations (4)</td>
<td></td>
</tr>
<tr>
<td>PHYS 310</td>
<td>Conceptual Physics (3)</td>
<td></td>
</tr>
<tr>
<td>PHYS 350</td>
<td>General Physics (4)</td>
<td></td>
</tr>
<tr>
<td>PHYS 360</td>
<td>General Physics (4)</td>
<td></td>
</tr>
<tr>
<td>PHYS 370</td>
<td>Introductory Physics - Mechanics and Thermodynamics (5)</td>
<td></td>
</tr>
<tr>
<td>PHYS 380</td>
<td>Introductory Physics - Electricity and Magnetism, Light and Modern Physics (5)</td>
<td></td>
</tr>
<tr>
<td>PHYS 411</td>
<td>Mechanics of Solids and Fluids (4)</td>
<td></td>
</tr>
<tr>
<td>PHYS 421</td>
<td>Electricity and Magnetism (4)</td>
<td></td>
</tr>
<tr>
<td>PHYS 431</td>
<td>Heat, Waves, Light and Modern Physics (4)</td>
<td></td>
</tr>
<tr>
<td>PSYC 312</td>
<td>Biological Psychology (4)</td>
<td></td>
</tr>
<tr>
<td>STAT 300</td>
<td>Introduction to Probability and Statistics (4)</td>
<td></td>
</tr>
<tr>
<td>or PSYC 330</td>
<td>Introductory Statistics for the Behavioral Sciences (3)</td>
<td></td>
</tr>
<tr>
<td>or ECON 310</td>
<td>Statistics for Business and Economics (3)</td>
<td></td>
</tr>
</tbody>
</table>

Total Units: 18

The Liberal Arts - Math and Science Associate in Science (A.S.) degree may be obtained by completion of the required program, plus general education requirements, plus sufficient electives to meet a 60-unit total. See CRC graduation requirements.

Student Learning Outcomes
Upon completion of this program, the student will be able to:

- Explain the core perspectives of the scientific method and apply it to at least one scientific discipline. (PSLO 1)
- Solve introductory problems of a conceptual and/or quantitative nature in at least one scientific discipline. (PSLO 2)
- Apply accurately the basic vocabulary and concepts of at least one scientific discipline verbally and in writing. (PSLO 3)
- Recognize the use and misuse of scientific concepts in society including politics and the media. (PSLO 4)
- Use appropriate quantitative skills at college level to solve problems applicable to occupational and personal activities. (PSLO 5)

A.A. in Liberal Arts - Social and Behavioral Sciences

The Associate Degree in Liberal Arts - Social and Behavioral Sciences is designed for students who wish a broad knowledge of social and behavioral sciences. Students must satisfactorily complete 60 units of collegiate coursework with a "C" (2.0) grade point average in curriculum that the district accepts toward this degree.

Note: If you plan to transfer to a CSU after completing this Liberal Arts - Social and Behavioral Sciences degree, please consider an Associate in Arts for Transfer degree such as the Anthropology, Communication Studies, Early Childhood Education, Geography, History, Psychology or Sociology AA-T rather than this degree. See a counselor for assistance with selecting the most appropriate transfer courses (i.e. 300 or higher numbered courses). If you plan to transfer to a UC campus or a private college or university, please see a counselor to determine if this degree is the most appropriate choice.

Catalog Date: June 1, 2020

Degree Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>A minimum of 18 units from the following:</td>
<td></td>
<td>18</td>
</tr>
</tbody>
</table>

**Courses must be chosen from at least two disciplines:**

- AGB 321 Agriculture Economics (3)
- ANTH 310 Cultural Anthropology (3)
- ANTH 316 Global Forces in Culture Change (3)
- ANTH 323 Introduction to Archaeology (3)
- ANTH 324 World Prehistory (3)
- ANTH 331 The Anthropology of Religion (3)
- ANTH 332 Native Peoples of California (3)
- ANTH 334 Native Peoples of North America (3)
- ANTH 341 Introduction to Linguistics (3)
- ANTH 374 Birth to Death: The Anthropology of Primate Culture and Behavior (3)
- BUS 330 Managing Diversity in the Workplace (3)
- BUS 345 Law and Society (3)
- COMM 325 Intercultural Communication (3)
- COMM 341 Organizational Communication (3)
- COMM 363 Introduction to Communication Theory (3)
- COMM 480 Honors Seminar: Political Campaign Communication (3)
- ECE 312 Child Development (3)
- ECE 314 The Child, the Family and the Community (3)
<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECON 302</td>
<td>Principles of Macroeconomics (3)</td>
<td></td>
</tr>
<tr>
<td>ECON 304</td>
<td>Principles of Microeconomics (3)</td>
<td></td>
</tr>
<tr>
<td>ECON 306</td>
<td>Environmental Economics (3)</td>
<td></td>
</tr>
<tr>
<td>ETHNS 300</td>
<td>Introduction to Ethnic Studies (3)</td>
<td></td>
</tr>
<tr>
<td>ETHNS 320</td>
<td>The African American Experience (3)</td>
<td></td>
</tr>
<tr>
<td>ETHNS 330</td>
<td>The Asian American Experience in America (3)</td>
<td></td>
</tr>
<tr>
<td>ETHNS 340</td>
<td>Chicanos/Mexican Americans in the U.S. (3)</td>
<td></td>
</tr>
<tr>
<td>ETHNS 344</td>
<td>The Latino Experience in America (3)</td>
<td></td>
</tr>
<tr>
<td>GEOG 302</td>
<td>Environmental Studies &amp; Sustainability (3)</td>
<td></td>
</tr>
<tr>
<td>GEOG 310</td>
<td>Human Geography: Exploring Earth's Cultural Landscapes (3)</td>
<td></td>
</tr>
<tr>
<td>GEOG 322</td>
<td>Geography of California (3)</td>
<td></td>
</tr>
<tr>
<td>HIST 301</td>
<td>History of Western Civilization (to 1660) (3)</td>
<td></td>
</tr>
<tr>
<td>HIST 302</td>
<td>History of Western Civilization (3)</td>
<td></td>
</tr>
<tr>
<td>HIST 307</td>
<td>History of World Civilizations to 1500 (3)</td>
<td></td>
</tr>
<tr>
<td>HIST 308</td>
<td>History of World Civilizations, 1500 to Present (3)</td>
<td></td>
</tr>
<tr>
<td>HIST 310</td>
<td>History of the United States (3)</td>
<td></td>
</tr>
<tr>
<td>HIST 311</td>
<td>History of the United States (3)</td>
<td></td>
</tr>
<tr>
<td>HIST 314</td>
<td>Recent United States History (3)</td>
<td></td>
</tr>
<tr>
<td>HIST 320</td>
<td>History of the United States: African-American Emphasis (3)</td>
<td></td>
</tr>
<tr>
<td>HIST 331</td>
<td>Women in American History (3)</td>
<td></td>
</tr>
<tr>
<td>HIST 344</td>
<td>Survey of California History: A Multicultural Perspective (3)</td>
<td></td>
</tr>
<tr>
<td>HIST 360</td>
<td>History of African Civilizations (3)</td>
<td></td>
</tr>
<tr>
<td>HIST 364</td>
<td>Asian Civilization (3)</td>
<td></td>
</tr>
<tr>
<td>HIST 365</td>
<td>Asian Civilization (3)</td>
<td></td>
</tr>
<tr>
<td>HIST 370</td>
<td>History of the Americas through the 19th Century Wars of Independence (3)</td>
<td></td>
</tr>
<tr>
<td>HIST 371</td>
<td>History of the Americas from the 19th Century Wars of Independence to the Present (3)</td>
<td></td>
</tr>
<tr>
<td>HIST 373</td>
<td>History of Mexico (3)</td>
<td></td>
</tr>
<tr>
<td>HIST 380</td>
<td>History of the Middle East (3)</td>
<td></td>
</tr>
<tr>
<td>HONOR 340</td>
<td>Honors Seminar: Political Campaign Communication (3)</td>
<td></td>
</tr>
<tr>
<td>JOUR 310</td>
<td>Mass Media and Society (3)</td>
<td></td>
</tr>
<tr>
<td>or RTVF 300</td>
<td>Mass Media and Society (3)</td>
<td></td>
</tr>
<tr>
<td>JOUR 320</td>
<td>Race and Gender in the Media (3)</td>
<td></td>
</tr>
<tr>
<td>PHIL 360</td>
<td>Social/Political Philosophy (3)</td>
<td></td>
</tr>
<tr>
<td>POLS 301</td>
<td>Introduction to Government: United States (3)</td>
<td></td>
</tr>
<tr>
<td>POLS 302</td>
<td>Comparative Politics (3)</td>
<td></td>
</tr>
<tr>
<td>COURSE CODE</td>
<td>COURSE TITLE</td>
<td>UNITS</td>
</tr>
<tr>
<td>-------------</td>
<td>---------------------------------------------------------------------</td>
<td>-------</td>
</tr>
<tr>
<td>POLS 304</td>
<td>Introduction to Government: California</td>
<td>3</td>
</tr>
<tr>
<td>POLS 310</td>
<td>Introduction to International Relations</td>
<td>3</td>
</tr>
<tr>
<td>POLS 311</td>
<td>International Political Economy</td>
<td>3</td>
</tr>
<tr>
<td>POLS 312</td>
<td>Politics of the Middle East</td>
<td>3</td>
</tr>
<tr>
<td>POLS 313</td>
<td>Latin America</td>
<td>3</td>
</tr>
<tr>
<td>POLS 314</td>
<td>Modern Europe and the Unification Process</td>
<td>3</td>
</tr>
<tr>
<td>POLS 315</td>
<td>Pacific Rim</td>
<td>3</td>
</tr>
<tr>
<td>POLS 317</td>
<td>Global Studies: Africa</td>
<td>3</td>
</tr>
<tr>
<td>POLS 318</td>
<td>Global Studies: Central Asia</td>
<td>3</td>
</tr>
<tr>
<td>POLS 319</td>
<td>Global Studies: Southeast Asia</td>
<td>3</td>
</tr>
<tr>
<td>POLS 320</td>
<td>Introduction to Political Theory</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 300</td>
<td>General Principles</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 312</td>
<td>Biological Psychology</td>
<td>4</td>
</tr>
<tr>
<td>PSYC 320</td>
<td>Social Psychology</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 335</td>
<td>Research Methods in Psychology</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 340</td>
<td>Abnormal Behavior</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 356</td>
<td>Human Sexuality</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 368</td>
<td>Cross Cultural Psychology</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 371</td>
<td>Life Span Developmental Psychology</td>
<td>3</td>
</tr>
<tr>
<td>SOC 300</td>
<td>Introductory Sociology</td>
<td>3</td>
</tr>
<tr>
<td>SOC 301</td>
<td>Social Problems</td>
<td>3</td>
</tr>
<tr>
<td>SOC 302</td>
<td>Introduction to Social Research Methods</td>
<td>3</td>
</tr>
<tr>
<td>SOC 305</td>
<td>Critical Thinking in the Social Sciences</td>
<td>3</td>
</tr>
<tr>
<td>SOC 321</td>
<td>Race, Ethnicity and Inequality in the United States</td>
<td>3</td>
</tr>
<tr>
<td>SOC 341</td>
<td>Sex and Gender in the U.S.</td>
<td>3</td>
</tr>
<tr>
<td>TA 306</td>
<td>Diversity in American Drama (1960 to Present)</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Total Units:</strong></td>
<td><strong>18</strong></td>
</tr>
</tbody>
</table>

The Liberal Arts - Social and Behavioral Sciences Associate in Arts (A.A.) degree may be obtained by completion of the required program, plus general education requirements, plus sufficient electives to meet a 60-unit total. See CRC graduation requirements.

**Student Learning Outcomes**

Upon completion of this program, the student will be able to:

- Apply accurately the basic vocabulary and concepts of at least one social or behavioral science discipline verbally and in writing. (PSLO 1)
- Examine the possible causes and suggest solutions to introductory problems of a conceptual nature using the methods of at least one social or behavioral scientific discipline. (PSLO 2)
- Recognize the use and misuse of social and behavioral science concepts in society including politics and the media. (PSLO 3)
- Describe both verbally and in writing the role of diverse ethnic, religious and social groups in American political, economic and social development. (PSLO 4)
**Interdisciplinary Studies (INDIS)**

**INDIS 310 Mathematics, Computer Information Science, Engineering and Science Achievement**

<table>
<thead>
<tr>
<th>Units:</th>
<th>0.5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hours:</td>
<td>9 hours LEC</td>
</tr>
<tr>
<td>Prerequisite:</td>
<td>None.</td>
</tr>
<tr>
<td>Transferable:</td>
<td>CSU</td>
</tr>
<tr>
<td>Catalog Date:</td>
<td>June 1, 2020</td>
</tr>
</tbody>
</table>

This course introduces the student to MESA and to the skills needed for academic success in mathematics, computer information science, engineering, and science. The course covers college resources and transfer processes as they relate to the study of math and science. The course is intended for students who will transfer to universities in a calculus-based major (biology, computer science, chemistry, engineering, mathematics, physics, etc.). This is the first 1/2 unit of a 1 unit combination of courses that will provide academic and career support to MESA students and other students in math-based majors who wish to develop study skills specific to those disciplines. (INDIS 311 or 312 complete the combination.) This course is graded on a Pass/No-Pass basis only.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- effectively communicate the campus and MESA resources pertinent to the MESA transfer student. (SLO 1)
- describe the basic elements of the MESA/CCCP program.
- describe the basic elements of counseling, internships, the transition center, and financial aid.
- describe the university transfer process for STEM (Science Technology Engineering Mathematics) majors. (SLO 2)
- discuss the structure and culture of four-year college math, CIS, engineering, and science programs.
- outline the logistics involved in completing Associates and Bachelor degrees in math, CIS, engineering, and science.

**INDIS 311 Academic Skills for a Career in Engineering, Computer Information Science, Mathematics, Physics and Related Disciplines**

<table>
<thead>
<tr>
<th>Units:</th>
<th>0.5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hours:</td>
<td>9 hours LEC</td>
</tr>
<tr>
<td>Prerequisite:</td>
<td>None.</td>
</tr>
<tr>
<td>Advisory:</td>
<td>INDIS 310</td>
</tr>
<tr>
<td>Transferable:</td>
<td>CSU</td>
</tr>
<tr>
<td>Catalog Date:</td>
<td>June 1, 2020</td>
</tr>
</tbody>
</table>

This course introduces the MESA student to academic skills and career exploration needed for advanced study toward a career in Mathematics, Engineering, Computer Information Science, Architecture, and Physics. This course will provide an overview of careers in engineering, math, computer information science, architecture, and physics, including the education, type of work conducted by professionals, and employment opportunities in these fields. The course is the second 1/2 unit of a 1 unit package of courses (see INDIS 310) that will provide academic and career support to MESA students. This course is graded on a pass/no-pass basis only.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- understand educational and career opportunities in the fields of engineering, mathematics, Computer Information Science (CIS), architecture, and physics. (SLO 1)
- describe the education needed for careers in engineering, mathematics, CIS, architecture, and physics.
- describe the work conducted by professionals in engineering, mathematics, CIS, architecture, and physics.
- summarize employment opportunities in engineering, mathematics, CIS, architecture, and physics.
INDIS 312 Academic Skills for a Career in Chemistry, Biology and Related Disciplines

This course introduces the MESA student to academic skills and career exploration needed for advanced study toward a career in Biology, Chemistry, and related fields - including dentistry, medicine, pharmacy, and veterinary medicine. This course will provide an overview of careers in Biology, Chemistry, and related fields, including the education, type of work conducted by professionals, and employment opportunities. The course is the second 1/2 unit of a 1 unit package of courses (see INDIS 310) that will provide academic and career support to MESA students. This course is graded on a pass/no-pass basis only.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- understand educational and career opportunities in biology, chemistry, and related fields. (SLO 1)
- describe the education needed for careers in biology, chemistry, and related fields.
- describe the work conducted by professionals in biology, chemistry, and related fields.
- summarize employment opportunities in biology, chemistry, and related fields.

INDIS 313 Freshman Seminar

This course will assist new college students in achieving academic success. Topics covered will include discipline-specific academic language and culture, the value and demands of a college education, problem solving strategies, the use of technology in education, academic integrity, campus resources and services, and life during and after college. The course will introduce students to one or more academic disciplines or areas of study, and discuss the academic and professional expectations and experiences of those disciplines.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO #1 - Navigate college processes and access resources
- understand the academic language of a community college
- understand the roles and functions of various campus resources and services including tutoring options
- SLO #2 - Demonstrate an awareness of the factors and skills needed to promote college success
- identify their own strengths and barriers as related to college success
- develop strategies to promote their own success in college
- SLO #3 - Demonstrate an understanding of the appropriate use of technology and active learning
- SLO #4 - Demonstrate an understanding of academic and/or career options available upon completion of community college in a specific discipline or broader area of study
- SLO #5 - Apply appropriately the basic language and practices of a specific academic discipline or broader area of study.
- SLO #6 – Examine their own individual behavior and choices as related to college and career and the potential effects on their physiological, psychological and social development and well-being.
INDIS 350 Life and Culture in Study Abroad

This course is designed to allow students to acquire a level of global competence while enrolled in the Los Rios Study Abroad program. Global competence is a continuing process of acquiring specific economic, historical, and geo-political knowledge which support the intercultural communication skills and authentic lived experiences that allow a person to function in another culture, and result in attitudes of cultural appreciation and interdependence. While participating in a specific Study Abroad program the student will have opportunities to study and generally survey the host country's historical, cultural, and geopolitical influences, as well as the societal structures to develop an understanding and appreciation of the host culture as different from U.S. American culture.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- Identify aspects of social, physical, and/or emotional well-being for the community while considering present and future conditions in society [SLO #1].
- Incorporate specific cultural, geopolitical, economic, and social knowledge into academic and personal contexts for an understanding of global competence.
- Analyze personal beliefs, values and attitudes about the host culture that the student had prior to an intercultural experience and aspects of ethnocentric behavior that can occur within intercultural communication and relations.
- Demonstrate an understanding of concepts of physical and emotional wellness to make wise lifestyle choices and will develop these skills and competencies to understand themselves as whole persons (integral to their environment) [SLO #2].
- Identify, analyze, articulate and describe the affects of intercultural experiences upon physical and emotional wellness while immersed in a country different than one's native country.
- Appreciate visual, historical and experiential cultural products of cultures different from the student's own.
- Identify and explain aspects of culture shock and techniques to cope and reduce its affects on physical and emotional wellness.
- Describe the value of international travel as a part of lifelong learning and personal wellness.
- Participate in the larger community beyond campus in a positive manner demonstrating an understanding of personal responsibility in the larger context [SLO #3; College-wide SLO].
- Undertake thoughtful consideration of divergent points of view and utilize multiple perspectives in considering information.
- Develop a foundation for cultural pluralism, a rejection of previous personal prejudices, and knowledge of and comfort with others unlike one's self.
Journalism | Cosumnes River College

The Journalism program is designed to train students in the writing, reporting and critical thinking skills required for jobs in the news media or for transfer to a journalism program at a four-year institution.

Dean

 (916) 691-7170

 BedforB@crc.losrios.edu (mailto:BedforB@crc.losrios.edu)

Associate Degrees for Transfer

A.A.-T. in Journalism

The Journalism AA-T degree offers students the opportunity to take courses in media theories, news writing and reporting, and writing for publication, which readies them for the courses that offer hands-on experience at the award-winning, student-produced publications: The Connection, a biweekly print newspaper, and www.thecrcconnection.com, the daily online news outlet.

The Journalism AA-T degree is for students who have a goal of transferring to the California State University to attain a Bachelor of Arts or Science in Journalism for the purpose of becoming journalism or communications professionals. Some students pursuing this degree may plan to minor in journalism at a CSU. Lower-division requirements for the major and minor in Journalism may be completed through the Journalism AA-T degree.

The Journalism AA-T degree may be obtained by completing a total of 60 transferable semester units with a minimum 2.0 GPA, to include either the California State University General Education Breadth pattern or the Intersegmental General Education Transfer Curriculum; students must also earn a grade of C or better in all the courses for the major as described in the Required Program. Upon successful completion of the degree requirements, students will be guaranteed admission to the CSU system with junior status and will not have to repeat lower division coursework. Students are encouraged to meet with a counselor to develop their educational plans as degree options and general education requirements vary for each university.

Catalog Data: June 1, 2020

Degree Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>CORE COURSES:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>JOUR 310</td>
<td>Mass Media and Society (3)</td>
<td>3</td>
</tr>
<tr>
<td>or RTVF 300</td>
<td>Mass Media and Society (3)</td>
<td>3</td>
</tr>
<tr>
<td>JOUR 300</td>
<td>Newswriting and Reporting</td>
<td>3</td>
</tr>
<tr>
<td>JOUR 410</td>
<td>College Media Production I</td>
<td>3</td>
</tr>
</tbody>
</table>

ELECTIVE LIST A - at least 1 course from the following:

A minimum of 3 units from the following: 3

| JOUR 351    | Public Relations Writing and Media Techniques (3)   |       |
| JOUR 411    | College Media Production II (3)                     |       |

ELECTIVE LIST B - at least 2 courses from the following:

A minimum of 6 units from the following: 6
<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>JOUR 320</td>
<td>Race and Gender in the Media (3)</td>
<td></td>
</tr>
<tr>
<td>COMM 311</td>
<td>Argumentation and Debate (3)</td>
<td></td>
</tr>
<tr>
<td>COMM 363</td>
<td>Introduction to Communication Theory (3)</td>
<td></td>
</tr>
<tr>
<td>ECON 304</td>
<td>Principles of Microeconomics (3)</td>
<td></td>
</tr>
<tr>
<td>or ECON 302</td>
<td>Principles of Macroeconomics (3)</td>
<td></td>
</tr>
<tr>
<td>ENGWR 302</td>
<td>Advanced Composition and Critical Thinking (3)</td>
<td></td>
</tr>
<tr>
<td>PHOTO 302</td>
<td>Beginning Digital Photography (3)</td>
<td></td>
</tr>
<tr>
<td>POLS 301</td>
<td>Introduction to Government: United States (3)</td>
<td></td>
</tr>
<tr>
<td>POLS 302</td>
<td>Comparative Politics (3)</td>
<td></td>
</tr>
<tr>
<td>STAT 300</td>
<td>Introduction to Probability and Statistics (4)</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Total Units:</strong> 18</td>
<td></td>
</tr>
</tbody>
</table>

The Associate in Arts in Journalism for Transfer (AA-T) degree may be obtained by completion of 60 transferable, semester units with a minimum 2.0 GPA, including (a) the major or area of emphasis described in the Required Program, and (b) either the Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education-Breadth Requirements.

**Student Learning Outcomes**

Upon completion of this program, the student will be able to:

- Write clear and concise stories that adhere to journalistic conventions.
- Conduct research and evaluate information using appropriate methods.
- Demonstrate an understanding of basic news and feature writing in print, broadcast, and on-line media.
- Evaluate their own work and that of others for accuracy, fairness, appropriate style, and grammatical correctness.
- Produce news and feature articles, photographs, and/or multimedia packages for publication in a newspaper or on-line publication.
- Understand and apply the principles of the First Amendment and other laws appropriate to professional practice.
- Apply ethical principles in pursuit of truth, accuracy, fairness, and diversity.
- Identify and explain the processes, elements, history, theory, and effects of modern mass media in society.

**Career Information**

The AA-T degree in Journalism can provide students with the foundational knowledge necessary for transfer to a 4-year Bachelor of Arts (BA) degree program. Career opportunities for students who have earned BS or BA degrees in Journalism include but are not limited to: news reporter, news editor, broadcast news writer, broadcast news producer, online news editor, online news producer, advertising copy writer, public relations representative. Some careers may require additional training. NOTE TO TRANSFER STUDENTS: The Associate Degree for Transfer program is designed for students who plan to transfer to a campus of the California State University (CSU). Other than the required core, the courses you choose to complete this degree will depend to some extent on the selected CSU for transfer. In addition, some CSU-GE Breadth or IGETC requirements can also be completed using courses required for this associate degree for transfer major (known as “double-counting”). Meeting with a counselor to determine the most appropriate course choices will facilitate efficient completion of your transfer requirements. For students wishing to transfer to other universities (UC System, private, or out-of-state), the Associate Degree for Transfer may not provide adequate preparation for upper-division transfer admissions; it is critical that you meet with a CRC counselor to select and plan the courses for the major, as programs vary widely in terms of the required preparation.

**Associate Degrees**

**A.A. in Journalism**

The Journalism program is designed to train students in the writing, reporting and critical thinking skills required for jobs in the news media or for transfer to a journalism program at a four-year institution.
Highlights include:
* Hands-on experience publishing the college's award-winning newspaper, The Connection. The newspaper showcases students' work in writing, photography, editing, graphic illustration and publication design
* Hands-on experience producing the newspaper's award-winning website. The website allows students to publish breaking news, showcase photo galleries, and post audio and video clips to accompany stories.
* Instruction and practice in desktop publishing, digital photography and graphics applications in the department's Macintosh laboratory or in the campus PC computer laboratory
* Opportunities to attend state journalism conferences, compete for awards in writing, photography, editing and graphic art, and qualify for scholarships
* Opportunities for internships at newspapers, magazines, websites, broadcast television stations, and in public relations firms

Note to Transfer Students:
If you are interested in transferring to a four-year college or university to pursue a bachelor's degree in this major, it is critical that you meet with a CRC counselor to select and plan the courses for your major. Schools vary widely in terms of the required preparation. The courses that CRC requires for an Associate's degree in this major may be different from the requirements needed for the Bachelor's degree.

Catalog Date: June 1, 2020

Degree Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>JOUR 310</td>
<td>Mass Media and Society (3)</td>
<td>3</td>
</tr>
<tr>
<td>JOUR 300</td>
<td>Newswriting and Reporting</td>
<td>3</td>
</tr>
<tr>
<td>JOUR 404</td>
<td>Editing and Production</td>
<td>3</td>
</tr>
<tr>
<td>JOUR 410</td>
<td>College Media Production I</td>
<td>3</td>
</tr>
<tr>
<td>PHOTO 301</td>
<td>Beginning Photography (3)</td>
<td>3</td>
</tr>
<tr>
<td>or PHOTO 302</td>
<td>Beginning Digital Photography (3)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>A minimum of 9 units from the following:</td>
<td></td>
</tr>
<tr>
<td>CISC 305</td>
<td>Introduction to the Internet (1)</td>
<td>1</td>
</tr>
<tr>
<td>CISC 306</td>
<td>Introduction to Web Page Creation (1)</td>
<td>1</td>
</tr>
<tr>
<td>JOUR 330</td>
<td>Computer Familiarization (2)</td>
<td>2</td>
</tr>
<tr>
<td>or CISC 302</td>
<td>Computer Familiarization (2)</td>
<td>2</td>
</tr>
<tr>
<td>JOUR 320</td>
<td>Race and Gender in the Media (3)</td>
<td>3</td>
</tr>
<tr>
<td>JOUR 335</td>
<td>Introduction to Desktop Publishing (2)</td>
<td>2</td>
</tr>
<tr>
<td>JOUR 336</td>
<td>Intermediate Desktop Publishing (2)</td>
<td>2</td>
</tr>
<tr>
<td>JOUR 340</td>
<td>Writing for Publication (3)</td>
<td>3</td>
</tr>
<tr>
<td>PHOTO 400</td>
<td>Digital Imaging (3)</td>
<td>3</td>
</tr>
<tr>
<td>JOUR 301</td>
<td>Advanced Newswriting and Reporting (3)</td>
<td>3</td>
</tr>
<tr>
<td>Total Units:</td>
<td></td>
<td>24</td>
</tr>
</tbody>
</table>

The Journalism Associate in Arts (A.A.) degree may be obtained by completion of the required program, plus general education requirements, plus sufficient electives to meet a 60-unit total. See CRC graduation requirements.

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- PSLO 1: Write clear and concise stories that adhere to journalistic conventions.
- PSLO 2: Conduct research and evaluate information using appropriate methods.
- PSLO 3: Demonstrate an understanding of basic news and feature writing in print, broadcast, and on-line media.
- PSLO 4: Evaluate their own work and that of others for accuracy, fairness, appropriate style, and grammatical correctness.
Journalism (JOUR)

JOUR 300 Newswriting and Reporting

Introductory course in basic news writing and reporting. Course concentrates on fundamental writing techniques for mass media. Course also emphasizes the legal and ethical responsibilities of the news media with critical analysis of current news reporting practices.

Upon completion of this course, the student will be able to:

- **SLO #1**: Apply the basic skills of news writing and reporting in clear, concise stories.
- **SLO #2**: Write stories in the inverted pyramid format.
- **SLO #3**: Apply knowledge of grammar and Associated Press Style to create mass media products that conform to journalistic conventions.
- **SLO #4**: Conduct interviews, research topics, and observe events.
- **SLO #5**: Analyze news stories for the appropriate use of sources, data, and evidence.
- **SLO #6**: Recognize and seek out the information needed to produce balanced stories.
- **SLO #7**: Demonstrate an understanding of basic news writing, feature writing, and reporting in print, broadcast, and online media.
- **SLO #8**: Write and report a news story and feature story for print, broadcast, and online media.
- **SLO #9**: Assess and apply the principles of the First Amendment and other laws appropriate to professional practice.
- **SLO #10**: Write and report stories that are free of libel.
- **SLO #11**: Apply ethical principles in pursuit of truth, accuracy, fairness, and diversity.
- **SLO #12**: While news gathering, respect issues of privacy, avoid conflicts of interest, and adhere to professional standards of conduct.
- **SLO #13**: Apply the principles of news judgment to assignments.
- **SLO #14**: Rank information appropriately in stories; emphasize key facts in leads, stories, and headlines.

Career Information

Career Options: Journalist; Newspaper Reporter; Magazine Editor; Editor; Columnist; Desktop Publishing Specialist; Public Information Officer; Web Writer/Editor/Producer; Script Writer; Copy Writer; Broadcast News Writer; Broadcast News Producer. Some career options may require more than two years of college study. Classes beyond the associate degree may be required to fulfill some career options or for preparation for transfer to a university program.

Journalism (JOUR)

JOUR 300 Newswriting and Reporting

| Units: | 3 |
| Hours: | 54 hours LEC |
| Prerequisite: | None. |
| Advisory: | Eligibility for ENGWR 300 |
| Transferable: | CSU |
| General Education: | AA/AS Area II(b) |
| C-ID: | C-ID JOUR 110 |
| Catalog Date: | June 1, 2020 |

Introductory course in basic news writing and reporting. Course concentrates on fundamental writing techniques for mass media. Course also emphasizes the legal and ethical responsibilities of the news media with critical analysis of current news reporting practices.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- **SLO #1**: Apply the basic skills of news writing and reporting in clear, concise stories.
- **SLO #2**: Write stories in the inverted pyramid format.
- **SLO #3**: Apply knowledge of grammar and Associated Press Style to create mass media products that conform to journalistic conventions.
- **SLO #4**: Conduct interviews, research topics, and observe events.
- **SLO #5**: Analyze news stories for the appropriate use of sources, data, and evidence.
- **SLO #6**: Recognize and seek out the information needed to produce balanced stories.
- **SLO #7**: Demonstrate an understanding of basic news writing, feature writing, and reporting in print, broadcast, and online media.
- **SLO #8**: Write and report a news story and feature story for print, broadcast, and online media.
- **SLO #9**: Assess and apply the principles of the First Amendment and other laws appropriate to professional practice.
- **SLO #10**: Write and report stories that are free of libel.
- **SLO #11**: Apply ethical principles in pursuit of truth, accuracy, fairness, and diversity.
- **SLO #12**: While news gathering, respect issues of privacy, avoid conflicts of interest, and adhere to professional standards of conduct.
- **SLO #13**: Apply the principles of news judgment to assignments.
- **SLO #14**: Rank information appropriately in stories; emphasize key facts in leads, stories, and headlines.
JOUR 301 Advanced Newswriting and Reporting

This course focuses on interpretive news writing with emphasis on public affairs, specialized reporting, mastery of fundamental reporting techniques, an introduction to feature and editorial writing, and an introduction to the tools of multimedia reporting.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO #1: Produce news stories using advanced writing formats and techniques.
- Write stories using narrative, descriptive, and anecdotal leads.
- Write stories using the Wall Street Journal formula.
- SLO #2: Critically analyze and apply information from complex sources, including public opinion polls, medical studies, and government budgets.
- Complete exercises in computer-assisted reporting.
- SLO #3: Construct opinion stories and editorial pieces.
- Evaluate and apply rhetorical arguments in opinion and editorial pieces.
- SLO #4: Assemble in-depth stories, profiles, and reviews.
- SLO #5: Evaluate the methods of investigative reporting.
- Assess investigative stories for their use of sources, research, and credibility.
- SLO #6: Assess and apply the principles of the First Amendment and other laws appropriate to professional practice.
- Write and report stories that are free of libel.
- SLO #7: Apply ethical principles in pursuit of truth, accuracy, fairness, and diversity.
- While news gathering, respect issues of privacy, avoid conflicts of interest, and adhere to professional standards of conduct.
- SLO#8: Produce stories using audio, video, and other multimedia tools.

JOUR 310 Mass Media and Society

Survey of the mass media: history, philosophy, structure and trends, as well as theories which help to explain effects and the importance of mass communications as a social institution. Exploration of economics, technology, law, ethics, and social issues, including cultural and ethnic diversity. This course is the same as RTVF 300, and only one may be taken for credit. (C-ID JOUR 100)

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- apply the basic vocabulary and concepts of mass communication verbally and in clear, concise English (SLO #1 GE Vb a).
- define the various roles of mass media professionals.
- compare and contrast the origins, development, functions and effects of various mass media.
- research critically, filter the results and present them in a cogent manner (SLO #2).
- evaluate the possible causes and suggest solutions to introductory problems of a conceptual nature using the methods appropriate to the study of Mass communication (SLO #3/GE Vb b).
- analyze the economics of the mass media.
- assess the impact of media messages on various audiences.
- recognize the use and misuse of social and behavioral science concepts in society including politics and the media (SLO #4/GE Vb c).
- identify basic media theories and their application to contemporary media use and behavior.
- predict future roles and developments in mass media.
- analyze, interpret, and exercise critical judgment in the evaluation of media productions (SLO #5).
- create a simple content analysis of a media product.
- demonstrate that with the power of a communicator, comes moral and ethical responsibility (SLO #6).
- explain and analyze the legal and ethical rights, regulations and responsibilities of the media in America.

### JOUR 320 Race and Gender in the Media

Units: 3  
Hours: 54 hours LEC  
Prerequisite: None.  
Transferable: CSU; UC  
General Education: AA/AS Area V(b); AA/AS Area VI; CSU Area D3; IGETC Area 4C  
Catalog Date: June 1, 2020

This course examines the roles of ethnic minorities and women in American society as depicted, documented and distorted in the mass media. Students will study ethnic, racial and gender issues in mass media content, development, policy, and professions, including media stereotypes, contributions of diverse groups to the media and mass communications as an agent of social change.

### Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO #1: Evaluate mass media theories, concepts, and practices as they relate to gender, race, and class constructs.
- Analyze the economics of the mass media.
- Assess media messages that depict race, gender, and class.
- SLO #2: Evaluate cultural stereotypes in media content and the role of ethnocentrism in reporting.
- Analyze stereotypes in news stories, films, music, and other media products.
- SLO #3: Examine how prejudice and racism have shaped the American experience, media content, and policy.
- Analyze government and mass media policies that have influenced class and inequity.
- SLO #4: Examine the contributions of American Indians, African-Americans, Hispanics and Latinos, Asian Americans and other diverse groups in America to the art and development of broadcasting, film, newspapers, magazines, and recordings.
- SLO #5: Analyze social issues such as the Civil Rights movement, Japanese internment, and women's rights by reviewing and evaluating media documentation.

### JOUR 330 Computer Familiarization

Same As: CISC 302  
Units: 2  
Hours: 36 hours LEC  
Prerequisite: None.  
Advisory: BUSTEC 302  
Transferable: CSU  
General Education: AA/AS Area III(b)  
Catalog Date: June 1, 2020
This is an introductory course to provide general knowledge on how computers work, computer terminology and the impact of computers on society and the work environment. Beginning level hands-on instruction using an operating system, word processing software, spreadsheet software, database software, email and the Internet will be emphasized. Students will be reading and interpreting written and oral instructions of a technical nature. This course is the same as CISC 302, and only one may be taken for credit. See “Cross-Listed Courses” in the catalog.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO1: DESCRIBE BASIC HARDWARE AND SOFTWARE REQUIREMENTS FOR A PERSONAL COMPUTER
  - Identify different hardware required for input, output, processing and storage of data on a personal computer
  - Apply appropriate log on techniques to access lab computers and online course management software
- SLO2: UTILIZE OPERATING SYSTEM TO EFFECTIVELY MANAGE PROGRAMS, FILES AND FOLDERS
  - Demonstrate ability to retrieve, create, copy, move and delete files and folders within a file management hierarchy
  - Locate and launch programs successfully
- SLO3: DIFFERENTIATE BETWEEN, AND APPLY BASIC CONCEPTS FOR BUSINESS APPLICATION SOFTWARE
  - Define and correctly select appropriate program for a given task
  - Demonstrate ability with word processing commands and features such as cursor movement, entering text; formatting including setting margins, line spacing, bold, centering, underlining, changing font typeface and size; inserting clip art; saving, printing, retrieving, and editing a file; spelling checker
  - Demonstrate ability with spreadsheet commands and features such as cursor movement; entering text, values and formulas; formatting including changing column widths, bold, centering, underlining, changing font typeface and size, formatting numbers with dollar signs; inserting and deleting rows and columns; saving, printing, retrieving, and editing a file; spelling checker
  - Demonstrate ability with database commands and features such as creating a database, creating tables, creating fields, setting field widths, positioning fields, entering data through tables or forms, designing forms, formatting forms, creating reports, displaying records, changing page orientation, saving, and printing
- SLO4: COMMUNICATE, SHARE, AND ACCESS INFORMATION ELECTRONICALLY
  - Utilize e-mail commands and features to communicate appropriately, sending and receiving messages, including attachments.
  - Operate search engines, browsers, and related web tools to effectively find information on the World Wide Web
  - Evaluate web sites for accuracy based on specific criteria

JOUR 335 Introduction to Desktop Publishing

Same As: CISA 330
Units: 2
Hours: 27 hours LEC; 27 hours LAB
Prerequisite: None.
Advisory: JOUR 330; CISC 302 or 310; and CISA 305
Transferable: CSU
Catalog Date: June 1, 2020

This course provides an overview of desktop publishing (DTP) and a major desktop publishing application program. It includes page layout skills needed to produce newsletters, brochures, flyers, reports, and marketing material on the computer. Additionally it covers importing graphics and text, using palette menus, layers, master pages, and working with graphic and text frames.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO #1: Create professional-looking documents using desktop publishing software.
  - Import, assemble, format, and arrange text and graphics working with frames and layers.
- SLO #2: Demonstrate effective visual communication by applying elements of design, composition, and presentation in published material.
  - Create commonly used printed marketing documents such as brochures, flyers, business cards, stationery and newsletters.
JOUR 336 Intermediate Desktop Publishing

This course builds upon previous desktop publishing software concepts and study. Topics include working with color, applying styles, importing and linking graphics, tabs and tables, and working with transparency effects. It also covers producing long documents and book features, output and exporting to PDF format, and creating interactive documents for online use. This course is the same as CISA 331, and only one may be taken for credit.

Upon completion of this course, the student will be able to:

- SLO #1: Demonstrate knowledge of advanced elements of design, composition, and presentation. Create, import, modify and enhance tables; create and modify styles; create and apply swatches, gradients and tints; and apply opacity, effects, color blends and transparency effects to visually enhance documents.
- SLO #2: Create professional-looking documents in print, PDF, and online format using desktop publishing software.
- Combine multiple documents into a book format, export and generate a document into an Adobe PDF format, and convert a print document into an online format.

JOUR 340 Writing for Publication

This is an introductory course in writing nonfiction for publication. Emphasis will be on developing magazine articles that sell; finding ideas; analyzing magazines; writing query letters; researching and interviewing; organizing, writing and illustrating articles. Individual and class criticism of student work will be featured. This course is the same as ENGWR 330, and only one may be taken for credit.

Upon completion of this course, the student will be able to:

- SLO #1: Be self-reliant, evaluative readers and writers, able to use critical thinking skills to read and write effectively in academic and workplace settings.
- Identify and define problems or issues for possible publication.
- Collect, analyze, and evaluate information synthesizing and developing conclusions.
- Demonstrate research and marketing skills to find the most appropriate print or online publications to market articles.
- Become aware of audience and focus articles toward a particular print or online publication.
- SLO #2: Obtain the necessary reading and writing skills for university-level courses.
- Select and organize information from various sources effectively.
- Compose, edit, and illustrate salable articles for print and online publications.
- SLO #3: Develop academic literacy skills, to utilize reading and writing processes, to find and comprehend information, and to apply that knowledge in myriad rhetorical situations.
- Conduct interviews and research to collect, evaluate, and synthesize information.
- Assess and select ideas for articles and books.
- SLO #4: Assess and apply the principles of the First Amendment and other laws appropriate to professional practice.
Write articles that are free of libel.

SLO #5: Apply ethical principles in pursuit of truth, accuracy, fairness, and diversity.

Demonstrate writing and marketing skills to successfully write magazine articles and find the most appropriate print or online publications to market them.

While researching and gathering information, respect issues of privacy, avoid conflicts of interest, adhere to professional standards of conduct, and respect diverse viewpoints.

**JOUR 351 Public Relations Writing and Media Techniques**

| Units:     | 3 |
| Hours:     | 54 hours LEC |
| Prerequisite: | None. |
| Transferable: | CSU |
| C-ID:      | C-ID JOUR 150 |
| Catalog Date: | June 1, 2020 |

This course is a study of the practice of public relations (PR); planning PR campaigns; preparing promotional messages for newspapers, magazines, radio, television, and online; using public relations techniques in business, education, entertainment, social service and other fields.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- SLO #1: Evaluate the role of the public relations practitioner in PR firms, corporations, and public information offices.
- SLO #2: Assess the effectiveness of various public relations strategies.
- Critically analyze public relations case studies for effectiveness of strategies that are used.
- SLO #3: Evaluate the relationship between public relations practitioners and the mass media.
- Identify and analyze messages disseminated through mass media that have been shaped by public relations practitioners.
- SLO #4: Design and implement a public relations campaign.
- Identify an audience, craft an appropriate message, produce media products, and execute a campaign.
- SLO #5: Create public relations tools, including press releases, brochures, newsletters, and press kits.
- SLO #6: Assess and apply the principles of the First Amendment and other laws appropriate to professional practice.
- Produce press releases, brochures, and newsletters that are free of libel.
- SLO #7: Apply ethical principles in pursuit of truth, accuracy, fairness, and diversity.
- While researching and gathering information, respect issues of privacy, avoid conflicts of interest, adhere to professional standards of conduct, and respect diverse viewpoints.

**JOUR 355 Media Writing**

| Units:     | 1 |
| Hours:     | 18 hours LEC |
| Prerequisite: | None. |
| Advisory:  | ENGWR 101 with a grade of "C" or better; or eligibility for ENGWR 300 as demonstrated through the assessment process. |
| Transferable: | CSU |
| Catalog Date: | June 1, 2020 |

An introduction to writing copy for advertising, public relations, and publications. This course covers writing techniques and copy preparation for brochures, newsletters, in-house publications, press releases, display advertising, websites, and other visual presentations.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:
JOUR 404 Editing and Production

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO #1: Apply the conventions of journalism to prepare work for publication.
- SLO #2: Apply the principles of news judgment to stories and layouts.
- SLO #3: Demonstrate an understanding of appropriate production practices for a publication.
- SLO #4: Construct visually attractive and readable news pages, in print or online.
- SLO #5: Assess and apply the principles of the First Amendment and other laws appropriate to professional practice.
- SLO #6: Apply ethical principles in pursuit of truth, accuracy, fairness, and diversity.
- While editing, respect issues of privacy, avoid conflicts of interest, and adhere to professional standards of conduct.
This course focuses on writing and producing student news media, using the school newspaper The Connection and its online companion www.thecrcconnection.com, as a practical laboratory that produces a journalistic product for distribution to a college-wide audience. Students will work primarily in one of the following areas: researching, writing, and editing articles for the two publications; taking photographs and creating graphic illustrations; developing multimedia stories; or designing pages. Ethical and legal aspects of communication are also covered.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- SLO#1: Produce work suitable for publication in print and/or online.
- Report and write stories for publication using multiple sources OR
- Design newspaper pages and advertisements using up-to-date design and desktop publishing software OR
- Take and prepare photographs for publication for print and online OR
- Report and produce news content, such as photo slideshows, videos, audio clips, and multimedia, using digital technology.
- SLO#2: Apply the principles of news judgment to assignments.
- Rank information appropriately in stories; emphasize key facts in leads, stories, photo captions, and headlines.
- SLO#3 Understand the role of the student press as a member of the campus community.
- SLO #4: Demonstrate an understanding of production processes while working under deadline pressure in the college newsroom.
- Meet required deadlines for publication.
- Plan and adhere to a production process.
- SLO #5: Assess and apply the principles of the First Amendment and other laws appropriate to professional practice.
- Write and report stories that are free of libel; respect issues of copyright when publishing photos.
- SLO #6: Apply ethical principles in pursuit of truth, accuracy, fairness, and diversity.
- While news gathering, respect issues of privacy, avoid conflicts of interest, and adhere to professional standards of conduct.
- SLO #7: Evaluate their own work and that of others for accuracy, appropriate style, and grammatical correctness.
- SLO #8 develop an electronic portfolio of at least 10 writing, design, photo, or multimedia stories published in the student publications.

**JOUR 411 College Media Production II**

This course builds on experience gained in Journalism 410. During this second-semester course, students focus on intermediate writing and production skills, using the school newspaper The Connection and its online companion www.thecrcconnection.com, as a practical laboratory. Students will work in at least two of the following areas: researching, writing, and editing articles for the two publications; taking photographs and creating graphic illustrations; developing multimedia stories; or designing pages. Ethical and legal aspects of communication are also covered.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:
SLO#1: Produce intermediate work suitable for publication in print and/or online.
Report and write stories for publication using multiple sources AND/OR
Design newspaper pages and advertisements using up-to-date design and desktop publishing software AND/OR
Take and prepare photographs for publication for print and online AND/OR
Report and produce news content, such as photo slideshows, videos, audio clips, and multimedia, using digital technology AND/OR
Assign and edit stories, photos, or multimedia elements for publication in print or online.

SLO#2: Apply the principles of news judgment to assignments.
Rank information appropriately in stories; emphasize key facts in leads, stories, photo captions, and headlines.

SLO#3: Demonstrate an understanding of production processes while working under deadline pressure in the college newsroom.
Meet required deadlines for publication.

SLO #4: Assess and apply the principles of the First Amendment and other laws appropriate to professional practice.
Write and report stories that are free of libel AND/OR edit stories that are free of libel; respect issues of copyright when publishing photos.

SLO #5 Develop an intermediate electronic portfolio of 14 assignments that includes work in at least two of these areas: writing, editing, design, photo, or multimedia assignments published in student publications.

JOUR 412 College Media Production III

Units: 3
Hours: 36 hours LEC; 54 hours LAB
Prerequisite: JOUR 300 and 411 with grades of "C" or better
Transferable: CSU
Catalog Date: June 1, 2020

This course builds on the experience gained in Journalism 411. During this third-semester course, students focus on advanced intermediate writing and production skills, using the school newspaper The Connection and its online companion www.thecrcconnection.com, as a practical laboratory. Students will work in at least three of the following areas: researching, writing, and editing articles for the two publications; taking photographs and creating graphic illustrations; developing multimedia stories; or designing pages. Ethical and legal aspects of communication are also covered.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO#1: Produce advanced intermediate work suitable for publication in print and/or online.
- Report and write stories for publication using multiple sources AND/OR
- Design newspaper pages and advertisements using up-to-date design and desktop publishing software AND/OR
- Take and prepare photographs for publication for print and online AND/OR
- Report and produce news content, such as photo slideshows, videos, audio clips, and multimedia, using digital technology AND/OR
- Assign and edit stories, photos, or multimedia elements for publication in print or online.

- SLO #2: Evaluate their own work and that of others for accuracy, fairness, appropriate style, grammatical correctness, and news judgment.

- SLO #3: Plan and execute a production process while working under deadline pressure in the college newsroom.

- SLO #4: Assess and apply the principles of the First Amendment and other laws appropriate to professional practice.

- Write, report, and/or edit stories that are free of libel AND/OR
- Respect issues of copyright when publishing photos.

- SLO #5: Apply ethical principles in pursuit of assignments.

- While news gathering, respect issues of privacy; avoid conflicts of interest, and adhere to professional standards of conduct.
JOUR 413 College Media Production IV

Units: 3
Hours: 36 hours LEC; 54 hours LAB
Prerequisite: JOUR 412 with a grade of "C" or better
Transferable: CSU
Catalog Date: June 1, 2020

This course builds on the experience gained in Journalism 412. During this fourth-semester course, students focus on advanced writing and production skills, using the school newspaper The Connection and its online companion www.thecrcconnection.com, as a practical laboratory. Students will produce work in each of the following areas: researching, writing, and editing advanced and in-depth articles for the two publications; taking photographs and creating graphic illustrations; developing multimedia stories; and designing pages. Ethical and legal aspects of communication and media leadership/management are also covered and students should serve in leadership roles.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO #1: Produce advanced work suitable for publication in print and/or online.
- Report, write, and edit advanced stories for publication using multiple sources AND/OR
- Design newspaper pages and advertisements using up-to-date design and desktop publishing software AND/OR
- Take and prepare photographs for publication for print and online AND/OR
- Report and produce news content, such as photo slideshows, videos, audio clips, and multimedia, using digital technology.
- SLO #2: Evaluate their own work and that of others for accuracy, fairness, appropriate style, grammatical correctness, and news judgment.
- SLO #3: Plan, assign, and execute a production process while working under deadline pressure in the college newsroom.
- SLO #4: Assess and apply the principles of the First Amendment and other laws appropriate to professional practice.
- Write, report, and/or edit stories that are free of libel AND/OR
- Respect issues of copyright when publishing photos.
- SLO #5: Apply ethical principles in pursuit of assignments.
- While news gathering, respect issues of privacy, avoid conflicts of interest, and adhere to professional standards of conduct.
- SLO #6: Develop an advanced electronic portfolio of 22 assignments that includes work in all of these areas: writing, editing, design, and multimedia assignments published in student publications.

JOUR 420 College Media Production Lab I

Units: 0.5 - 3
Hours: 27 - 162 hours LAB
Prerequisite: ENGWR 101 with a grade of "C" or better, or placement through the assessment process.
Corequisite: JOUR 404 and 410
Transferable: CSU
Catalog Date: June 1, 2020

This lab course helps students improve their writing, editing, photography, design, and computer skills as an addition to their enrollment in College Media Production I (JOUR 410) and/or Editing and Production (JOUR 404).

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO #1 Apply journalistic principles to hands-on assignments.
- Report and write stories for publication using multiple sources OR
- Design newspaper pages and advertisements using desktop publishing software OR
- Take and prepare photographs for publication for print and online OR
- Report and produce news content, such as photo slideshows, videos, audio clips, and multimedia.
- SLO#2 Assess and apply the essential skills of layout and design.
- Write and edit headlines for the print and online publications.
- SLO#3 Develop a digital portfolio of up to ten writing, photo, editing, or design pieces published in student publications, depending on the number of units in which the student is enrolled.

**JOUR 421 College Media Production Lab II**

- **Units:** 0.5 - 3
- **Hours:** 27 - 162 hours LAB
- **Prerequisite:** JOUR 420 with a grade of "C" or better
- **Corequisite:** JOUR 411
- **Transferable:** CSU
- **Catalog Date:** June 1, 2020

This lab course helps students build on skills gained in Journalism 410 and 420. During this second-semester course, students will continue to improve their skills in at least two of the following areas: writing, editing, photography, design, and web production skills as an addition to their enrollment in College Media Production II (JOUR 411).

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- SLO#1 Apply intermediate journalistic principles to hands-on assignments.
- Report and write stories for publication using multiple sources AND/OR
- Design newspaper pages and advertisements using desktop publishing software AND/OR
- Take and prepare photographs for publication for print and online AND/OR
- Report and produce news content, such as photo slideshows, videos, audio clips, and multimedia.
- SLO#2 Assess and apply the essential skills of intermediate layout and design.
- Design pages that adhere to the principles of modular design.
- SLO#3 Develop a digital portfolio of up to 12 writing, photo, editing, or design pieces published in student publications.

**JOUR 422 College Media Production Lab III**

- **Units:** 0.5 - 3
- **Hours:** 27 - 162 hours LAB
- **Prerequisite:** JOUR 421 with a grade of "C" or better
- **Corequisite:** JOUR 412
- **Transferable:** CSU
- **Catalog Date:** June 1, 2020

This lab course helps students build on skills gained in Journalism 411 and 421. During this third-semester course, students will continue to improve their skills in at least three of the following areas: writing, editing, photography, design, and web production skills as an addition to their enrollment in College Media Production III (JOUR 412).

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- SLO#1 Apply advanced intermediate journalistic principles to hands-on assignments.
- Report and write stories for publication using multiple sources AND/OR
- Design newspaper pages and advertisements using desktop publishing software AND/OR
• Take and prepare photographs for publication for print and online AND/OR
• Report and produce news content, such as photo slideshows, videos, audio clips, and multimedia.
• SLO#2 Assess and apply the essential skills of advanced intermediate layout and design.
• Design pages that adhere to the principles of modular design.
• SLO#3 Develop an advanced intermediate digital portfolio of up to 14 writing, photo, editing, or design pieces published in student publications.

JOUR 423 College Media Production Lab IV

Units: 0.5 - 3
Hours: 27 - 162 hours LAB
Prerequisite: JOUR 422 with a grade of "C" or better
Transferable: CSU
Catalog Date: June 1, 2020

This lab course helps students build on skills gained in Journalism 412 and 422. During this fourth-semester course, students will continue to improve their skills in at least four of the following areas: writing, editing, photography, design, and web production skills as an addition to their enrollment in College Media Production IV (JOUR 413).

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• SLO#1 Apply advanced journalistic principles to hands-on assignments.
• Report and write stories for publication using multiple sources AND/OR
• Design newspaper pages and advertisements using desktop publishing software AND/OR
• Take and prepare photographs for publication for print and online AND/OR
• Report and produce news content, such as photo slideshows, videos, audio clips, and multimedia.
• SLO#2 Assess and apply the essential skills of advanced layout and design.
• Design pages that adhere to the principles of modular design.
• SLO#3 Develop an advanced digital portfolio of up to 16 writing, photo, editing, or design pieces published in student publications.

JOUR 495 Independent Studies in Journalism

Units: 1 - 3
Hours: 54 - 162 hours LAB
Prerequisite: None.
Transferable: CSU
Catalog Date: June 1, 2020

An independent studies project involves an individual student or small group of students in study, research, or activities beyond the scope of regularly offered courses. See the current catalog section of "Special Studies" for full details of Independent Studies.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• SLO #1: Actively engage in intellectual inquiry beyond that required in order to pass a course of study (College Wide Learning Outcome – Area 4).
• Discuss and outline a proposal of study (that can be accomplished within one semester term) with a supervising instructor qualified within the discipline.
• Design an independent study (to be completed individually or by collaboration of a small group) to foster special knowledge, skills, and experience that are not available in any one regularly scheduled course.
• Use information resources to gather discipline-specific information.
- SLO #2: Utilize modes of analysis and critical thinking to apply theoretical perspectives and/or concepts in the major discipline of study to significant problems and/or educational activities (College Wide Learning Outcome – Area 3).

- Analyze and apply the knowledge, skills and experience that are involved in the independent study to theoretical perspectives and/or concepts in the major discipline of study.

- Explain the importance of the major discipline of study in the broader picture of society.

- SLO #3: Communicate a complex understanding of content matter of the major discipline of study (College Wide Outcome – Area 3).

- Demonstrate competence in the skills essential to mastery of the major discipline of study that are necessary to accomplish the independent study.

- SLO #4: Identify personal goals and pursue these goals effectively (College Wide Outcome – Area 4).

- Utilize skills from the “academic tool kit” including time management, study skills, etc., to accomplish the independent study within one semester term.

### JOUR 498 Work Experience in Journalism

<table>
<thead>
<tr>
<th>Units:</th>
<th>1 - 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hours:</td>
<td>60 - 300 hours LAB</td>
</tr>
<tr>
<td>Prerequisite:</td>
<td>None.</td>
</tr>
<tr>
<td>Enrollment Limitation:</td>
<td>Students must be in a paid or unpaid internship, volunteer position or job related to career goals in Journalism.</td>
</tr>
<tr>
<td>Transferable:</td>
<td>CSU</td>
</tr>
<tr>
<td>General Education:</td>
<td>AA/AS Area III(b)</td>
</tr>
<tr>
<td>Catalog Date:</td>
<td>June 1, 2020</td>
</tr>
</tbody>
</table>

This course provides students with opportunities to develop marketable skills in preparation for employment in their major field of study or advancement within their career. It is designed for students interested in work experience and/or internships in transfer level degree occupational programs. Course content includes understanding the application of education to the workforce; completion of required forms which document the student's progress and hours spent at the work site; and developing workplace skills and competencies. Appropriate level learning objectives are established by the student and the employer. During the semester, the student is required to participate in a weekly orientation and 75 hours of related paid work experience, or 60 hours of unpaid work experience for one unit. An additional 75 or 60 hours of related work experience is required for each additional unit. Work Experience may be taken for a total of 16 units when there are new or expanded learning objectives. Only one Work Experience course may be taken per semester.

### Student Learning Outcomes

Upon completion of this course, the student will be able to:

- **DEMONSTRATE AN UNDERSTANDING AND APPLICATION OF PROFESSIONAL WORKPLACE BEHAVIOR IN A FIELD OF STUDY RELATED ONE’S CAREER.**

- Understand the effects time, stress, and organizational management have on performance.

- Demonstrate an understanding of consistently practicing ethics and confidentiality in a workplace.

- Examine the career/life planning process and relate its relevancy to the student.

- Demonstrate an understanding of basic communication tools and their appropriate use.

- Demonstrate an understanding of workplace etiquette.

- **DESCRIBE THE CAREER/LIFE PLANNING PROCESS AND RELATE ITS RELEVANCY TO ONE’S CAREER.**

- Link personal goals to long term achievement.

- Display an understanding of creating a professional first impression.

- Understand how networking is a powerful job search tool.

- Understand necessary elements of a résumé.

- Understand the importance of interview preparation.

- Identify how continual learning increases career success.

- **DEMONSTRATE APPLICATION OF INDUSTRY KNOWLEDGE AND THEORETICAL CONCEPTS AS WRITTEN IN LEARNING OBJECTIVES IN PARTNERSHIP WITH THE EMPLOYER WORK SITE SUPERVISOR.**
Kinesiology and Athletics  
| Cosumnes River College

The Cosumnes River College Kinesiology program offers a wide variety of classes, including Fitness, Dance, Aquatics, Individual Sports, Team Sports, Intercollegiate Athletics, and Kinesiology classes.

Dean  
Collin Pregliasco  
 (916) 691-7261  
 PregliC@crc.losrios.edu

Associate Degrees for Transfer

A.A.-T. in Kinesiology

The Associate in Arts in Kinesiology for Transfer Degree (AA-T) is designed to meet common lower-division requirements for a major in Kinesiology at California State University (CSU) campuses by completion of 60 transferable semester units with a minimum 2.0 GPA, to include either the California State University General Education Breadth pattern or the Intersegmental General Education Transfer Curriculum; students must earn a grade of C or better in all the courses for the major as described in the Required Program. Upon successful completion of the degree requirements, students will be guaranteed admission to the CSU system with junior status and will not have to repeat lower division coursework. Students are encouraged to meet with a counselor to develop their educational plans as degree options and general education requirements vary for each university.

Catalog Date: June 1, 2020

Degree Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>CORE REQUIREMENTS:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>KINES 300</td>
<td>Introduction to Kinesiology</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 430</td>
<td>Anatomy and Physiology</td>
<td>5</td>
</tr>
<tr>
<td>BIOL 431</td>
<td>Anatomy and Physiology</td>
<td>5</td>
</tr>
<tr>
<td><strong>ELECTIVE LIST A - 2 Courses from the following:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A minimum of 7 units from the following:</td>
<td></td>
<td>7</td>
</tr>
<tr>
<td>STAT 300</td>
<td>Introduction to Probability and Statistics (4)</td>
<td></td>
</tr>
<tr>
<td>or PSYC 330</td>
<td>Introductory Statistics for the Behavioral Sciences (3)</td>
<td></td>
</tr>
<tr>
<td>BIOL 310</td>
<td>General Biology (4)</td>
<td></td>
</tr>
<tr>
<td>CHEM 305</td>
<td>Introduction to Chemistry (5)</td>
<td></td>
</tr>
<tr>
<td>PHYS 350</td>
<td>General Physics (4)</td>
<td></td>
</tr>
<tr>
<td><strong>ACTIVITY ELECTIVES:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A minimum of 3 units from the following:</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>FITNS 440</td>
<td>Swimming I (1)</td>
<td></td>
</tr>
<tr>
<td>COURSE CODE</td>
<td>COURSE TITLE</td>
<td>UNITS</td>
</tr>
<tr>
<td>-------------</td>
<td>------------------------------</td>
<td>-------</td>
</tr>
<tr>
<td>FITNS 380</td>
<td>Circuit Weight Training (1)</td>
<td></td>
</tr>
<tr>
<td>FITNS 381</td>
<td>Weight Training (1)</td>
<td></td>
</tr>
<tr>
<td>FITNS 390</td>
<td>Basic Yoga (1)</td>
<td></td>
</tr>
<tr>
<td>FITNS 406</td>
<td>Walking and Jogging (1)</td>
<td></td>
</tr>
<tr>
<td>PACT 310</td>
<td>Badminton I (1)</td>
<td></td>
</tr>
<tr>
<td>TMAC 302</td>
<td>Soccer - Outdoor (1)</td>
<td></td>
</tr>
<tr>
<td>TMAC 320</td>
<td>Basketball (1)</td>
<td></td>
</tr>
<tr>
<td>TMAC 330</td>
<td>Volleyball (1)</td>
<td></td>
</tr>
</tbody>
</table>

Total Units: 23

Select a maximum of one (1) course from any three (3) of the following areas for a maximum of three units: Aquatics (FITNS 440); Fitness (FITNS 308, 380, 381, 390, 406); Individual Sports (PACT 310); Team Sports (TMAC 302, 320, 330).

The Associate in Arts in Kinesiology for Transfer (AA-T) degree may be obtained by completion of 60 transferable, semester units with a minimum 2.0 GPA, including (a) the major or area of emphasis described in the Required Program, and (b) either the Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education-Breadth Requirements.

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- utilize the theories of biomechanics and exercise physiology and apply them to sport and fitness pedagogy.
- discuss how sociological, psychological, historical, and philosophical factors influence the field of kinesiology and sport.
- evaluate the unique and overlapping roles of each body system in promoting homeostasis and how such body systems adapt to the demands of activity and sport.
- evaluate anatomical and physiological information and apply findings to decision making.
- assess and measure improvements in fitness levels through a comprehensive analysis of aerobic capacity, body composition, muscular endurance, and flexibility.
- define and understand how to properly execute fitness and sport training techniques.
- FOR STUDENTS CHOOSING THE STAT 300 or PSYC 330 OPTION: use the concepts of descriptive statistics to display and analyze univariate and bivariate data.
- FOR STUDENTS CHOOSING THE CHEM 305 OPTION: apply the basic terminology and nomenclature of elements and compounds relevant to the human body and metabolism.
- FOR STUDENTS CHOOSING THE PHYS 350 OPTION: solve conceptual problems in classical mechanics, fluids, mechanical waves, and thermodynamics.

Career Information

The AA-T in Kinesiology can provide students with the foundational knowledge necessary for transfer to a 4-year Bachelor of Science (BS) or Bachelor of Arts (BA) degree program. Career opportunities for students who have earned BS or BA degrees in Kinesiology include but are not limited to: exercise physiologist, physical therapy aide, health consultant, personal trainer, recreation director, referee, group fitness instructor, health club manager, athletic coach, activities director, K-12 physical educator, public health educator, swimming pool manager, cardiac rehabilitation technician, or corporate fitness director. Some careers may require additional training. NOTE TO TRANSFER STUDENTS: The Associate Degree for Transfer program is designed for students who plan to transfer to a campus of the California State University (CSU). Other than the required core, the courses you choose to complete this degree will depend to some extent on the selected CSU for transfer. In addition, some CSU-GE Breadth or IGETC requirements can also be completed using courses required for this associate degree for transfer major (known as “double-counting”). Meeting with a counselor to determine the most appropriate course choices will facilitate efficient completion of your transfer requirements. For students wishing to transfer to other universities (UC System, private, or out-of-state), the Associate Degree for Transfer may not provide adequate preparation for upper-division transfer admissions; it is critical that you meet with a CRC counselor to select and plan the courses for the major, as programs vary widely in terms of the required preparation.

Associate Degrees
A.A. in Physical Education

The Cosumnes River College Physical Education program offers a wide variety of physical education classes, including Fitness, Dance, Aquatics, Self Defense, Individual Sports, Team Sports, Intercollegiate Athletics, and Physical Education Theory classes. The program in Physical Education outlined below is typical of lower-division requirements for four-year colleges and universities (though some requirements tend to vary from college to college). For specific requirements, students should refer to a catalog of the college of their choice. Students are also advised to see a counselor before selecting the courses best aligned with their transfer institution.

Note to Transfer Students:
If you are interested in transferring to a four-year college or university to pursue a bachelor's degree in this major, it is critical that you meet with a CRC counselor to select and plan the courses for your major. Schools vary widely in terms of the required preparation. The courses that CRC requires for an Associate's degree in this major may be different from the requirements needed for the Bachelor's degree.

Highlights include:
* A wide variety of physical education options
* Outstanding facilities that include a state of the art fitness center, competitive aquatic facilities, baseball stadium, state of the art community and athletic center, second gymnasium, soccer/football stadium
* 2 FIFA sized soccer fields with scoreboards, softball stadium, 8 championship tennis courts and numerous physical education fields.

Physical Education
NOTE: The University of California has a limitation on the number of units of physical education courses that can be transferred. The California State University System has no such limitation, but there are restrictions placed on the number of physical education units that can be applied toward the major and general education. See a counselor for specific course limitations.

All activity classes are open to both men and women unless noted within the course title. Students may be concurrently enrolled in more than one physical education activity class; however, no more than two of the same physical education activity classes may be taken by a student in the same semester.

The prefixes ADAPT, DANCE, FITNESS, PACT, TMACt, and SPORT refer to courses which may be used to satisfy the physical education graduation requirement. Beginning classes concentrate on fundamental skills, rules, scoring, equipment, dress, etiquette and basic strategy. Intermediate classes continue efforts on skill development while concentrating on strategy and competitive play.

Activity courses may be taken up to four times in each activity area, unless otherwise identified (e.g. four Tennis, four Aerobics, four Weight Training, etc.).

Courses with the "PET" prefix are open to students interested in the physical education major and in the theoretical aspects of sports activity. PET courses do not meet the physical education graduation requirement; however, they are all transferable. Some "PET" courses have a unit limitation to the UC system. See a counselor for specific course limitations.

Athletics
Academic Advising for Athletes

10 intercollegiate athletic opportunities for student participation:
* For Men: Baseball, Basketball, Soccer, Tennis
* For Women: Basketball, Soccer, Softball, Tennis, Volleyball, Water Polo

Cosumnes River College is a member of the Bay Valley Conference which includes community colleges located in the San Francisco Bay Area and the interior valleys of Northern California. The Bay Valley Conference is a member of the Community College League of California - Commission on Athletics (COA) and adheres to all rules and regulations governing community college athletics within the State of California.

In order to participate in intercollegiate athletics, both men and women must fulfill the requirements of the Los Rios Community College District and the Athletic Constitution of the Commission on Athletics. These requirements are very exacting and the athletes are advised to become thoroughly familiar with them in order to avoid eligibility problems. The athletic director is familiar with the eligibility requirements and would be available to answer specific questions.

Students who have not competed in intercollegiate athletics are deemed scholastically eligible for their first season of competition. In order to maintain eligibility, an athlete must participate in Cosumnes River College's Athletic Academic Advising. This Academic Advising Program requires athletes to:
* Meet with an athletic academic counselor annually and complete a Student Educational Plan (SEP).
* Maintain at least a 2.0 cumulative Grade Point Average (GPA), attend classes regularly and complete all assigned course work.
* Successfully complete 24 units between the first and second season of participation in a specific sport, of which 18 units must be in General Education or degree specific classes.
* Maintain active enrollment in a minimum of 12 units during the semester of competition. Nine of these 12 units must be General Education or degree specific.

Field Study Classes at Cosumnes River College:
Nature is often the best classroom! Come learn outside in Cosumnes River College's field study courses. These classes consist of short classroom sessions followed by extended trips to some of the most unique and beautiful environments in California, including Big Sur, Monterey Bay, Mt. Lassen, Point Reyes, Yosemite and more! These short-term classes are offered by several departments, including Biology, Geography, Geology, Photography, and Physical Education. For more information about specific classes, consult the class schedule or visit the Los Rios Field Study Consortium website at: www.losrios.edu/fieldstudy.

Catalog Data: June 1, 2020
Adapted Physical Education (ADAPT)

ADAPT 300 Adapted Physical Education

In adapted physical education, the instructor works under the recommendation/direction of the student's physician. Class activities are adapted or modified to meet individual needs. Each student performs at an individual level of ability without pressure or competition. Students with both temporary and permanent disabilities are served as well as students with major health problems. Students must have a physician's statement indicating (a) the disability, (b) specific restrictions, and (c) recommended activities.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO #1: Evaluate, analyze, and accurately assess fitness levels appropriate for student's limitations or disabilities
- Evaluate and measure improvements in the basic components of fitness including body composition, body measurements, training heart rate zone, range of motion, muscular strength and balance in a pre and post fitness assessment.
- Comprehend and recognize improvements in the fitness levels.
• Evaluate and modify fitness programs throughout the semester to maintain maximum benefits from their workouts

• SLO #2: Distinguish between and discuss the value of overall fitness as it relates to daily living.

• Identify individual fitness objectives

• Analyze which skills are appropriate to the abilities and limitations.

• Judge safe habits for participation within their limits of their disabilities.

• SLO #3: Utilize knowledge to develop, design and implement individual exercise programs.

• Distinguish, choose and use proper terminology associated with fitness.

• Differentiate and understand the proper use of equipment in class.

• Explain and demonstrate coordinated loco motor skills appropriate for individual abilities.

• Develop and improve gross and fine motor skills complimentary to their abilities.

ADAPT 332 Adapted Aquatics

Units: 1
Hours: 9 hours LEC; 27 hours LAB
Prerequisite: None.
Transferable: CSU; UC
General Education: AA/AS Area III(a); CSU Area E2
Catalog Date: June 1, 2020

This physical education class is a personal water safety and fitness class adapted for individuals who are physically challenged. The class will be tailored for the individual’s abilities and needs. Topics covered will include stroke mechanics, water safety, movement through water, and the use of water for resistive exercises.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• SLO #1: Analyze and examine various methods of water exercises including swimming, and perform them within their individual limitations.

• Explain and demonstrate the fundamental techniques of hydrodynamics.

• Examine and evaluate the different water exercises to improve general fitness levels.

• Develop, revise and improve swimming strokes or methods of moving through the water considering specific physical challenges.

• Relate, understand and use the water to develop or increase psycho motor skills especially in the areas of balance, spatial awareness and kinesthetic sense.

• SLO #2: Identify and practice safety strategies to be used in and around the pool.

• Analyze and demonstrate personal water safety skills that correspond to specific physical limitations.

• Distinguish and use correct swimming terminology.

• Recognize, appraise, and implement the correct use of aquatic equipment used in class.

ADAPT 333 Adapted Shallow Water Aerobics

Units: 1
Hours: 9 hours LEC; 27 hours LAB
Prerequisite: None.
Transferable: CSU; UC
General Education: AA/AS Area III(a); CSU Area E2
Catalog Date: June 1, 2020

Although swimming skills are not needed, it is suggested that students are comfortable in an aquatic environment.
This class is designed for individuals who are physically challenged and uses the resistance of the water for low impact weight bearing exercise. It will be tailored to each student's individual abilities. The class will include exercises in shallow water; working on cardiovascular endurance and fitness, muscular strength and endurance as well as increase overall flexibility. Students must have a doctor's recommendation on file. No swimming skills are needed or required as students will be in shallow water and use equipment to help with flotation.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO #1: Examine and analyze various methods of exercise, in shallow water, and perform them within their individual abilities.
- Demonstrate and understand the fundamental techniques of hydrodynamics as it relates to this course.
- Demonstrate, understand and use proper form and technique for shallow water aerobic exercise.
- SLO #2: Identify and practice water safety strategies to be used in and around the pool.
- Demonstrate, modified if necessary, water safety strategies as they relate to their specific disability or challenge.
- SLO #3: Evaluate measurable improvements in aerobic fitness levels.
- Learn and analyze fitness assessments, assess them as they relate to their individual fitness goals and apply them appropriately in order to reach their individual fitness goals.

ADAPT 334 Adapted Deep Water Aerobics

This course is designed to allow students with disabilities or challenges, the opportunity to improve their overall fitness through a no-impact, non-weight bearing class in the water. In this class, cardiovascular exercises and endurance will be stressed. Additionally, due to the resistance of the water, students will improve their overall strength and flexibility.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO #1. Discuss, analyze and understand methods of exercising in deep water and demonstrate skills within their individual abilities.
- Comprehend basic hydrodynamics as well as viscosity, hydrostatic pressure and buoyancy as they relate to exercising in deep water.
- Demonstrate and use proper form and technique, adjusted as need be for each individual student, for deep aqua exercise.
- Discuss, understand and use proper spinal and body alignment with respect to the flotation belt and other equipment used in this class.
- SLO #2. Identify and practice strategies related to safety in and around a pool environment, especially in the deep water.
- Demonstrate, modified if necessary, water safety strategies as they relate to each student's individual challenge, abilities and/or needs.
- Discuss and understand strategies use in case of an emergency for classmates around them in the water.
- SLO #3. After taking the initial fitness assessment, develop individual fitness goals and apply appropriate training principle for achieving those goals.
- Demonstrate understanding of aerobic vs anaerobic exercise and the benefit for using both while working out.
- Develop and improve workout coordination, intensity and duration as the semester progresses, especially cardiovascular endurance.
- Distinguish and use correct deep water exercise terminology.
ADAPT 336 Motor Development for the Physically Challenged

This course gives the student individual instruction which promotes and develops overall physical fitness and psychomotor skills. This activity class for the physically challenged includes exercises in flexibility, strength development, aerobic activity and relaxation training. Students must have a doctor's recommendation on file.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- **SLO #1:** Evaluate, analyze, and accurately assess current fitness levels.
- Evaluate and measure improvements in the basic components of fitness including body composition, body measurements, target heart rate training, flexibility, muscular strength, endurance, and balance through a pre and post test assessment.
- Measure and calculate blood pressure, resting, ambient and training heart rates and their relationships of these to fitness, exercise and individual disabilities.
- **SLO #2:** Select biomechanical movements and apply the understanding of those movements related to physical activity in order to create an effective and efficient exercise program according to individual needs.
- Distinguish the association between fitness and wellness as it pertains to individual physical challenges.
- Discuss, develop, and demonstrate improved physiological skills appropriate to individual challenged abilities including flexibility, range of motion, muscular strength and endurance and aerobic development.
- Explain and demonstrate improvement in psychomotor development which includes speed, agility, perceptual motor functions, balance, kinesthetic sense, spatial awareness and relationships and hand to eye and foot to eye coordination.
- Identify and recognize muscles and their movements in order to distinguish which types of exercises can be best implemented.
- Appraise the correct use of equipment in class.
- Examine the proper use of terminology related to psychomotor and physiological development.
- Construct an ongoing exercise plan to meet individual needs.

ADAPT 339 Walk and Wheel

This course is designed for students who are disabled and/or physically challenged and want to participate in a general physical education activity course. Individualized walking or wheeling programs are designed to enhance cardiovascular and cardio-respiratory endurance. The course also includes specific exercises for muscular strength, muscular endurance, and flexibility. Small group games and activities are included to promote fitness and fun.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- **SLO #1:** Evaluate personal physical limitation(s) and/or challenge(s), devise a plan and comprehend the importance of living as actively as possible.
- Critique their beginning and end of the semester fitness assessment to determine current fitness levels.
- Recognize and summarize improvements in fitness levels at mid-term and the conclusion of the semester.
ADAPT 495 Independent Studies in Adapted Physical Education

Upon completion of this course, the student will be able to:

- SLO #1: Actively engage in intellectual inquiry beyond that required in order to pass a course of study (College Wide Learning Outcome – Area 4).
- Discuss and outline a proposal of study (that can be accomplished within one semester term) with a supervising instructor qualified within the discipline.
- Design an independent study (to be completed individually or by collaboration of a small group) to foster special knowledge, skills, and experience that are not available in any one regularly scheduled course.
- Use information resources to gather discipline-specific information.
- SLO #2: Utilize modes of analysis and critical thinking to apply theoretical perspectives and/or concepts in the major discipline of study to significant problems and/or educational activities (College Wide Learning Outcome – Area 3).
- Analyze and apply the knowledge, skills and experience that are involved in the independent study to theoretical perspectives and/or concepts in the major discipline of study.
- Explain the importance of the major discipline of study in the broader picture of society.
- SLO #3: Communicate a complex understanding of content matter of the major discipline of study (College Wide Outcome – Area 3).
- Demonstrate competence in the skills essential to mastery of the major discipline of study that are necessary to accomplish the independent study.
- SLO #4: Identify personal goals and pursue these goals effectively (College Wide Outcome – Area 4).
- Utilize skills from the “academic tool kit” including time management, study skills, etc., to accomplish the independent study within one semester term.

Dance (DANCE)

DANCE 310 Jazz Dance I

| Units: | 1 |
| Hours: | 54 hours LAB |
| Course Family: | Jazz Dance Technique (http://crc.losrios.edu/course-families#id_100032) |
| Prerequisite: | None. |
| Transferable: | CSU; UC |
| General Education: | AA/AS Area III(a); CSU Area E2 |
| Catalog Date: | June 1, 2020 |
This physical education course covers barre and center floor warm-ups, exercises, jazz techniques, isolations, walks and turns. This course explores variation of styles in ethnic, lyrical and modern jazz dance given in combinations and offers students the opportunity for exploration and improvisation using jazz steps learned in class. This class is for students with no or very little dance training.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO #1: employ jazz dance as an activity that will promote fitness and wellness in the student's life.
- identify the role that jazz dance has in maintaining health and well-being.
- demonstrate the ability to relieve stress and enjoy life through dance.
- demonstrate an improvement in several areas of fitness, but most notably in cardiovascular fitness, coordination, and flexibility.
- SLO #2: demonstrate skills and dance movements in jazz dance.
- demonstrate body control through proper technique and exercises requiring balance, flexibility, agility, endurance, strength and coordination.
- demonstrate a kinesthetic awareness of placement.
- analyze shape, rhythm, time/texture and quality into space.
- create an atmosphere for self-expression in jazz.
- define, practice and assume a degree of skill of specific jazz techniques, including floor stretches, center barre isolation progression, jazz walk combinations, turns, jazz adage, hops, jumps, leaps, stage presence, and beginning jazz combinations.
- SLO #3: demonstrate an ability to work cooperatively with others to achieve physical, social, and mental skills through participation in jazz dance.
- illustrate the ability to socialize and work with others to practice and perform jazz dance routines.
- illustrate the ability to respect other students in the class and value the contribution they make to the group effort of creating a dance routine.
- SLO #4: develop an appreciation and understanding of jazz dance as an art form and how it relates to other types of dance and forms.
- relate the history and cultural significance of jazz dance in society.
- contrast and compare jazz dance choreographers and dancers past and present.
- develop a better understanding of dance as a performer.

DANCE 312 Jazz Dance II

| Units: | 1 |
| Hours: | 54 hours LAB |
| Course Family: | Jazz Dance Technique (http://crc.losrios.edu/course-families#id_100032) |
| Prerequisite: | DANCE 310 with a grade of "C" or better; or one year of beginning training determined by the professor per an evaluation for the level of proficiency. |
| Transferable: | CSU; UC |
| General Education: | AA/AS Area III(a); CSU Area E2 |
| Catalog Date: | June 1, 2020 |

This beginning/intermediate dance class continues the fundamental jazz skills learned in the previous level with further focus on proper technique including alignment, balance, multiple turns, leaps, and more complex combinations. This course is for students with some previous dance training.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO #1: employ jazz dance as an activity that will promote fitness and wellness in the student's life
- identify the role that jazz dance has in maintaining health and well being.
- demonstrate the ability to relieve stress and enjoy life through dance.
- demonstrate an improvement in several areas of fitness, but most notably in cardiovascular fitness, coordination, and flexibility.
• SLO #2: demonstrate beginning/intermediate skills and dance movements in jazz dance.
• demonstrate body control through proper technique and exercises requiring balance, flexibility, agility, endurance, strength and coordination.
• demonstrate a kinesthetic awareness of placement.
• analyze shape, rhythm, time/texture and quality into space.
• create an atmosphere for self expression in jazz.
• define, practice and assume a degree of skill of specific jazz techniques, including floor stretches, centre barre isolation progression, jazz walk combinations, turns, jazz adage, hops, jumps, leaps, stage presence, and beginning/intermediate jazz combinations.
• SLO #3: demonstrate an ability to work cooperatively with others to achieve physical, social, and mental skills through participation in jazz dance.
• illustrate the ability to socialize and work with others to practice and perform jazz dance routines.
• illustrate the ability to respect other students in the class and value the contribution they make to the group effort of creating a dance routine.
• SLO #4: develop an appreciation and understanding of jazz dance as an art form and how it relates to other types of dance and forms.
• relate the history and cultural significance of jazz dance in society.
• contrast and compare jazz dance choreographers and dancers past and present.
• develop a better understanding of dance as a performer.

DANCE 313 Jazz Dance III

Units: 1
Hours: 54 hours LAB
Course Family: Jazz Dance Technique [Link](http://crc.losrios.edu/course-families#id_100032)
Prerequisite: DANCE 312 with a grade of "C" or better; or two years of beginning toward intermediate skills of jazz dance, determined by the professor per an evaluation for the level of proficiency.
Transferable: CSU; UC
General Education: AA/AS Area III(a); CSU Area E2
Catalog Date: June 1, 2020

This intermediate dance class continues with the fundamental jazz skills learned in the previous level with a further focus on proper technique while performing more complex combinations and exploring different rhythms and styles. This course is for students with previous dance training.

Student Learning Outcomes

Upon completion of this course, the student will be able to:
• employ jazz dance as an activity that will promote fitness and wellness in the student's life. (SLO 1)
• identify the role that jazz dance has in maintaining health and well being.
• identify the role that jazz dance has in maintaining health and well being.
• demonstrate an improvement in several areas of fitness, but most notably in cardiovascular fitness, coordination, and flexibility.
• demonstrate intermediate skills and dance movements in jazz dance. (SLO 2)
• demonstrate body control through proper technique and exercises requiring balance, flexibility, agility, endurance, strength and coordination.
• demonstrate a kinesthetic awareness of placement.
• analyze shape, rhythm, time/texture and quality into space.
• analyze shape, rhythm, time/texture and quality into space.
- define, practice and assume a degree of skill of specific jazz techniques, including floor stretches, center barre isolation progression, jazz walk combinations, turns, jazz adage, hops, jumps, leaps, stage presence, and intermediate jazz combinations.
- demonstrate an ability to work cooperatively with others to achieve physical, social, and mental skills through participation in jazz dance. (SLO 3)
- illustrate the ability to socialize and work with others to practice and perform jazz dance routines.
- illustrate the ability to respect other students in the class and value the contribution they make to the group effort of creating a dance routine.
- develop an appreciation and understanding of jazz dance as an art form and how it relates to other types of dance and forms. (SLO 4)
- relate the history and cultural significance of jazz dance in society.
- contrast and compare jazz dance choreographers and dancers past and present.
- develop a better understanding of dance as a performer.

DANCE 314 Jazz Dance IV

Units: 1
Hours: 54 hours LAB
Course Family: Jazz Dance Technique (http://crc.losrios.edu/course-families#id_100032)
Prerequisite: DANCE 313 with a grade of "C" or better; or training at a level of intermediate skills of jazz dance, determined by the professor per an evaluation for the level of proficiency.
Transferable: CSU; UC
General Education: AA/AS Area III(a); CSU Area E2
Catalog Date: June 1, 2020

This intermediate/advanced dance class offers the opportunity for students to create a personal jazz style using the techniques learned in the previous levels. This course explores variation of styles in ethnic, lyrical and modern given in combinations and offers students the opportunity for exploration and improvisation using jazz steps learned in class. This class is for high intermediate to advanced dance students only.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- employ jazz dance as an activity that will promote fitness and wellness in the student's life. (SLO 1)
- identify the role that jazz dance has in maintaining health and well being.
- demonstrate the ability to relieve stress and enjoy life through dance.
- demonstrate an improvement in several areas of fitness, but most notably in cardiovascular fitness, coordination, and flexibility.
- demonstrate intermediate/advanced skills and dance movements in jazz dance. (SLO 2)
- demonstrate body control through proper technique and exercises requiring balance, flexibility, agility, endurance, strength and coordination.
- demonstrate a kinesthetic awareness of placement.
- analyze shape, rhythm, time/texture and quality into space.
- create an atmosphere for self expression in jazz.
- define, practice and assume a degree of skill of specific jazz techniques, including floor stretches, center barre isolation progression, jazz walk combinations, turns, jazz adage, hops, jumps, leaps, stage presence, and intermediate/advanced jazz combinations.
- demonstrate an ability to work cooperatively with others to achieve physical, social, and mental skills through participation in jazz dance. (SLO 3)
- illustrate the ability to socialize and work with others to practice and perform jazz dance routines.
- illustrate the ability to respect other students in the class and value the contribution they make to the group effort of creating a dance routine.
- develop an appreciation and understanding of jazz dance as an art form and how it relates to other types of dance and forms. (SLO 4)
- relate the history and cultural significance of jazz dance in society.
contrast and compare jazz dance choreographers and dancers past and present.

develop a better understanding of dance as a performer.

DANCE 320 Ballet I

This course covers the fundamentals of beginning ballet technique. Basic terminology, coordination, alignment and execution of beginning ballet technique will be addressed. Students will experience a typical ballet class beginning with exercises at the barre, developed exercises in the center and across the floor exercises. Students will gain strength, agility, flexibility, coordination and balance. Students will also acquire knowledge of ballet history and repertory. Students will present their semester-long study of beginning ballet in a final showcase performance. This course is for students with no to very little dance experience.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO #1: Employ ballet as an activity that will promote fitness and wellness in the student's life.
- Relate the role that ballet has in maintaining health and well-being.
- Demonstrate an improvement in several areas of fitness, but most notably in coordination, agility, strength, balance and flexibility.
- SLO #2: Demonstrate beginning level knowledge of ballet terms and techniques.
- Identify and properly execute beginning barre, center, and across the floor exercises.
- Analyze and safely execute introductory ballet movement patterns.
- Apply beginning level ballet terminology to the execution of ballet positions and techniques.
- SLO #3: Develop an appreciation and understanding of ballet as an art form and how it relates to other types of dance and forms.
- Discuss the historical and traditional foundations of ballet.
- Relate the historical and cultural significance of ballet in society.

DANCE 321 Ballet II

This course is a continuation of beginning ballet technique with a progression in barre, center, and across the floor exercises. Fundamentals of beginning ballet are addressed with greater emphasis on strength and coordination. Students will further develop their ballet skills, movement vocabulary, and sequence construction while advancing their knowledge of ballet history and repertory. Students will present their semester-long study of Level II ballet in a final performance. This course is recommended for students who have successfully completed Ballet I and are at a high beginner or intermediate level.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO #1: Employ ballet as an activity that will promote fitness and wellness in the student's life.
- Relate the role that ballet has in maintaining health and well being.
- Demonstrate an improvement in several areas of fitness, but most notably in strength and coordination.
- SLO #2: Identify and properly execute Level II barre, center, and across the floor exercises.
- Analyze and safely execute Level II ballet movement patterns.
- SLO #3: Demonstrate an ability to work cooperatively with others to achieve physical, social, and mental skills through participation in ballet.
- Collaborate and construct beginning level adagio and allegro sequences.
- Illustrate the ability to respect other students in the class and value the contribution they make to the group effort of creating a sequence.
- SLO #4: Develop an appreciation and understanding of ballet as an art form and how it relates to other types of dance and forms.
- Discuss the historical and traditional foundations of ballet.
- Evaluate ballet as a culturally significant art form in contemporary society.

**DANCE 322 Ballet III**

| Units: | 1 |
| Hours: | 54 hours LAB |
| Course Family: | Ballet Technique [Link](http://crc.losrios.edu/course-families#id_100033) |
| Prerequisite: | DANCE 321 (Ballet II) with a grade of "C" or better; or one year of beginning training with skills that properly execute Level II barre, center, and across the floor exercises, determined by the professor per an evaluation for the level of proficiency. |
| Transferable: | CSU |
| General Education: | AA/AS Area III(a) (effective Summer 2020) |
| Catalog Date: | June 1, 2020 |

This course is a progression of ballet from Dance 321 with an emphasis on technique in barre exercises to improve extensions, center exercises to improve balance and across the floor combinations to challenge the dancer with more complex steps and difficult combinations. This course is recommended for students who have successfully completed Ballet II with a grade of "C" or better or are at an intermediate level to be determined by the instructor.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- SLO#1 Employ ballet as an activity that will promote fitness and wellness in the student's life.
- Demonstrate an improvement in several areas of fitness, most notably in strength, coordination and balance.
- SLO#2 Identify and properly execute Level III barre, center, and across the floor exercises.
- Analyze and safely execute Level III ballet movement patterns and combinations.
- SLO#3 Demonstrate an ability to work cooperatively with other students to achieve physical, social and communication skills through participation in ballet.
- Collaborate and construct intermediate adagio and allegro sequences.
- SLO#4 Develop an appreciation and understanding of ballet as an art form and how it relates to other types of dance.
- Discuss the historical and traditional foundations of ballet as a culturally significant art form in contemporary society.

**DANCE 330 Modern Dance I**

| Units: | 1 |
| Hours: | 54 hours LAB |
| Course Family: | Modern Dance Technique [Link](http://crc.losrios.edu/course-families#id_100034) |
| Prerequisite: | None. |
| Transferable: | CSU; UC (* All PE Activity courses: combined maximum transfer credit, 4 units) |
| General Education: | AA/AS Area III(a); CSU Area E2 |
| Catalog Date: | June 1, 2020 |
This beginning class offers an introduction to basic dance movement and the basic elements of music and rhythm. This course includes rhythmic, isolated and expressive movement as well as elemental concepts of space, time and force. This course is for students with little or no previous dance training.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO #1: employ modern dance as an activity that will promote fitness and wellness in life.
- demonstrate an improvement in several fitness components including muscular strength, muscular endurance, flexibility, coordination, and cardiovascular conditioning.
- recognize the benefits physically of participation in dance, including the impact on overall health.
- SLO #2: demonstrate skills and dance movements in modern dance.
- perform basic modern dance movements safely and with an improved degree of skill and kinesthetic awareness.
- learn modern dance terminology and how it relates to modern dance movement.
- analyze and synthesize movement fundamentals, dance routines, rhythms, and various styles.
- apply their own creative expression to modern dance movement.
- SLO #3: demonstrate an ability to work cooperatively with others to achieve a desired creative outcome through modern dance.
- analyze and problem solve in a group through participation in choreography of modern dance in-class performances.
- SLO #4: develop an appreciation and understanding of modern dance as an art form and how it relates to other types of dance and art forms.
- identify and relate the history and development of modern dance.
- contrast and compare modern dance to various dance forms.

DANCE 332 Modern Dance II

This beginning/intermediate modern dance class continues with the fundamental modern dance skills learned in the previous level. This course includes rhythmic, isolated and expressive movement. Concepts of space, time and force as related to dance will be discussed. Various cultural and contemporary dances will be explored. This course is for students who have successfully completed Modern Dance I or have previous dance training.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO #1: employ modern dance as an activity that will promote fitness and wellness in life.
- demonstrate an improvement in several fitness components including muscular strength, muscular endurance, flexibility, coordination, and cardiovascular conditioning.
- recognize the benefits physically of participation in dance, including the impact on overall health.
- SLO #2: demonstrate beginning/intermediate skills and dance movements in modern dance.
- perform beginning/intermediate modern dance movements safely and with an improved degree of skill and kinesthetic awareness.
- recall modern dance terminology and relate to modern dance movement.
- analyze and synthesize movement fundamentals, dance routines, rhythms, and various styles.
- apply their own creative expression to modern dance movement.
**DANCE 333 Modern Dance III**

**Units:** 1  
**Hours:** 54 hours LAB  
**Course Family:** [Modern Dance Technique](http://crc.losrios.edu/course-families#id_100034)  
**Prerequisite:** DANCE 332 with a grade of "C" or better; or have training at a beginning-intermediate level in modern dance, as determined by the professor per an evaluation for the level of proficiency.  
**Transferable:** CSU; UC  
**General Education:** AA/AS Area III(a); CSU Area E2  
**Catalog Date:** June 1, 2020

This intermediate modern dance class continues to develop fundamental modern dance skills learned in the previous level. The class focuses on proper technique with more complex combinations. The students will perform various types of styles including cultural and contemporary dance. This course is for students who have successfully completed Modern Dance II or have previous dance training.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- **SLO #1:** employ intermediate modern dance as an activity that will promote fitness and wellness in life.
- **SLO #2:** demonstrate an improvement in several fitness components including muscular strength, muscular endurance, flexibility, coordination, and cardiovascular conditioning.
- **SLO #3:** recognize the benefits physically of participation in dance, including the impact on overall health.
- **SLO #4:** demonstrate skills and dance movements in modern dance.
- **SLO #5:** perform intermediate modern dance movements safely and with an improved degree of skill and kinesthetic awareness.
- **SLO #6:** recall modern dance terminology and relate to modern dance movement.
- **SLO #7:** analyze and synthesize movement fundamentals, dance routines, rhythms, and various styles.
- **SLO #8:** apply their own creative expression to modern dance movement.
- **SLO #9:** demonstrate an ability to work cooperatively with others to achieve a desired creative outcome through modern dance.
- **SLO #10:** analyze and problem solve in a group through participation in choreography of modern dance in-class performances.
- **SLO #11:** develop an appreciation and understanding of modern dance as an art form and how it relates to other types of dance and art forms.
- **SLO #12:** identify and relate the history and development of modern dance.
- **SLO #13:** contrast and compare modern dance to various dance forms.

**DANCE 334 Modern Dance IV**
This intermediate/advanced modern dance class continues to develop fundamental modern dance skills learned in the previous level. The class focus is on proper technique while performing complex combinations and developing a personal style. This course creates an opportunity for self-discovery, self-discipline and self-expression in the art form of modern dance. Creative assignments will be given in improvisation and movement communication and expression utilizing problem-solving techniques. This course is for students who have successfully completed Modern Dance III or have previous dance training.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- SLO #1: employ modern dance as an activity that will promote fitness and wellness in life.
- SLO #2: demonstrate an improvement in several fitness components including muscular strength, muscular endurance, flexibility, coordination, and cardiovascular conditioning.
- SLO #3: recognize the benefits physically of participation in dance, including the impact on overall health.
- SLO #4: demonstrate skills and dance movements in modern dance.
- SLO #5: recall modern dance terminology and relate to modern dance movement.
- SLO #6: analyze and synthesize movement fundamentals, dance routines, rhythms, and various styles.
- SLO #7: apply their own creative expression to modern dance movement.
- SLO #8: analyze and problem solve in a group through participation in choreography of modern dance in-class performances.
- SLO #9: develop an appreciation and understanding of modern dance as an art form and how it relates to other types of dance and art forms.
- SLO #10: identify and relate the history and development of modern dance.
- SLO #11: contrast and compare modern dance to various dance forms.

---

**DANCE 351 Urban Hip Hop I**

Upon completion of this course, the student will be able to:

- SLO #1: implement Hip Hop dance skills, steps, and choreographed dance movements.
- SLO #2: select, adapt and demonstrate a warm up that is designed to support the body.
DANCE 352 Urban Hip Hop II

Units: 1
Hours: 54 hours LAB
Course Family: Hip Hop Technique and Competition (http://crc.losrios.edu/course-families#id_100036)
Prerequisite: DANCE 351 with a grade of "C" or better; or one year of beginning training determined by the professor per an evaluation for the level of proficiency.
Transferable: CSU; UC
General Education: AA/AS Area III(a); CSU Area E2
Catalog Date: June 1, 2020

This course builds on the skills introduced with Urban Hip Hop I. Skills, steps, and hip hop dance combinations will progress in difficulty. Students will have more opportunity to explore freestyle movement and participate in session work. The emphasis of this class will cover the progression of hip hop dance beginning with break dance through the current trends of today.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO #1: research the progression of hip hop dance beginning with break dance through the current trends of today
- Compare and contrast the old school moves with the new school moves.
- Categorize the various styles within hip hop dance and distinguish the individual steps that belong to each style.
- SLO #2: explore freestyle movement and participate in session work.
- Originate dance combinations building on the steps taught in class.
- Express emotion with musical interpretation with freestyle dance.
- Execute a three-minute dance at performance level.

DANCE 353 Urban Hip Hop III

Units: 1
Hours: 54 hours LAB
Course Family: Hip Hop Technique and Competition (http://crc.losrios.edu/course-families#id_100036)
Prerequisite: DANCE 352 with a grade of "C" or better; or an intermediate level of training in Hip Hop dance, as determined by the professor per an evaluation for the level of proficiency.
Transferable: CSU; UC
General Education: AA/AS Area III(a); CSU Area E2
Catalog Date: June 1, 2020

This course builds on the skills and steps learned in Urban Hip Hop I and II. Level III dance combinations will be taught covering various styles within hip hop dance. Students will work in groups to create a final presentation that expands a teacher-choreographed dance into a full length performance piece that utilizes choreographic elements and adds student choreography. The emphasis of this class will be on choreographic styles.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO #1: demonstrate an understanding of choreographic Hip Hop Styles.
- Integrate choreographic elements into a hip hop combination and extend it into a three minute performance quality dance.
- Express personal style and emotion when creating hip hop choreography.
- associate hip hop steps with their cultural and historical origins.
- demonstrate 3 Level III hip hop dance combinations.
- identify the choreographic styles of combinations taught and recognize these styles in other choreography.
- SLO #2: develop intermediate level Hip Hop dance skills.
- state the names of 10 or more level III hip hop steps.
- execute with appropriate technique and style at least 10 intermediate level skills or steps.

DANCE 354 Urban Hip Hop IV

| Units: | 1 |
| Hours: | 54 hours LAB |
| Course Family: | Hip Hop Technique and Competition (http://crc.losrios.edu/course-families#id_100036) |
| Prerequisite: | DANCE 353 with a grade of "C" or better; or an intermediate to advanced level of training in Hip Hop dance, as determined by the professor per an evaluation for the level of proficiency. |
| Transferable: | CSU; UC |
| General Education: | AA/AS Area II(a); CSU Area E2 |
| Catalog Date: | June 1, 2020 |

This is an intermediate level course that builds on the skills learned in Urban Hip Hop levels I-III. Students will be introduced to freestyle movement and the elements of cyphering and battling. Musicality, emotion, and storytelling are explored as students develop their own artistry within freestyle movement. The emphasis of this class will be on utilizing intermediate level skills with freestyle movement.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO #1: express freestyle movement and the elements of cyphering and battling
- experiment with musicality, emotion, and storytelling in freestyle hip hop dance.
- correlate movement with the movement of other dancers while battling.
- evaluate the movement of other dancers and 'bite', 'burn', or 'kill off' their opponent while battling.
- compare and contrast the freestyle battling elements of one-on-one, two-on-two, and crew battling.
- SLO #2: combine intermediate level Hip Hop skills and steps to freestyle dancing, cyphering, and battling.
- practice and apply intermediate level hip hop skills with freestyle movement.
- develop original intermediate level skills, tricks, steps, bites, burns and kill-offs to incorporate with freestyle movement.

DANCE 386 Dance History

| Units: | 3 |
| Hours: | 54 hours LEC |
| Prerequisite: | None. |
| Transferable: | CSU; UC |
| General Education: | AA/AS Area I; AA/AS Area VI; CSU Area C1; IGETC Area 3A |
| Catalog Date: | June 1, 2020 |

This comprehensive study of the history, evolution and culture of dance as an art form encompasses ballet, modern, African and social dance. The analysis of various styles of dance commences with social order, expression and the power of dance in a culture.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO #1: Examine and discuss dance as a performing art derived from many different forms, styles and cultures throughout history.
- Analyze how dance was considered a function of cleansing, cathartic release and the proper education of a good citizen in the early Greek society.
- Examine the history of ballet, the oldest form of Western dance.
Develop an understanding of modern dance dating back to the early 1900's and how it continues to evolve and change to present day.

Examine the components of jazz dance including movements from ballet, modern, African and street dance.

SLO #2 Develop a world view of dance with strong ethnic identities in many different areas of the world.

Identify different ways of looking at cross-cultural dance.

Assess the chronology of world history through dance and the development of traditions.

SLO #3 Analyze the cultural dynamics of political events, scientific advancements and religious ceremonies as it relates to dance history.

DANCE 410 Dance Composition and Production I

Units: 2
Hours: 18 hours LEC; 54 hours LAB
Course Family: Dance Composition and Production
Prerequisite: None.
Transferable: CSU; UC (* Any PE Activity courses combined: maximum credit, 4 units)
General Education: AA/AS Area III(a); CSU Area E2
Catalog Date: June 1, 2020

This course introduces students to the elements of choreography and the creative processes of composing dances. Students assume the roles of dancer and choreographer in developing improvisation, directing, and performance skills to produce and perform original group compositions. This course culminates in a final showcase performance designed to give students an opportunity to experience a college level dance production.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO #1: Employ dance as an activity that will promote fitness and wellness in their life.
- Apply fitness concepts to dance and understand the benefits of those components.
- SLO #2: Demonstrate basic knowledge of dance composition and production.
- Demonstrate beginning level technique for the creation of choreography.
- Identify the stages of the creative process: preparation, incubation, elaboration, presentation.
- Identify the elements of choreography.
- Understand the roles of the dancer and the choreographer.
- Understand general stage directions and operations of a dance production.
- SLO #3: Develop the ability to work collaboratively and individually to achieve a desired creative outcome.
- Analyze and solve choreographic challenges.
- Develop an appreciation for personal expression.
- Develop an appreciation for group creativity.
- SLO #4: Develop an appreciation for the creative processes involved in composing and producing dances of several styles and genres.
- Relate and reflect thoughtfully on the development of one's creative processes.
- Relate the creative processes of modern and contemporary choreographers.

DANCE 411 Dance Composition and Production II
This course provides an opportunity to explore the processes of composing and producing beginning to intermediate level choreography. Students will work in small groups to develop original compositions that demonstrate an understanding of choreographic forms and creative processes. This course culminates in a final showcase performance.

### Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO #1: Employ dance as an activity that will promote fitness and wellness in their life
- Apply fitness concepts to dance and understand the benefits of those components.
- SLO #2: Demonstrate beginning to intermediate knowledge of dance composition and production.
- Demonstrate beginning to intermediate level technique for the creation of choreography.
- Identify and develop the stages of the creative process: preparation, incubation, elaboration, presentation.
- Identify the elements of choreography.
- Identify choreographic devices.
- Understand the roles of the dancer and the choreographer.
- Understand the role of house and backstage attendants.
- Understand general stage directions and operations of a dance production.
- SLO #3: Develop the ability to work collaboratively and individually to achieve a desired creative outcome.
- Analyze and solve choreographic challenges.
- Develop an appreciation for personal expression.
- Develop an appreciation for group creativity.
- SLO #4: Develop an appreciation for the creative processes involved in composing and producing dances of several styles and genres.
- Relate and reflect thoughtfully on the development of one's creative processes.
- Relate the creative processes of modern and contemporary choreographers.

### DANCE 412 Dance Composition and Production III

This course provides an opportunity to explore the processes of composing and producing intermediate level choreography. Students will identify and integrate the contributions of modern and contemporary choreographers for the purpose of expanding their choreography skills. An emphasis on smaller compositions, for example, solos, duos, and trios will be included along with the roles of lighting and costume design. This course culminates in a final showcase performance.

### Student Learning Outcomes

Upon completion of this course, the student will be able to:
Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO #1: Employ dance as an activity that will promote fitness and wellness in their life.
- Apply fitness concepts to dance and understand the benefits of those components.
- SLO #2: Demonstrate intermediate knowledge of dance composition and production.
- Demonstrate intermediate level technique for the creation of choreography.
- Develop and evaluate the stages of the creative process: preparation, incubation, elaboration, presentation.
- Integrate the elements of choreography and choreographic devices to produce compositions.
- Employ and evaluate lighting and costuming design.
- SLO #3: Develop the ability to give and receive choreographic direction to achieve a desired creative outcome.
- Analyze and solve choreographic challenges in augmenting choreography.
- Demonstrate the ability to execute and project the choreographer's vision.
- SLO #4: Develop an appreciation for the creative processes involved in composing and producing dances of several styles and genres.
- Relate and reflect thoughtfully on the development of one's creative processes.
- Identify and apply choreographic techniques employed by modern and contemporary choreographers.
- Evaluate dance as a culturally significant art form in contemporary society.
Identify and apply choreographic techniques employed by modern and contemporary choreographers.
Evaluate dance as a culturally significant art form in contemporary society and from a cross-disciplinary perspective.

DANCE 495 Independent Studies in Dance

Units: 1 - 3
Hours: 54 - 162 hours LAB
Prerequisite: None.
Transferable: CSU
General Education: AA/AS Area III(a); CSU Area E2
Catalog Date: June 1, 2020

An independent studies project involves an individual student or small group of students in study, research, or activities beyond the scope of regularly offered courses. See the current catalog section of “Special Studies” for full details of Independent Studies.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO #1: Actively engage in intellectual inquiry beyond that required in order to pass a course of study (College Wide Learning Outcome – Area 4).
- Discuss and outline a proposal of study (that can be accomplished within one semester term) with a supervising instructor qualified within the discipline.
- Design an independent study (to be completed individually or by collaboration of a small group) to foster special knowledge, skills, and experience that are not available in any one regularly scheduled course.
- Use information resources to gather discipline-specific information.
- SLO #2: Utilize modes of analysis and critical thinking to apply theoretical perspectives and/or concepts in the major discipline of study to significant problems and/or educational activities (College Wide Learning Outcome – Area 3).
- Analyze and apply the knowledge, skills and experience that are involved in the independent study to theoretical perspectives and/or concepts in the major discipline of study.
- Explain the importance of the major discipline of study in the broader picture of society.
- SLO #3: Communicate a complex understanding of content matter of the major discipline of study (College Wide Outcome – Area 3).
- Demonstrate competence in the skills essential to mastery of the major discipline of study that are necessary to accomplish the independent study.
- SLO #4: Identify personal goals and pursue these goals effectively (College Wide Outcome – Area 4).
- Utilize skills from the “academic tool kit” including time management, study skills, etc., to accomplish the independent study within one semester term.

Fitness (FITNS)

FITNS 306 Aerobics: Cardio-Kickboxing

Units: 1
Hours: 54 hours LAB
Prerequisite: None.
Transferable: CSU; UC (Any or all PE Activity courses combined: maximum credit, 4 units)
General Education: AA/AS Area III(a); CSU Area E2
Catalog Date: June 1, 2020

This course emphasizes proper alignment, execution, and timing of faster paced movements from kickboxing, boxing, and aerobic dance to improve cardiovascular fitness. Various training methods will also be used to improve individual strength and flexibility.

Student Learning Outcomes

Upon completion of this course, the student will be able to:
FITNS 310 Aquatic Fitness I

Units: 1
Hours: 54 hours LAB
Course Family: Aerobic Water Fitness (http://crc.losrios.edu/course-families#id_100019)
Prerequisite: None.
Advisory: Although no swimming skills are needed or required, it is suggested that students are comfortable in an aquatic environment since the class will be taught in shallow and deep water.
Transferable: CSU; UC
General Education: AA/AS Area III(a); CSU Area E2
Catalog Date: June 1, 2020

This course is designed to improve student’s fitness level through the use of shallow and deep water exercise. The course will focus on using the resistance of the water for low or non-weight bearing exercise to improve cardiovascular fitness, muscular strength and endurance, and flexibility in shallow and deep water. Additionally, students will learn information related to overall health and fitness. No swimming skills are needed as flotation devices such as aqua joggers will be provided for deep water workouts.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO #1. Understand, describe and demonstrate knowledge of physical fitness as it relates to aquatic exercise.
- Analyze their pre and post semester fitness levels using the class assessment test.
- Demonstrate and use proper form and technique related to aquatic exercise.
- SLO #2. Formulate individual fitness goals, apply appropriate training principles toward acquisition of goals.
- Develop, improve and adapt workout intensity, duration and coordination throughout the course.
- Demonstrate understanding of aerobic vs. anaerobic aqua exercise and the need for both.
- SLO #3. Design an aqua-exercise workout to include emphasis in cardiovascular exercise, muscular strength and endurance, and a component to improve flexibility.

FITNS 314 Aquatic Fitness III- Deep Water Jogging

Units: 1
Hours: 54 hours LAB
Course Family: Aerobic Water Fitness (http://crc.losrios.edu/course-families#id_100019)
Prerequisite: None.
Advisory: Although no swimming skills are needed or required, it is strongly suggested that students enrolled in this class are comfortable in an aquatic environment, especially deep water.
Transferable: CSU; UC
General Education: AA/AS Area III(a); CSU Area E2
Catalog Date: June 1, 2020
This jogging/running course uses the resistance of deep water to build and/or improve muscular strength and endurance, cardiovascular fitness and increases flexibility while wearing a flotation belt to maintain a vertical position in the water. It is a fitness class for those individuals who want to improve their current fitness level with non-weight bearing exercise in the water.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO #1. Understand, demonstrate and discuss components of fitness as they relate to deep water jogging.
- Compare and contrast the difference of jogging and running in the water vs on land.
- SLO #2. Comprehend the relationship of different heart rates used in fitness training and how they relate to fitness level.
- Discuss, compute and understand their own resting, ambient, training and recovery heart rate several times throughout the semester and relate to current fitness level.
- Explain, understand and demonstrate the difference between aerobic and anaerobic running workouts in the water as well as the benefit of each in regard to fitness training.
- Demonstrate improvement in cardiovascular fitness, especially endurance throughout the course by increased jogging/running intensity and duration before a need to rest.
- SLO #3. Understand and use proper form, technique and mechanics in regard to jogging and running in deep water.
- Discuss and comprehend the principles of hydrostatic pressure and viscosity, as they relate to deep water jogging and running.
- Understand and demonstrate proper body alignment in the water with respect to the flotation belt used in this class.

FITNS 320 Body Fitness

| Units: | 1 |
| Hours: | 54 hours LAB |
| Prerequisite: | None. |
| Transferable: | CSU; UC |
| General Education: | AA/AS Area III(a); CSU Area E2 |
| Catalog Date: | June 1, 2020 |

This course is designed to assess and improve physical fitness levels, enhance weight control, and encourage a healthy attitude toward lifelong fitness. Students receive theories and practical activities involved in obtaining and maintaining a healthy weight and appropriate level of fitness.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO #1 Define and participate in regular physical conditioning program.
- Identify individual goals and objectives and develop diet and fitness plans based on those goals.
- Recognize, relate and appreciate the need for lifelong fitness conditioning.
- SLO#2 Analyze and accurately assess current fitness levels.
- Modify workouts as cardiovascular and strength levels improve.
- Evaluate fitness levels throughout the semester.
- SLO#3 Implement proper dietary strategies for weight control.
- Assess current nutrition habits with the use of food journals.
- Investigate current trends in nutrition and fallacies of fad diets.

FITNS 323 Fitness Ball
The fitness ball is a valuable tool for developing core strength (middle of your body), flexibility and balance. Because of the fitness ball’s inherent instability, the effect of traditional strength training exercises is intensified when performed in conjunction with the fitness ball. Students will learn to safely and effectively execute strengthening exercises for all the major muscle groups with and without hand weights, flexibility exercises, and balancing exercises. Specific topics and exercises may vary each semester depending on the needs of the students.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO #1: Evaluate fitness level in various components of fitness using standard tests and measurements.
- Establish a pre/mid/post training fitness profile as measured by fitness assessments.
- Measure an improvement in body composition, muscular endurance and flexibility as evidenced by the fitness assessments.
- SLO #2: Design, implement and evaluate a fitness program.
- Modify exercises to suit the changing needs and abilities of the individual as measured by instructor observation and responses to written classwork/homework.
- Conceptualize the kinesiology of exercises presented as assessed by written exams/homework.
- Create a personalized program for home use that addresses strength, flexibility and balance as measured by a fitness ball portfolio. The program will evolve as the student gains experience and skills.
- Understand safety guidelines for each exercise.
- Size and inflate the ball according to body dimensions.

FITNS 324 Mat Pilates

This beginning course is a unique methodology that offers improvement in core strength, posture and flexibility. Mat Pilates is designed to work with the deepest muscles with a sequence of fundamental exercises to achieve improved balance and position control while strengthening and toning the entire body.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO #1 Demonstrate an improvement in several areas of fitness.
- Increase in joint mobility.
- Gain greater strength and flexibility of the large and small muscles for core stabilization.
- SLO #2 Apply the Pilates method to a routine practice to create more challenges with endurance and range of motion.
- Improve strength, stamina, alignment and breath control.
- SLO #3 Create a personalized program for home use that addresses strength, flexibility and balance.
- Understand modifications to achieve safety using different patterns of movement.
- Build strength progressively with more challenges, coordination and increased intensity.
FITNS 326 Mat Pilates II

**Units:** 1  
**Hours:** 54 hours LAB  
**Prerequisite:** None.  
**Advisory:** FITNS 324  
**Transferable:** CSU; UC  
**General Education:** AA/AS Area III(a); CSU Area E2  
**Catalog Date:** June 1, 2020

This intermediate course is designed to improve core strength and overall body awareness using the unique methodology of Mat Pilates. Mat Pilates II will include a sequence of fundamental exercises with the addition of intermediate level exercises. The addition of equipment (i.e. fitness balls, resistance bands, etc.) will be introduced.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- SLO#1 Integrate basic mind/body skills using Mat Pilates exercises and techniques in a general group fitness setting.
- Gain muscular strength and endurance.
- Increase joint mobility.
- SLO#2 Apply and determine fitness goals, safety and effectiveness using the Pilates method.
- Improve general daily mobility.
- SLO#3 Comprehend and focus on proper spinal alignment and breathing techniques while demonstrating Mat Pilates exercises.
- SLO#4 Identify which muscles are used for core strength.

FITNS 327 Mat Pilates III

**Units:** 1  
**Hours:** 54 hours LAB  
**Prerequisite:** None.  
**Advisory:** FITNS 324 and 326  
**Transferable:** CSU; UC  
**General Education:** CSU Area E2  
**Catalog Date:** June 1, 2020

This course will use Mat Pilates training for muscle groups through controlled exercises taught at an advanced level. The advanced course is designed to improve in strength, posture, flexibility, and coordination. This course will include resistance methods of training and use of equipment (i.e. fitness balls, resistance bands, etc.) to help build strength and improve mobility.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- SLO #1: Students will demonstrate improvement in strength, posture, flexibility, and coordination.
- Increase muscular strength and endurance.
- SLO #2: Determine and apply fitness goals, safety, and effective technique using the Pilates method.
- Understand correct technique in order to improve daily mobility.
- SLO #3: Demonstrate the knowledge of various exercises and practical application in the study of Pilates at an advanced level.
- Develop an at home exercise routine at an advanced level.
- SLO #4: Focus of proper spinal alignment and breathing techniques via Mat Pilates exercises.
- Students will identify which muscle groups are used during each exercise.

FITNS 328 Thighs, Abs, and Gluteals (TAG)
This course is designed to be a workout specific to the thighs, abdominal and gluteal muscles included as part of the Cross Training family of Power Sculpting and Fitness Ball. This class will include workouts using a variety of calisthenics/exercises designed to enhance muscular strength and endurance, including core strength.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO #1: Evaluate strength and personal fitness levels for lower body and core training using standard fitness testing.
- Create an individual fitness profile determined by a pre-, mid- and post-fitness assessments.
- Analyze their fitness and flexibility levels and apply training methods to achieve fitness goals.
- Appraise improvements in body composition, muscular strength, muscular endurance and flexibility.
- SLO #2: Identify and apply exercises used in motion as related to lower body conditioning, core training and balance.
- Organize exercise variables using repetition, resistance, and time to train for desired outcome of muscular strength, endurance and balance when working specific muscle groups.
- Apply progressive exercises for improvement of muscular strength, muscular endurance, core training, and balance; including principles of frequency, intensity, duration and types of activities as components of exercise.
- SLO # 3: Understand and apply safety techniques, proper biomechanics to create efficiency of psychomotor skills and achieve maximum benefits in that exercise.
- Analyze and train using proper lifting and other locomotor movements.
- Utilize proper exercise technique during the warm up, workout, and cool down.
- Recognize and identify basic anatomy of specific muscles.
- Recall and discriminate major muscle groups in recruiting to perform specific types of exercises.

FITNS 331 Boot Camp Fitness

This course is designed to be a physically intense and challenging fitness class. Training exercises used during this class will include jogging, interval training, hill running training, obstacle courses, and performing a variety of calisthenics designed to enhance muscular strength and endurance. In addition, students will be challenged to understand and apply fitness training principles. The students will train individually, with a partner or in a team setting.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO #1: Evaluate strength and fitness levels for daily living using standard fitness testing.
- Create an individual fitness profile determined by a pre-, mid- and post-fitness assessments.
- Analyze their fitness levels and apply training methods to achieve fitness goals.
- Appraise improvements in aerobic capacity, body composition, muscular strength, muscular endurance and flexibility.
- Apply target heart rate and perceived exertion to evaluate the effectiveness of their workout sessions.
- SLO #2: Identify and apply exercises used in motion as related to conditioning.
- Apply their physical abilities in conducting various work-out sessions by training individually, with a partner, or as a team.
- SLO #3: Design, implement, and evaluate a weight training program for personal use.
- Design a personal heart rate training zone.
- Calculate a heart rate training zone.
- SLO #4: Understand and apply safety techniques and training etiquette to boot camp fitness.
- Analyze and train using proper walking, jogging, running and other locomotor movements.
- Utilize proper exercise technique during the warm up, workout, and cool down.

FITNS 339 Multi Sport Training for Fitness

| Units: | 1 |
| Hours: | 54 hours LAB |
| Prerequisite: | None. |
| Transferable: | CSU; UC (Any or all PE Activity courses combined: maximum credit, 4 units) |
| General Education: | AA/AS Area III(a); CSU Area E2 |
| Catalog Date: | June 1, 2020 |

This course covers multi-sport training, including swimming, cycling and running. This class is designed for the beginner triathlete or any student interested in cross training for fitness. The student will be taught how to develop improved techniques in all three activities. Students must supply their own road or mountain bike and helmet. This course may be taken four times for credit.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO #1: Apply basic knowledge and skill learned to participate in cross training or triathlons.
  - Operate a bicycle and maintain it in good working condition.
  - Practice proper biking form and tactical maneuvers on a bicycle.
  - Apply bicycle safety, etiquette and the rules of the road.
  - Demonstrate how to breathe properly while performing correct swimming techniques.
  - Design a progressive swimming workout that will prepare them to improve cardiovascularly.
  - Apply cross training principles to their total workout plan.
  - Use proper running form for maximum efficiency in training.
- SLO #2: Evaluate their own fitness level and create a training program to prepare for cross training for fitness or triathlons.
  - Employ fitness concepts to the training of the three sports involved.
  - Compare a pre, mid and post test to assess their fitness level.
  - Design a progressive biking workout that will prepare them to improve cardiovascularly.
  - Design a progressive running workout that will prepare them to improve cardiovascularly.
  - Design an overall workout for all three sports that meets their desired individual goals.
- SLO #3: Understand and apply the safety rules, etiquette rules and procedures within the sports of swimming, cycling, and running.
  - Create a plan for proper hydration, safety and mental strategies for each sport.
  - Relate to others in a positive manner within the fitness training community.

FITNS 348 High-Intensity Interval Training
This course is designed to be a physically intense and total body workout included as part of the Cross Training family of Boot Camp Fitness. This class will include workouts using running, obstacle courses, and performing a variety of calisthenics designed to enhance muscular strength and endurance used through high intensity intervals.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- **SLO #1:** Evaluate strength and personal fitness levels for high-intensity interval training using standard fitness testing.
- **SLO #2:** Create an individual fitness profile determined by a pre-, mid- and post-fitness assessments.
- **SLO #3:** Analyze their fitness levels and apply training methods to achieve fitness goals.
- **SLO #4:** Appraise improvements in aerobic capacity, body composition, muscular strength, muscular endurance, agility, power, speed, and flexibility.
- **SLO #5:** Apply target heart rate and perceived exertion to evaluate the effectiveness of their workout sessions.

**FITNS 352 Power Sculpting**

Power Sculpting is a non-impact conditioning course designed to enhance muscular fitness (muscular endurance and muscular strength), balance, and improve body composition by sculpting and defining muscles through the use of resistance equipment (other than weight machines), core training, calisthenics, and flexibility exercises.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- **SLO #1** Demonstrate an understanding of the process of determining the validity of fitness and health information using the scientific method and the relationship between scientific research and established knowledge.
- **SLO #2** Evaluate and measure improvement of one's own muscular fitness level by using the fitness components such as muscular strength, muscular endurance, body composition, body measurement and flexibility.
- **SLO #3** Utilize knowledge to design, develop, and implement an effective personalized fitness program.
- **SLO #4** Organize program variables (reps, resistance, time) to train for the desired outcome of muscular strength and/or muscular endurance when performing exercises that target specific muscle groups.
demonstrate proper technique in executing power sculpting exercises.

SLO #3 Understand biomechanical movement as applied to physical activity to create efficiency of psychomotor skills and achieve maximum benefits in that activity.

recognize and identify major muscles of the body and their movements/mechanics.

discriminate major muscle groups worked by each sculpting exercise to distinguish and develop/maintain their function in exercise.

select an appropriate stretch for a target muscle group.

FITNS 355 Workforce Fitness

This physical education course emphasizes concepts related to health, physical fitness and recreation as they relate to the industrial worker. Exercise programs will be designed to improve specific muscle groups impacted in the occupational setting.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO #1 Demonstrate an understanding of the process of determining the validity of fitness and health information using the scientific method and the relationship between scientific research and established knowledge.

- Demonstrate basic understanding of health and fitness. Students at various levels of knowledge and fitness will be challenged to improve to the next level.

- SLO #2 Utilize knowledge to design, develop, and implement an effective personalized fitness program.

- Apply and plan a personal fitness program using proper lifting techniques as well as the mechanics of lifting, pushing and carrying. Students at various levels of knowledge and fitness will be challenged to improve to the next level.

- Apply and plan a personal fitness plan using proper strength and cardiovascular training. Students at various levels of knowledge and fitness will be challenged to improve to the next level.

- SLO #3 Recognize motivational techniques and apply them to enable the student to create lifestyle changes in fitness and health.

- Assess current habits and apply behavioral modification procedures to ensure healthier choices. Students at various levels of knowledge and fitness will be challenged to improve to the next level.

FITNS 380 Circuit Weight Training

Circuit Weight Training shall introduce the student to a fitness program of progressive resistive exercises designed to promote improvement in muscular strength and endurance, cardiovascular endurance, and flexibility, as well as, decrease in body fat percentage. The student will move in a prescribed circuit (alternating timed lifting with active recovery) utilizing machines, free weights, cardiovascular activities, and flexibility training.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO #1. develop fitness in the following areas: cardiovascular, muscular strength, muscular endurance and flexibility.

- analyze their current fitness levels and develop personalized goals for fitness improvement.

- apply fitness concepts in circuit training.
SLO#2. develop an understanding of cardiovascular fitness and how it applies to circuit training.

monitor heart rates during workouts.

FITNS 381 Weight Training

Units: 1
Hours: 54 hours LAB
Prerequisites: None.
Transferable: CSU; UC (Any or all PE Activity courses combined: maximum credit 4 units)
General Education: AA/AS Area III(a); CSU Area E2
Catalog Date: June 1, 2020

This physical education course is designed to develop fitness strength through weight training. Students will learn basic weight training techniques using the weight machines and basic free lifts. The student will be able to design and implement their own weight training program for future use after taking this class.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO #1 Evaluate strength and fitness levels using standard fitness testing.
- Identify goals and design weight training programs based upon personal goals as recorded on workout logs. Students will utilize the weight circuit when developing their program.
- Students will compare strength tests, analyze results, and formulate new strategies for meeting unattained goals.
- SLO #2 Identify concepts and differentiate between types of strength training programs
- Explain principles and concepts of progressive resistance training. Students will explore the weight circuit and how to best utilize it.
- Experiment with different types of training programs to find one which best suits individual needs
- SLO #3 Design, implement, and evaluate a personalized strength training program
- Conceptualize the kinesiology of lifts presented as assessed by written exam
- Modify exercises to suit changing levels of strength
- SLO #4 Recognize safety issues in weight training including spotting, collars, and class awareness.
- Demonstrate proper lifting techniques at each level as evaluated by the instructor.

FITNS 384 Weight Training II

Units: 1
Hours: 54 hours LAB
Course Family: Weight Training (http://crc.losrios.edu/course-families#id_100065)
Prerequisites: None.
Advisory: FITNS 381
Transferable: CSU; UC
General Education: AA/AS Area III(a); CSU Area E2
Catalog Date: June 1, 2020

This physical education course is designed to stress the proper guidelines, principles and techniques of weight lifting and the development of muscular strength and endurance at an intermediate level. The students will design and implement their own weight training program.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO #1 Evaluate muscular strength, muscular endurance and cardiorespiratory fitness levels using standard fitness testing.
- Identify goals and design weight training programs based upon personal goals as recorded on workout logs.
• Compare strength tests, analyze results, and formulate new strategies at an intermediate level.
• SLO #2 Identify and apply concepts and differentiate between types of strength training programs at an intermediate level.
• Explain principles and concepts of progressive resistance training at the intermediate level as it applies to their individual program.
• Experiment with different types of training programs to find one which best suits individual needs.
• SLO #3 Design, implement, and critique a personalized strength training program.
• Conceptualize the mechanics of lifts presented as assessed by written exam.
• Modify exercises to suit changing levels of strength.
• SLO #4 Demonstrate proper lifting techniques at an intermediate level as evaluated by the instructor.
• Practice safety in weight training including spotting, collars and class awareness.

FITNS 386 Weight Training III

Units: 1
Hours: 54 hours LAB
Course Family: Weight Training (http://crc.losrios.edu/course-families#id_100065)
Prerequisite: None.
Advisory: FITNS 384 with a grade of "C" or better
Transferable: CSU; UC
General Education: AA/AS Area III(a); CSU Area E2
Catalog Date: June 1, 2020

This physical education course is designed to stress the proper guidelines, principles and techniques of weight training and the development of muscular strength, endurance and power at an advanced level. More emphasis will be placed on free weights as the student progresses. The students will design and implement their own weight training program.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• SLO #1: Evaluate muscular strength, muscular endurance and cardiorespiratory fitness levels using standard fitness testing.
• Identify goals and design weight training programs based upon personal goals as recorded on workout logs.
• Compare strength tests, analyze results, and formulate new strategies at an advanced level.
• SLO #2: Understand biomechanical movement and differentiate between types of strength training exercises at an advanced level.
• Apply advanced weight training principles and techniques to exercise routines.
• Experiment with different types of exercises and programs to find one which best suits individual goals.
• SLO #3: Design, implement, and analyze a personalized strength training program at an advanced level.
• Modify exercises to suit changing levels of strength.
• Demonstrate and evaluate stabilization, balance and core exercises to improve performance.
• Examine and demonstrate advanced strength and conditioning techniques to improve speed, agility and quickness.
• SLO #4: Demonstrate proper lifting techniques and form at an advanced level as evaluated by the instructor.
• Practice safety in weight training including spotting, collars, and class awareness.

FITNS 390 Basic Yoga

Units: 1
Hours: 54 hours LAB
Prerequisite: None.
Transferable: CSU; UC
General Education: AA/AS Area III(a); CSU Area E2
Catalog Date: June 1, 2020
This course in Yoga emphasizes breathing, stretching, and relaxing techniques. Yoga positions and philosophies are examined.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- **SLO#1** Utilize knowledge to design, develop and implement an effective personalized fitness program.
- identify and demonstrate hatha postures and classify yoga methods.
- develop a personalized yoga workout that can be modified to their strengths and weaknesses.
- **SLO#2** Understand biomechanical movement as applied to physical activity to create efficiency of psychomotor skills and achieve maximum benefits in that activity.
- Identify the major muscle groups.
- Improve flexibility for lifelong fitness.
- Identify and perform breathing patterns
- Explain duration and repetition guidelines associated with hatha yoga asana.
- **SLO#3** Enable the student to create lifestyle changes in fitness and health.
- apply and evaluate the benefits of yoga as a tool for stress reduction and improved range of motion.

FITNS 393 Yoga II

Units: 1
Hours: 54 hours LAB
Prerequisite: FITNS 390 with a grade of "C" or better
Transferable: CSU; UC
General Education: AA/AS Area III(a)
Catalog Date: June 1, 2020

Yoga is an East Indian method of mind/body exercise designed to stretch, strengthen, and enhance muscle tone through the practice of asanas (poses) and pranayama (breathing exercises). Yoga practice plus meditation helps decrease stress and increase energy levels while improving focus, concentration, and self-realization. The variety of health benefits a yoga practice offers are: for inner harmony, balance, and overall well-being, for spiritual connection and growth; or for stretching and strengthening a variety of muscle groups involved in a yoga practice. This course is designed to assist any and all of those goals through support and guidance in a safe and nurturing learning environment. Students will be required to purchase a yoga mat.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- **SLO#1** Utilize knowledge to design, develop and implement a progressive personal yoga session.
- Identify breath control practices for heating the body, calming the mind, balancing the emotions, soothing the nerves, and relaxing the body.
- **SLO#2** Understand biomechanical movement as applied to yoga movement to create efficiency of psychomotor skills and achieve maximum benefits of body and breath work.
- Safely and effectively execute asanas (poses) and pranayama (breathing exercises).
- **SLO#3** Enable the student to create lifestyle changes in fitness and health.
- Express a solid understanding of yogic principles, practices, history and philosophy.
- Describe meditation methods to improve concentration, focus and mood.

FITNS 394 Yoga III
This is an advanced yoga course that allows students to continue to explore and develop their yoga practice, and to learn a deeper focus for stress reduction and relaxation. This class is designed to advance the practice of the individual through stretching, strengthening, and enhancing muscle tone. This will be done through the practice of advance asanas (poses) and pranayama (breathing exercises). Yoga practice plus meditation helps decrease stress and increase energy levels while improving focus, concentration, and self-realization. Students will be required to purchase a yoga mat.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- **SLO #1:** Successfully perform asanas and pranayama and utilize yoga as a means to lifelong fitness, including an understanding and recognition of a yoga practice and training methods, and applying them to their own yoga practice. Explain and demonstrate the fundamental techniques of asanas.
- **SLO #2:** Choose, differentiate, and demonstrate the proper use and care of yoga props.
- **SLO #3:** Demonstrate proper form and technique of vinyasas, flow, balance postures and restorative yoga.
- **SLO #4:** Demonstrate proper form and technique of arm balance postures, headstands and handstand postures.
- **SLO #5:** SLO #2: Be comfortable in a group setting and with the social aspects of a group yoga practice.
- **SLO #6:** Understand the basic components of teaching a yoga session to a group.
- **SLO #7:** Analyze the correct posture technique of others in the class, demonstrate yoga assisting etiquette.
- **SLO #8:** Demonstrate the ability of self-reflection and assessment, assessment of peers, and constructive critiques of a yoga session.
- **SLO #9:** Arrange a music playlist that will aid in the flow of a yoga practice.
- **SLO #10:** SLO #3 express a solid understanding of yogic principles, practices, history and philosophy.
- **SLO #11:** Recount the 8 limbs of yoga and how they apply to the yogic lifestyle.
- **SLO #12:** Recount the 7 Chakras and how they apply to the yogic lifestyle.

This course is designed to improve cardiovascular fitness, muscle endurance, and flexibility. Weight management, nutritional guidelines and healthy living information will also contribute to overall health and wellness for the student in this course.

**FITNS 406 Walking and Jogging**

Upon completion of this course, the student will be able to:

- **SLO #1:** Demonstrate an understanding of the process of determining the validity of fitness and health information using the scientific method and the relationship between scientific research and established knowledge.
- **SLO #2:** Use critical thinking skills combined with course information to differentiate between valid scientific health and fitness products and non-effective health and fitness products.
- **SLO #3:** SLO #2: Utilize knowledge to design, develop, and implement an effective personalized fitness program.
- **SLO #4:** Evaluate and measure improvement of one’s own fitness level in the basic fitness components such as body composition, body measurement, target heart rate zone, and flexibility. Measure and calculate resting heart rate, maximum heart rate, and target heart rates.
- **SLO #5:** Comprehend and recognize improved levels of fitness through fitness testing and recognizing those improvements as each a separate component of fitness.
Practice proper biomechanical techniques for both walking and jogging to insure a safe workout to maximize the efficiency of the workout.

Establish an effective work-out program suited to the student's individual needs.

SLO #3: Recognize and analyze the implementation of fitness principles as related to weight management through walking and jogging for fitness.

Establish appropriate goals in fitness workouts and measure progress in those goals.

Utilize nutrition information, including caloric intake to enhance weight loss with exercise if that is the goal of the student.

FITNS 440 Swimming I

**Units:** 1  
**Hours:** 54 hours LAB  
**Course Family:** Swimming  
**Prerequisite:** None.  
**Transferable:** CSU; UC  
**General Education:** AA/AS Area III(a); CSU Area E2  
**Catalog Date:** June 1, 2020

This class provides the opportunity for students to become safe and comfortable in the water. Students will develop swimming skills on their front and back. Instruction will emphasize freestyle and backstroke as well as water safety. Each student will progress toward becoming an endurance swimmer for enhanced fitness.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- SLO #1: successfully swim and utilize swimming as a means to lifelong fitness, including an understanding and recognition of basic swimming techniques and training methods, and applying them to their own workouts.
- explain and demonstrate the fundamental techniques of hydrodynamics.
- choose and use the correct terminology associated with swimming.
- comprehend, recognize and demonstrate proper water safety techniques associated with maintaining personal water safety, treading and survival floating, and helping in an emergency.
- recognize, develop, practice and demonstrate proper stroke mechanics for the basic strokes on the front and back. Freestyle, kicking and sculling or finning, backstroke and/or elementary backstroke will be emphasized.
- choose, differentiate and demonstrate the proper use of the swimming equipment in class.
- SLO #2: be comfortable in the pool with swimming etiquette and the social aspects of group training.
- develop and improve their comfort level in and around the water.
- identify and judge correct lap lane usage.

FITNS 441 Swimming II

**Units:** 1  
**Hours:** 54 hours LAB  
**Prerequisite:** None.  
**Transferable:** CSU; UC  
**General Education:** AA/AS Area III(a); CSU Area E2  
**Catalog Date:** June 1, 2020

This course is designed for non-swimmers or those returning to swimming after a long absence. Topics include basic water adjustment skills, floats, glides, basic freestyle and backstroke. It is appropriate for those afraid or not comfortable in deep water or those unable to correctly or continuously swim 25 meters without stopping. Instruction will be given in the physical and psychological adjustment to water.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:
FITNS 442 Swimming III

The purpose of this course is to teach intermediate swimmers, who have mastered basic water acclimation, water safety, and basic swimming skills, swim training protocols and design, further refinement of stroke technique, proper diving technique, and development of cardiovascular capacity. Students will learn and refine the stroke techniques of freestyle, backstroke, and breaststroke. Students will learn flip turns for freestyle and backstroke. Students will be introduced to swim training and workout design.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO #1: successfully swim and utilize swimming as a means to lifelong fitness, including an understanding and recognition of basic swimming techniques and training methods, and applying them to their own workouts. explain and demonstrate the fundamental techniques of hydrodynamics.
- recognize, develop, practice, and demonstrate proper form and technique in the standard swimming strokes (freestyle, backstroke, and breaststroke).
- choose, differentiate, and demonstrate the proper use and care of swim training equipment.
- demonstrate proper form and technique of freestyle, backstroke, and breaststroke turns and breakouts.
- demonstrate proper form and technique of sculling and treading water.
- demonstrate proper understanding of diving safety, technique and practice progressions.
- demonstrate and intermediate swimming fitness level by completing a 500-yard swim test.
- SLO #2: be comfortable in the pool with swimming etiquette and the social aspects of group training.
- analyze the stroke technique of others in the class, demonstrate swimming etiquette of group training, including: self-reflection and assessment, assessment of peers, constructive critiques of training group performance.

FITNS 443 Swimming IV
This swim class is for advanced intermediate swimmers who want to learn or improve proper training technique specific to the four competitive strokes. Students will also develop or refine underwater efficiency related to increasing speed during entry into the water, turning and breakouts for all of the competitive strokes (free, back, breast and fly). Advanced training protocols, drills and workouts will be used.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO #1. Identify and demonstrate proper form and technique in the four competitive strokes of freestyle, backstroke, breaststroke and butterfly.
- Develop, adapt and/or improve swimming stroke mechanics and skills in the four competitive strokes.
- Develop and demonstrate proper form and technique of drilling, finning, sculling and treading water.
- SLO #2. Demonstrate proper form and technique of entry, turns and breakouts in freestyle, backstroke, breaststroke and butterfly.
- Develop and/or demonstrate understanding of proper diving safety, technique and practice progression for competitive swimming.
- Develop, adapt and/or improve technique of turns and breakouts for the four competitive strokes.
- SLO #3. Choose, differentiate and demonstrate proper use and care of swim training equipment.
- SLO #4. Create fitness level appropriate swim workouts.
- Evaluate, analyze and provide feedback to training partner on stroke technique and mechanics.

FITNS 444 Swimming V

Units: 1
Hours: 54 hours LAB
Course Family: Swimming (http://crc.losrios.edu/course-families#id_100018)
Prerequisite: FITNS 442 with a grade of “C” or better; Students must demonstrate the ability to swim in deep water and possess, at minimum, intermediate swimming skills using correct stroke mechanics and technique.
Transferable: CSU; UC
General Education: AA/AS Area III(a); CSU Area E2
Catalog Date: June 1, 2020

This swimming class emphasizes improvement in aerobic fitness. This is a self-paced overload method of training using a workout approach. Stroke efficiency, aerobic fitness, and personal improvement will be emphasized.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO #1 Define and participate in regular physical conditioning program in swimming.
- Develop, adapt and improve swimming stroke mechanics.
- Understand the correct terminology associated with swimming.
- SLO #2 Analyze and accurately assess current fitness levels through swimming.
- Comprehend, recognize and evaluate improved levels of fitness through swimming including cardiovascular development, muscular strength and endurance, and flexibility.
- Understand the relationship between resting, ambient and training heart rates and how to calculate each.
- SLO #3 Implement proper strategies for group swimming.
- Select and judge the proper method of group swimming as it pertains to lap lane methods.
* Choose and evaluate their preferred method of turning at the wall to ensure smooth transitions for continuous swimming.

FITNS 495 Independent Studies in Fitness

<table>
<thead>
<tr>
<th>Units:</th>
<th>1 - 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hours:</td>
<td>54 - 162 hours LAB</td>
</tr>
<tr>
<td>Prerequisite:</td>
<td>None.</td>
</tr>
<tr>
<td>Transferable:</td>
<td>CSU; UC</td>
</tr>
<tr>
<td>General Education:</td>
<td>AA/AS Area III(a); CSU Area E2</td>
</tr>
<tr>
<td>Catalog Date:</td>
<td>June 1, 2020</td>
</tr>
</tbody>
</table>

An independent studies project involves an individual student or small group of students in study, research, or activities beyond the scope of regularly offered courses. See the current catalog section of “Special Studies” for full details of Independent Studies.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO #1: Actively engage in intellectual inquiry beyond that required in order to pass a course of study (College Wide Learning Outcome – Area 4).
- Discuss and outline a proposal of study (that can be accomplished within one semester term) with a supervising instructor qualified within the discipline.
- Design an independent study (to be completed individually or by collaboration of a small group) to foster special knowledge, skills, and experience that are not available in any one regularly scheduled course.
- Use information resources to gather discipline-specific information.
- SLO #2: Utilize modes of analysis and critical thinking to apply theoretical perspectives and/or concepts in the major discipline of study to significant problems and/or educational activities (College Wide Learning Outcome – Area 3).
- Analyze and apply the knowledge, skills and experience that are involved in the independent study to theoretical perspectives and/or concepts in the major discipline of study.
- Explain the importance of the major discipline of study in the broader picture of society.
- SLO #3: Communicate a complex understanding of content matter of the major discipline of study (College Wide Outcome – Area 3).
- Demonstrate competence in the skills essential to mastery of the major discipline of study that are necessary to accomplish the independent study.
- SLO #4: Identify personal goals and pursue these goals effectively (College Wide Outcome – Area 4).
- Utilize skills from the “academic tool kit” including time management, study skills, etc., to accomplish the independent study within one semester term.

Kinesiology (KINES)

KINES 300 Introduction to Kinesiology

<table>
<thead>
<tr>
<th>Units:</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hours:</td>
<td>54 hours LEC</td>
</tr>
<tr>
<td>Prerequisite:</td>
<td>None.</td>
</tr>
<tr>
<td>Transferable:</td>
<td>CSU; UC (UC Transfer Credit Limitation: KINES 300, 308, &amp; 460 maximum credit, 8 units.)</td>
</tr>
<tr>
<td>General Education:</td>
<td>AA/AS Area III(b); CSU Area E1</td>
</tr>
<tr>
<td>Catalog Date:</td>
<td>June 1, 2020</td>
</tr>
</tbody>
</table>

This introductory course presents an interdisciplinary approach to the study of human movement. It will provide students with an overview of the sub-disciplines in kinesiology, including the history, philosophy, sociology and psychology of sport; pedagogy; and motor behavior, biomechanics and physiology of physical activity. In addition, students will learn about career opportunities in teaching physical education, coaching, health and fitness, therapeutic exercise and sport management.

Student Learning Outcomes

Upon completion of this course, the student will be able to:
SLO #1: Recognize the types of knowledge concerning physical activity that are acquired through experience.
state the components and explain the importance of physical activity experiences.
describe the nature of subjective physical activity experiences.

SLO #2: Examine the categories of scholarly study of physical activity.
describe how philosophy fits into the field of kinesiology.
recognize the importance of the history of physical activity.
identify and analyze the key concepts of the sociology of physical activity.
understand and discuss the social-psychological factors that influence people's behavior and performance in physical activity.
understand and differentiate between the principles of motor learning, motor control and motor development.
explore how human movement biomechanics emerged; identify and apply the basic laws of physics to the structure and function of the human body.
understand adaptations in anatomy and physiology in response to physical activity.

SLO #3: Examine the various career opportunities in the field of kinesiology and its sub-disciplines.
compare and contrast the types of knowledge and skills essential for performing professional work in teaching, coaching, health and fitness, therapeutic exercise and sport management.
discuss how to prepare for the various career opportunities in kinesiology and its sub-disciplines.
determine what attitudes, values and goals are necessary for the various professions in kinesiology and its sub-disciplines.

KINES 301 Personal Wellness

Upon completion of this course, the student will be able to:

SLO #1: Utilize critical thinking skills to assess health information presented through lectures, assignments and other sources.
-Define the basic concepts of health and wellness.
-Identify the components of fitness.
-Evaluate the different ways to assess body composition.
-Distinguish between unhealthy and healthy stress.
-Analyze strategies useful in coping with stress.
-Evaluate and assess methods toward making responsible decisions.

SLO #2: Evaluate their current personal health status and devise programs designed to improve and/or maintain that status.
-Evaluate their current status of Wellness.
-Apply training principles to a fitness program and avoid fitness misconceptions.

SLO #3: Articulate the importance of lifestyle choices as a determinant toward disease prevention and leading a healthier, happier life.
-Measure and assess the effects of negative health habits and positive health habits on both short and long term health.
KINES 308 Women in Sport

Units: 3
Hours: 54 hours LEC
Prerequisite: None
Transferable: CSU; UC (UC Transfer Credit Limitation: KINES 300, 308, & 460 maximum credit, 8 units.)
Catalog Date: June 1, 2020

This course examines the relationship between women and sport, primarily in the United States, from multiple perspectives. Consideration is given to the cultural, economic, educational, legal, physiological and social influences on women in sport. Situating the ever-evolving roles that women assume in sport within a historical context, emphasis is placed on using the past to advise the present and effect change in the future. The course covers four broad areas: women's sport in historical context; the benefits and risks of participating in sport and physical activity; women, sport and social location; and women in the sport industry.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO #1: Identify key historical moments that created the foundation for women's sport in the present
- Understand the suspect science of female weakness
- SLO #2: Discuss how laws such as Title IX frame concepts of equality and equity.
- Understand the overview of Title IX's Legislative history
- Recognize the growth in athletic programs since Title IX.
- SLO #3: Describe the benefits and risks that women may experience as a result of participating in sport.
- Explain the concept of the Female Athlete Paradox.
- SLO #4: Discuss the influence that social status plays in affecting the opportunity for women to participate in sport, including gender, ethnicity, race, socioeconomic status, sexual orientation and identity, age and ability.
- Understand the sporting experiences of women of color in the United States.
- Examine sexual orientation and women's sport
- Explore culture, aging and the older woman.
- SLO #5: Summarize the physiological differences that exist between female and male athletes.
- Explain what those differences may be and may not be.
- Examine the effect of menstruation on athletic performance.
- SLO #6: Identify the changing roles of women working in the sport industry and the challenges and opportunities that they encounter.
- Describe the history of women in sports media.
- Explain the scarcity of women working in corporate sport.
- Merchandising and sporting goods targeted to female consumers.

KINES 416 Psychology of Sport
This course will explore current and historical concepts, theories, and techniques of sport and fitness psychology and the role these concepts play in the achievement of optimal performance in sports and in life.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- SLO #1: Demonstrate an understanding of the motivational techniques that will assist with performance and personal goals.
- Define sports psychology, explain the history of sport psychology, and explain the relevance of multiculturalism in sport and exercise.
- Explain how sport and exercise impact the mental processes that create consciousness, behavior, emotion, and intelligence.
- Evaluate and explain the impact of sport and exercise on society and self.
- SLO #2: Prepare necessary strategies that will build self-awareness and self-confidence.
- Identify how the use of sport and exercise concepts, theories, and techniques can improve the physiological well-being of self and society.
- Apply the appropriate tools and techniques to build self-confidence and self-image to enhance goal achievement in sport and exercise.
- SLO #3: Students will evaluate the various psychological skills and techniques, used in sport, that will enhance success in life both verbally and in writing.
- Observe and evaluate professionals engaged in sport training using techniques learned in class.
- Prepare a mental skills training program that can be used in any sport training setting.

---

**KINES 460 Sport in Society**

3 units: 54 hours LEC

**Units:** 3  
**Hours:** 54 hours LEC  
**Prerequisite:** None.  
**Transferable:** CSU; UC (UC Transfer Credit Limitation: KINES 300, 308, & 460 maximum credit, 8 units.)  
**General Education:** AA/AS Area V(b)  
**Catalog Date:** June 1, 2020

This course is an introduction to the examination of sport in contemporary society. The course analyzes sport as a social institution and examines sport’s interaction with politics, economics, education, religion, gender, race, media, and ethics. The course also focuses on the impact of sport on participants, spectators, and society as a whole.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- SLO #1: Define sport in society, explain the history of sport in society, and explain the relevance of sports in our society.
- Identify social problems related to sport and predict potential social problems related to sport in the future.
- Identify social benefits related to sport and predict potential social benefits related to sport in the future.
- Evaluate sport from both a functionalist and critical perspective.
- Review research to discover issues related to sport in society.
- Complete a research project or paper discussing a specific issue concerning society and sport using previous research and one’s own critical thinking.
- SLO #2: Identify and analyze the impact of religion, race, gender, social class, education, media, and politics on sport, sport’s participants, and sport’s spectators and vice versa.
- Compare and contrast public policies and ethical issues about sport and propose alternative solutions to these issues.
• Explain and apply various theories to sport.
• Debate the role society plays in influencing sport and the role sport plays in influencing individuals in society.
• Critique the impact of violent behavior in sport on society.
• Assess the relationship between sport and all levels of education.

KINES 495 Independent Studies in Physical Education

Theory

An independent studies project involves an individual student or small group of students in study, research, or activities beyond the scope of regularly offered courses. See the current catalog section of "Special Studies" for full details of Independent Studies.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• SLO #1: Actively engage in intellectual inquiry beyond that required in order to pass a course of study (College Wide Learning Outcome – Area 4).
• Discuss and outline a proposal of study (that can be accomplished within one semester term) with a supervising instructor qualified within the discipline.
• Design an independent study (to be completed individually or by collaboration of a small group) to foster special knowledge, skills, and experience that are not available in any one regularly scheduled course.
• Use information resources to gather discipline-specific information.
• SLO #2: Utilize modes of analysis and critical thinking to apply theoretical perspectives and/or concepts in the major discipline of study to significant problems and/or educational activities (College Wide Learning Outcome – Area 3).
• Analyze and apply the knowledge, skills and experience that are involved in the independent study to theoretical perspectives and/or concepts in the major discipline of study.
• Explain the importance of the major discipline of study in the broader picture of society.
• SLO #3: Communicate a complex understanding of content matter of the major discipline of study (College Wide Outcome – Area 3).
• Demonstrate competence in the skills essential to mastery of the major discipline of study that are necessary to accomplish the independent study.
• SLO #4: Identify personal goals and pursue these goals effectively (College Wide Outcome – Area 4).
• Utilize skills from the “academic tool kit” including time management, study skills, etc., to accomplish the independent study within one semester term.

KINES 498 Work Experience in Physical Education

Units: 1 - 3
Hours: 54 - 162 hours LAB
Prerequisite: None.
Transferable: CSU
Catalog Date: June 1, 2020

Student Learning Outcomes

Students must be in a paid or unpaid internship, volunteer position or job related to career goals in Physical Education.

Transferable: CSU
General Education: AA/AS Area III(b)
Catalog Date: June 1, 2020
This course provides students with opportunities to develop marketable skills in preparation for employment in their major field of study or advancement within their career. It is designed for students interested in work experience and/or internships in transfer level degree occupational programs. Course content includes understanding the application of education to the workforce; completion of required forms which document the student's progress and hours spent at the work site; and developing workplace skills and competencies. Appropriate level learning objectives are established by the student and the employer. During the semester, the student is required to participate in a weekly orientation and 75 hours of related paid work experience, or 60 hours of unpaid work experience for one unit. An additional 75 or 60 hours of related work experience is required for each additional unit. Work Experience may be taken for a total of 16 units when there are new or expanded learning objectives. Only one Work Experience course may be taken per semester.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- DEMONSTRATE AN UNDERSTANDING AND APPLICATION OF PROFESSIONAL WORKPLACE BEHAVIOR IN A FIELD OF STUDY RELATED ONE'S CAREER (SLO 1)
  - Understand the effects time, stress, and organizational management have on performance.
  - Demonstrate an understanding of consistently practicing ethics and confidentiality in a workplace.
  - Examine the career/life planning process and relate its relevancy to the student.
  - Demonstrate an understanding of basic communication tools and their appropriate use.
  - Demonstrate an understanding of workplace etiquette.

- DESCRIBE THE CAREER/LIFE PLANNING PROCESS AND RELATE ITS RELEVANCY TO ONE'S CAREER (SLO 2)
  - Link personal goals to long term achievement.
  - Display an understanding of creating a professional first impression.
  - Understand how networking is a powerful job search tool.
  - Understand necessary elements of a résumé.
  - Understand the importance of interview preparation.
  - Identify how continual learning increases career success.

- DEMONSTRATE APPLICATION OF INDUSTRY KNOWLEDGE AND THEORETICAL CONCEPTS AS WRITTEN IN LEARNING OBJECTIVES IN PARTNERSHIP WITH THE EMPLOYER WORK SITE SUPERVISOR (SLO 3)

Personal Activity (PACT)

PACT 310 Badminton I

**Units:** 1  
**Hours:** 54 hours LAB  
**Prerequisite:** None.  
**Transferable:** CSU; UC (Any and all PE Activity courses combined: maximum transfer credit 4 units)  
**General Education:** AA/AS Area III(a); CSU Area E2  
**Catalog Date:** June 1, 2020

This course provides a review of basic fundamentals, techniques and rules. The emphasis is on skills and techniques such as play strategies for singles and doubles and shot selection for various play situations.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO#1: Play the game of badminton and apply rules, strategies, and techniques.
- Demonstrate the proper use and care of equipment.
- Demonstrate an appreciation for the proper etiquette required for badminton including sportsmanship.
- Employ proper safety techniques while practicing badminton.
- Demonstrate the proper technique used to grip a racket.
- Demonstrate the proper technique used to serve.
• Demonstrate the proper technique for an overhead and underhand clear.
• Demonstrate the proper technique for a drop shot.
• Demonstrate the proper technique for a drive shot.
• Demonstrate the proper body mechanics for executing a forehand stroke.
• Demonstrate the proper body mechanics for executing a backhand stroke.
• Express an understanding for the vocabulary terms used in badminton.
• Express an understanding for the rules and regulations for badminton.
• SLO#2: Understand the benefits of physical activity to their health and well being.
• Evaluate their fitness level for improvement during the course.
• SLO#3: Demonstrate appropriate social behavior by working independently and with others during physical activity.
• Gain an appreciation for cooperating with a partner in small groups.

PACT 311 Badminton II

Units: 1
Hours: 54 hours LAB
Course Family: Badminton (http://crc.losrios.edu/course-families#id_100021)
Prerequisite: None.
Transferable: CSU; UC
General Education: AA/AS Area III(a); CSU Area E2
Catalog Date: June 1, 2020

This course provides instruction in intermediate skills, techniques, and rules of badminton. It emphasizes skill and technique development beyond that of a beginning player, as well as intermediate strategies for singles and doubles.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• SLO #1 Student will be able to effectively understand, execute and apply the required skill to effectively execute the shots required and understand the tactical approaches to the game to effectively compete at the game of badminton at a competitive level.
• effectively execute serves, drop shots, smashes, and backhand shots consistent with an intermediate-level badminton player.
• describe and apply rules and intermediate-level strategies of the game.
• evaluate the importance of sportsmanship in competitive situations.
• execute intermediate-level playing strategies by playing to personal strengths, while taking advantage of an opponent’s weaknesses.
• describe the benefits of badminton as a fitness activity.

PACT 390 Tennis I

Units: 1
Hours: 54 hours LAB
Course Family: Tennis (http://crc.losrios.edu/course-families#id_100022)
Prerequisite: None.
Transferable: CSU; UC (All PE Activity courses combined: maximum transfer credit 4 units)
General Education: AA/AS Area III(a); CSU Area E2
Catalog Date: June 1, 2020

This is a beginning tennis course. The course covers skills, rules, etiquette, and strategies of the game. The student will develop basic skills such as ground strokes, serving, volleying, elementary strategies, game rules, and basic knowledge of tennis strategies. The student will also engage in singles play and learn to improve in their play against an opponent. Playing tennis stimulates enjoyable, cooperative, and competitive modes of behavior and promotes awareness of physical activity for life long health and fitness. This course is designed for students with little or no prior tennis experience.
Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO #1: The student will identify, implement, and demonstrate competency in tennis techniques and tactics as they best apply to their respective skill level.
- Demonstrate and improve in basic strokes (forehand, backhand, volley, serves) and apply the proper grips for each stroke, as well as know basic rules, strategies and scoring for doubles and singles play.
- SLO #2: Understand and assemble a variety of conditioning drills and techniques associated with improving the physical skills required in tennis.
- Employ various training exercises to help condition a tennis athlete.
- SLO #3: Understand and apply mental strategies to effectively compete at their respective ability level.
- Learn and analyze basic position in relation to the ball.
- SLO #4: Relate to other players, instructors in a manner that is appropriate to tennis etiquette and respectful of all participants.
- Understand and apply tennis rules and regulations. Utilize proper tennis etiquette during game play.

PACT 391 Tennis II

Units: 1  
Hours: 54 hours LAB  
Prerequisite: None.  
Advisory: PACT 390 with a grade of "C" or better; Tennis II students should have some playing experience and basic tennis knowledge and skills.  
Transferable: CSU; UC  
Catalog Date: June 1, 2020

This course reviews basic fundamentals, techniques, rules, and social courtesies of tennis. Intermediate players are encouraged to take this course.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO #1: Apply the basic knowledge and skills learned to enjoy the sport of tennis.
- Understand and improve in more advanced strokes (forehand, backhand, serves, volleys) as well as understanding and implementing an advanced strategic and tactical play in both singles and doubles.
- SLO #2: Understand and assemble a variety of conditioning drills and techniques associated with improving the physical skills required in tennis.
- Be able to identify and employ various training exercises to help condition a tennis athlete.
- SLO #3: Understand and apply mental strategies to effectively compete at their respective ability level.
- Understand and analyze basic positioning and how to play to their individual respective strengths.
- SLO #4: Relate to other players, instructors in a manner that is appropriate to tennis etiquette and respectful of all participants.
- Understand and apply tennis rules and regulations. Utilize proper tennis etiquette during game play.

PACT 393 Tennis III

Units: 1  
Hours: 54 hours LAB  
Prerequisite: None.  
Advisory: PACT 391 with a grade of "C" or better; Tennis III students are recommended to have significant experience, preferably at the high school varsity level.  
Transferable: CSU; UC  
Catalog Date: June 1, 2020

Tennis III focuses on improving and refining the competitive physical and mental skills and techniques of the sport. Particular attention will be given to the strategic development of the overall player while refining racket strokes that set up and finish points. Hitting patterns, serving placement, and tactical movement will also be introduced and developed.
Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO #1: The student will identify, implement, and demonstrate competency in tennis techniques and tactics as they best apply to their respective skill level.
- Working towards mastery in advanced technical, strategic, physical and mental skills to become a competitive tennis player.
- SLO #2: Understand and assemble a variety of conditioning drills and techniques associated with improving the physical skills required in tennis.
- Develop a superior fitness level applying advance training techniques to help condition a superior tennis athlete.
- SLO #3: Understand and apply mental strategies to effectively compete at their respective ability level.
- Exhibit mastery of court position as well as learning techniques and shot patterns which will allow them to play to their own strengths, while taking advantage of their opponents' weaknesses in a competitive environment.
- SLO #4: Relate to other players, instructors in a manner that is appropriate to tennis etiquette and respectful of all participants.
- Understand and apply tennis rules and regulations. Utilize proper tennis etiquette during game play.

PACT 495 Independent Studies in Personal Activity

Units: 1 - 3
Hours: 54 - 162 hours LAB
Prerequisite: None.
Transferable: CSU; UC
General Education: AA/AS Area III(a); CSU Area E2
Catalog Date: June 1, 2020

An independent studies project involves an individual student or small group of students in study, research, or activities beyond the scope of regularly offered courses. See the current catalog section of "Special Studies" for full details of Independent Studies.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO #1: Actively engage in intellectual inquiry beyond that required in order to pass a course of study (College Wide Learning Outcome – Area 4).
- Discuss and outline a proposal of study (that can be accomplished within one semester term) with a supervising instructor qualified within the discipline.
- Design an independent study (to be completed individually or by collaboration of a small group) to foster special knowledge, skills, and experience that are not available in any one regularly scheduled course.
- Use information resources to gather discipline-specific information.
- SLO #2: Utilize modes of analysis and critical thinking to apply theoretical perspectives and/or concepts in the major discipline of study to significant problems and/or educational activities (College Wide Learning Outcome – Area 3).
- Analyze and apply the knowledge, skills and experience that are involved in the independent study to theoretical perspectives and/or concepts in the major discipline of study.
- Explain the importance of the major discipline of study in the broader picture of society.
- SLO #3: Communicate a complex understanding of content matter of the major discipline of study (College Wide Outcome – Area 3).
- Demonstrate competence in the skills essential to mastery of the major discipline of study that are necessary to accomplish the independent study.
- SLO #4: Identify personal goals and pursue these goals effectively (College Wide Outcome – Area 4).
- Utilize skills from the "academic tool kit" including time management, study skills, etc., to accomplish the independent study within one semester term.
SPORT 300 Baseball, Intercollegiate-Men

This course is for students who wish to participate in intercollegiate baseball. This course may be repeated a maximum of four times to meet California Community College Athletic Association requirements for eligibility.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO #1: Employ critical thinking skills by creating, planning, and evaluating success as participant on an athletic team.
- SLO #2: Compare advanced concepts of strategy pertaining to the game of baseball. Advanced students will be asked to assist those students with less skills and experience, and will be required to show improvement to the next level.
- SLO #3: Analyze simple game situations and apply correct strategy techniques. Advanced students will be asked to assist those students with less skills and experience, and will be required to show improvement to the next level.
- SLO #4: Prepare for successful transfer to four year institutions and participation in athletics.
- SLO #5: Identify the guidelines for academic success and athletic eligibility. Advanced students will be asked to assist those students with less skills and experience, and will be required to show improvement to the next level.
- SLO #6: Analyze baseball rules and regulations. Advanced students will be asked to assist those students with less skills and experience, and will be required to show improvement to the next level.
- SLO #7: Relate to teammates, coaches, and the competitive atmosphere in a manner that enhances their participation as well as the team environment. Develop the ability to participate in athletic competition at a high level.
- SLO #8: Experiment with basic skills in throwing, fielding, pitching, hitting and base running. Advanced students will be asked to assist those students with less skills and experience, and will be required to show improvement to the next level.
- SLO #9: Design an individual strength building through appropriate weight training for intercollegiate baseball. Advanced students will be asked to assist those students with less skills and experience, and will be required to show improvement to the next level.
- SLO #10: Examine common athletic injuries and develop injury prevention techniques. Advanced students will be asked to assist those students with less skills and experience, and will be required to show improvement to the next level.
- SLO #11: Create an atmosphere which develops responsible citizens and student athletes who represent the sport to themselves and others in a productive manner.

SPORT 301 Off Season Conditioning for Baseball

This course is designed to optimize sports performance and reduce risk of injury for the off-season intercollegiate athlete in the sport of baseball. Course content will include: sport specific skill development, sport specific strength training, cardiovascular conditioning, agility work, plyometric jump training, speed training and flexibility exercises. This course is designed to prepare students for intercollegiate baseball competition and may be repeated to meet requirements for CCCAA eligibility.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO #1: Evaluate strength and fitness levels for competition using standard fitness testing
• assess their fitness level for competition by applying the following fitness tests: body fat analysis, abdominal test, flexibility, and strength tests. Students of different levels (beginning/intermediate/advanced) will be challenged to improve their level of fitness and knowledge of conditioning concepts.

• demonstrate increased cardiovascular endurance, flexibility, strength, and muscle size. Students will be challenged to improve their level of fitness and knowledge of conditioning concepts. Advanced students will be encouraged to help the beginners.

• improve baseball fitness through weight training and aerobic conditioning. Students will be challenged to improve their level of fitness and knowledge of conditioning concepts.

• SLO #2 Identify and apply exercises used in motion as related to the sport.

• apply kinesiology principles of sport motion to the exercises needed to enhance their physical strength in that particular muscle group movement. Students be challenged to improve their level of fitness and knowledge of conditioning concepts.

• measure their improvement and apply needed resistance or intensity in order to maximize efficiency in their workout. Students will be challenged to improve their level of fitness and knowledge of conditioning concepts.

• improve in individual defensive and offensive basic skills. Students will be challenged to improve their level of fitness and knowledge of conditioning concepts.

• improve individual defense and understand its importance with regard to team defense. Students will be challenged to improve their level of fitness and knowledge of conditioning concepts.

• explain and demonstrate the defensive tactics of baseball. Students will be challenged to improve their level of fitness and knowledge of conditioning concepts.

• explain and demonstrate the offensive tactics of baseball. Students will be challenged to improve their level of fitness and knowledge of conditioning concepts.

• SLO #3 Design, implement, and evaluate a personalized training program for athletes

• describe the theory of conditioning as it relates to the development of individual programs. Students will be challenged to improve their level of fitness and knowledge of conditioning concepts.

• apply principles in cardiovascular fitness to enhance and support a training program. Students will be challenged to improve their level of fitness and knowledge of conditioning concepts.

• employ goal-setting techniques toward establishing their fitness program. Students will be challenged to improve their level of fitness and knowledge of conditioning concepts.

• SLO #4 Understand and apply safety techniques and etiquette to training.

• use proper safety procedures and techniques while training. Students will be challenged to improve their level of fitness and knowledge of conditioning concepts.

• illustrate proper etiquette and demonstrate an ability to relate to others while training. Students will be challenged to improve their level of fitness and knowledge of conditioning concepts.

SPORT 303 Pre-Season Conditioning for Baseball

0.5 - 3 Units:
27 - 162 hours LAB Hours:
None.
CSU; UC Prerequisite:
AA/AS Area III(a); CSU Area E2 Transferable:
June 1, 2020 General Education:
Catalog Date:

This course is designed to optimize sports performance and reduce risk of injury for the pre-season intercollegiate athlete in the sport of baseball. Course content includes sport-specific skill development, sport-specific strength training, cardiovascular conditioning, agility work, plyometric training, speed training, and flexibility exercises. This course designed to prepare students for participation in intercollegiate competition and may be repeated a maximum of four times to meet California Community College Athletic Association requirements for eligibility.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• SLO #1: evaluate and improve strength and fitness levels for competition using standard fitness testing.

• assess their fitness level for competition by applying the following fitness tests: body fat analysis, abdominal test, flexibility, and strength tests.

• demonstrate increased cardiovascular endurance, flexibility, strength, and muscle size.
• improve baseball specific position-related fitness. Such as shoulder flexibility for pitchers.
• demonstrate the ability to evaluate and plan a fitness program to improve their fitness based upon needs associated with playing competitive baseball.
• SLO #2: Apply training techniques, exercises and efficiency in motion as related to the sport of baseball.
• apply principles of sport motion to the exercises needed to enhance their flexibility and physical strength in that specific muscle group.
• measure their improvement and apply needed resistance or intensity in order to maximize efficiency in their workout.
• improve individual position-specific defensive skills
• improve batting technique.
• understand and demonstrate the ability to implement effective offensive and defensive techniques and tactics in the sport of baseball.
• SLO #3 demonstrate the ability to become a productive and effective member of a team.
• problem solve in working out conflicts between individuals on the team to create a cooperative working atmosphere
• maintain composure in the face of adversity in baseball play.
• support teammates in achieving their goals on the team.

SPORT 311 Basketball, Intercollegiate-Men, Fall

Upon completion of this course, the student will be able to:

• SLO #1: prepare for successful transfer to four year institutions and participate in athletics.
• compose and demonstrate an appreciation for the sport of basketball.
• improve in advanced individual and team basketball skills.
• assess and demonstrate advanced concepts of basketball team tactics in both offense and defense.
• measure individual fitness level through conditioning for basketball.
• explain the importance of good study habits as they pertain to academic success to maintain good standing as a student and for athletic eligibility.
• design, demonstrate and practice strength building through weight training appropriate for intercollegiate basketball.
• SLO #2: develop the ability to utilize critical thinking skills, evaluate, plan and create success as participant on an athletic team.
• distinguish injury prevention techniques for common athletic injuries.
• describe and interpret basketball rules and regulations.
• explain and demonstrate the personal skills necessary to be a viable, contributing team player.
• SLO #3: relate to teammates, coaches, and the competitive atmosphere in a manner that enhances their participation as well as the team environment. Develop the ability to participate in athletic competition at a high level.
• examine and demonstrate an appreciation for the competitive nature of basketball.
• SLO #4: become a responsible, productive citizen who represents the sport to themselves and others in a productive manner.
• improve individual health habits including eating nutritiously, getting enough sleep, and avoiding negative health habits as they pertain to intercollegiate competition.
SPORT 312 Basketball, Intercollegiate-Men, Spring

This course is for students who wish to participate in intercollegiate basketball. This course may be repeated a maximum of four times to meet California Community College Athletic Association requirements for eligibility.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO #1: prepare for successful transfer to four year institutions and participate in athletics at the intercollegiate level of understanding and skill for basketball.
- compose and demonstrate an appreciation for the sport of basketball.
- improve in advanced individual and team basketball skills.
- assess and demonstrate advanced concepts of basketball team tactics in both offense and defense.
- measure individual fitness level through conditioning for basketball.
- explain the importance of good study habits as they pertain to academic success to maintain good standing as a student and for athletic eligibility.
- design, demonstrate and practice strength building through weight training appropriate for intercollegiate basketball.
- SLO #2: develop the ability to utilize critical thinking skills, evaluate, plan and create success as participant on an athletic team.
- distinguish injury prevention techniques for common athletic injuries.
- describe and interpret basketball rules and regulations.
- explain and demonstrate the personal skills necessary to be a viable, contributing team player.
- SLO #3: relate to teammates, coaches, and the competitive atmosphere in a manner that enhances their participation as well as the team environment. Develop the ability to participate in athletic competition at a high level.
- examine and demonstrate an appreciation for the competitive nature of basketball.
- SLO #4: become a responsible, productive citizen who represents the sport to themselves and others in a productive manner.
- improve individual health habits including eating nutritiously, getting enough sleep, and avoiding negative health habits as they pertain to intercollegiate competition.

SPORT 313 Off Season Conditioning for Basketball

This course is designed to prepare the collegiate basketball player for the competitive season and reduce risk of injury. Course content will include: collegiate level basketball-specific skill development, a solid aerobic conditioning plan, sport specific strength training, agility work, plyometrics, speed training and flexibility exercises as well as team play combination of activities designed to prepare the athlete both physically and mentally. This course is designed to prepare students for intercollegiate basketball competition and may be repeated a maximum of four times to meet California Community College Athletic Association requirements for eligibility.

Student Learning Outcomes
Upon completion of this course, the student will be able to:

- **SLO #1** Evaluate strength and fitness levels for competition using standard fitness testing.

  - assess their fitness level for competition by applying the following fitness tests: body fat analysis, abdominal test, flexibility, and strength tests. Students of different levels (beginning/intermediate/advanced) will be challenged to improve their level of fitness and knowledge of conditioning concepts. Advanced students will be encouraged to help the beginners.

  - demonstrate increased cardiovascular endurance, flexibility, strength, and muscle size. Students of different levels (beginning/intermediate/advanced) will be challenged to improve their level of fitness and knowledge of conditioning concepts. Advanced students will be encouraged to help the beginners.

  - improve basketball fitness through weight training and aerobic conditioning. Students of different levels (beginning/intermediate/advanced) will be challenged to improve their level of fitness and knowledge of conditioning concepts. Advanced students will be encouraged to help the beginners.

- **SLO #2** Identify and apply exercises used in motion as related to the sport.

  - apply kinesiology principles of sport motion to the exercises needed to enhance their physical strength in that particular muscle group movement. Students of different levels (beginning/intermediate/advanced) will be challenged to improve their level of fitness and knowledge of conditioning concepts. Advanced students will be encouraged to help the beginners.

  - measure their improvement and apply needed resistance or intensity in order to maximize efficiency in their workout. Students of different levels (beginning/intermediate/advanced) will be challenged to improve their level of fitness and knowledge of conditioning concepts. Advanced students will be encouraged to help the beginners.

  - improve in individual defensive and offensive basic skills. Students of different levels (beginning/intermediate/advanced) will be challenged to improve their level of fitness and knowledge of conditioning concepts. Advanced students will be encouraged to help the beginners.

  - explain and demonstrate the defensive tactics of basketball. Students of different levels (beginning/intermediate/advanced) will be challenged to improve their level of fitness and knowledge of conditioning concepts. Advanced students will be encouraged to help the beginners.

  - explain and demonstrate the offensive tactics of basketball. Students of different levels (beginning/intermediate/advanced) will be challenged to improve their level of fitness and knowledge of conditioning concepts. Advanced students will be encouraged to help the beginners.

- **SLO #3** Design, implement, and evaluate a personalized training program for athletes.

  - describe the theory of conditioning as it relates to the development of individual programs. Students of different levels (beginning/intermediate/advanced) will be challenged to improve their level of fitness and knowledge of conditioning concepts. Advanced students will be encouraged to help the beginners.

  - apply principles in cardiovascular fitness to enhance and support a training program. Students of different levels (beginning/intermediate/advanced) will be challenged to improve their level of fitness and knowledge of conditioning concepts. Advanced students will be encouraged to help the beginners.

  - employ goal-setting techniques toward establishing their fitness program. Students of different levels (beginning/intermediate/advanced) will be challenged to improve their level of fitness and knowledge of conditioning concepts. Advanced students will be encouraged to help the beginners.

- **SLO #4** Understand and apply safety techniques and training etiquette to training.

  - use proper safety procedures and techniques while training. Students of different levels (beginning/intermediate/advanced) will be challenged to improve their level of fitness and knowledge of conditioning concepts. Advanced students will be encouraged to help the beginners.

  - illustrate proper etiquette and demonstrate an ability to relate to others while training. Students of different levels (beginning/intermediate/advanced) will be challenged to improve their level of fitness and knowledge of conditioning concepts. Advanced students will be encouraged to help the beginners.

**SPORT 314 Pre-Season Conditioning for Basketball**
This course is designed to prepare the collegiate basketball player for the competitive season and reduce risk of injury. Course content will include: collegiate level basketball-specific skill development, a solid aerobic conditioning plan, sport specific strength training, agility work, plyometrics, speed training and flexibility exercises as well as team play combination of activities designed to prepare the athlete both physically and mentally. This course is designed to prepare students for intercollegiate basketball competition and may be repeated a maximum of four times to meet California Community College Athletic Association requirements for eligibility.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- **SLO #1** Evaluate strength and fitness levels for competition using standard fitness testing.
- **SLO #2** Identify and apply exercises used in motion as related to the sport.
- **SLO #3** Design, implement, and evaluate a personalized training program for athletes.
- **SLO #4** Understand and apply safety techniques and training etiquette to training.

- assess their fitness level for competition by applying the following fitness tests: body fat analysis, abdominal test, flexibility, and strength tests. Students of different levels (beginning/intermediate/advanced) will be challenged to improve their level of fitness and knowledge of conditioning concepts. Advanced students will be encouraged to help the beginners.
- demonstrate increased cardiovascular endurance, flexibility, strength, and muscle size. Students of different levels (beginning/intermediate/advanced) will be challenged to improve their level of fitness and knowledge of conditioning concepts. Advanced students will be encouraged to help the beginners.
- improve basketball fitness through weight training and aerobic conditioning. Students of different levels (beginning/intermediate/advanced) will be challenged to improve their level of fitness and knowledge of conditioning concepts. Advanced students will be encouraged to help the beginners.
- **SLO #2** Identify and apply exercises used in motion as related to the sport.
- apply kinesiology principles of sport motion to the exercises needed to enhance their physical strength in that particular muscle group movement. Students of different levels (beginning/intermediate/advanced) will be challenged to improve their level of fitness and knowledge of conditioning concepts. Advanced students will be encouraged to help the beginners.
- measure their improvement and apply needed resistance or intensity in order to maximize efficiency in their workout. Students of different levels (beginning/intermediate/advanced) will be challenged to improve their level of fitness and knowledge of conditioning concepts. Advanced students will be encouraged to help the beginners.
- improve in individual defensive and offensive basic skills. Students of different levels (beginning/intermediate/advanced) will be challenged to improve their level of fitness and knowledge of conditioning concepts. Advanced students will be encouraged to help the beginners.
- improve individual defense and understand its importance with regard to team defense. Students of different levels (beginning/intermediate/advanced) will be challenged to improve their level of fitness and knowledge of conditioning concepts. Advanced students will be encouraged to help the beginners.
- explain and demonstrate the defensive tactics of basketball. Students of different levels (beginning/intermediate/advanced) will be challenged to improve their level of fitness and knowledge of conditioning concepts. Advanced students will be encouraged to help the beginners.
- explain and demonstrate the offensive tactics of basketball. Students of different levels (beginning/intermediate/advanced) will be challenged to improve their level of fitness and knowledge of conditioning concepts. Advanced students will be encouraged to help the beginners.
- describe the theory of conditioning as it relates to the development of individual programs. Students of different levels (beginning/intermediate/advanced) will be challenged to improve their level of fitness and knowledge of conditioning concepts. Advanced students will be encouraged to help the beginners.
- apply principles in cardiovascular fitness to enhance and support a training program. Students of different levels (beginning/intermediate/advanced) will be challenged to improve their level of fitness and knowledge of conditioning concepts. Advanced students will be encouraged to help the beginners.
- employ goal-setting techniques toward establishing their fitness program. Students of different levels (beginning/intermediate/advanced) will be challenged to improve their level of fitness and knowledge of conditioning concepts. Advanced students will be encouraged to help the beginners.
- **SLO #4** Understand and apply safety techniques and training etiquette to training.
• Use proper safety procedures and techniques while training. Students of different levels (beginning/intermediate/advanced) will be challenged to improve their level of fitness and knowledge of conditioning concepts. Advanced students will be encouraged to help the beginners.

• Illustrate proper etiquette and demonstrate an ability to relate to others while training. Students of different levels (beginning/intermediate/advanced) will be challenged to improve their level of fitness and knowledge of conditioning concepts. Advanced students will be encouraged to help the beginners.

SPORT 316 Basketball, Intercollegiate-Women, Fall

| Units:    | 1.5 |
| Hours:    | 85 hours LAB |
| Prerequisite: | None. |
| Transferable: | CSU; UC |
| General Education: | AA/AS Area III(a); CSU Area E2 |
| Catalog Date: | June 1, 2020 |

This course is for students who wish to participate in intercollegiate basketball. This course may be repeated a maximum of four times to meet California Community College Athletic Association requirements for eligibility.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• SLO #1: Develop the ability to utilize critical thinking skills, evaluate, plan and create success as a participant on an athletic team.
• Improve in advanced individual and team basketball skills.
• Explain and demonstrate advanced concepts of basketball team tactics in both offense and defense.
• Improve individual fitness level through conditioning for basketball.
• Explain and demonstrate the personal skills necessary to be a viable, contributing team player.
• Explain basketball rules and regulations.
• SLO #2: Prepare for successful transfer to four year institutions and participate in athletics.
• Explain the importance of good study habits as they pertain to academic success to maintain good standing as a student and for athletic eligibility.
• Explain, demonstrate and practice strength building through weight training appropriate for intercollegiate basketball.
• SLO #3: Relate to teammates, coaches and the competitive atmosphere in a manner that enhances their participation as well as the team environment.
• Explain injury prevention techniques for common athletic injuries.
• Explain and demonstrate an appreciation for the competitive nature of basketball.
• SLO #4: Become a responsible, productive citizen who represents the sport to themselves and others in a productive manner.
• Improve individual health habits including eating nutritiously, getting enough sleep, and avoiding negative health habits as they pertain to intercollegiate competition.
• Explain and demonstrate an appreciation for the sport of basketball.

SPORT 317 Basketball, Intercollegiate-Women, Spring

| Units:    | 1.5 |
| Hours:    | 90 hours LAB |
| Prerequisite: | None. |
| Transferable: | CSU; UC |
| General Education: | AA/AS Area III(a); CSU Area E2 |
| Catalog Date: | June 1, 2020 |

This course is for students who wish to participate in intercollegiate basketball. This course may be repeated a maximum of four times to meet California Community College Athletic Association requirements for eligibility.

Student Learning Outcomes
Upon completion of this course, the student will be able to:

- SLO #1: Develop the ability to utilize critical thinking skills, evaluate, plan and create success as a participant on an athletic team.
- Explain and demonstrate advanced concepts of basketball team tactics in both offense and defense.
- Explain and demonstrate the personal skills necessary to be a viable, contributing team player.
- SLO #2: Prepare for successful transfer to four year institutions and participate in athletics.
- Explain the importance of good study habits as they pertain to academic success to maintain good standing as a student and for athletic eligibility.
- Identify, demonstrate and practice strength building through weight training appropriate for intercollegiate basketball.
- SLO #3: Relate to teammates, coaches and the competitive atmosphere in a manner that enhances their participation as well as the team environment.
- Review injury prevention techniques for common athletic injuries.
- Demonstrate an appreciation for the competitive nature of basketball.
- SLO #4: Demonstrate responsible, productive conduct as a citizen who represents the sport of themselves and others in a productive manner.
- Improve individual health habits including eating nutritiously, getting enough sleep, and avoiding negative health habits as they pertain to intercollegiate competition.

SPORT 318 Post-Season Conditioning for Basketball

<table>
<thead>
<tr>
<th>Units: 0.5 - 3</th>
<th>Hours: 27 - 162 hours LAB</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prerequisite: None.</td>
<td>Transferable: CSU; UC</td>
</tr>
<tr>
<td>General Education: AA/AS Area III(a); CSU Area E2</td>
<td>Catalog Date: June 1, 2020</td>
</tr>
</tbody>
</table>

This course is designed to increase sport performance and overall understanding of women's intercollegiate basketball concepts and strategic philosophies. Course content will include: collegiate level basketball-specific skill development, collegiate level offensive and defensive concepts, team specific basketball fundamentals, Team specific drills for individual improvement and sport specific agility work, plyometrics and speed training. This course is designed to prepare students for participation in intercollegiate competition and may be repeated a maximum of four times to meet California Community College Athletic Association requirements for eligibility.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO #1: Assess various practice situations and apply appropriate solution.
- Establish a pre/mid/post evaluation of practice and game situations.
- SLO #2: Demonstrate proper technique in sport-specific fundamentals.
- Measure improvements in techniques related to basketball skills such as dribbling, passing, shooting and defensive positioning.
- SLO #3: Demonstrate proper weight lifting techniques that are sport-specific to basketball.
- Maintain a weight lifting log to see the progression of strength throughout the class.
- Pre and post testing of weight lifting techniques will be given to see the progression of each student.
- SLO #4: Demonstrate proper body movement and control as it pertains to agility and footwork through basketball movements.
- Assessment will be given through scrimmage situations to help evaluate proper agility and footwork.

SPORT 350 Soccer, Intercollegiate-Men
Student Learning Outcomes

Upon completion of this course, the student will be able to:

- **SLO #1:** Apply and demonstrate an understanding of the technical knowledge of soccer.
  - Analyze and employ the correct technique for passing in the game of soccer.
  - Analyze and execute the correct technique for receiving in the game of soccer.
  - Analyze and execute the correct technique for shooting in the game of soccer.
  - Analyze and execute the correct technique for crossing in the game of soccer.
  - Analyze and execute the correct technique for dribbling in the game of soccer.
  - Analyze and execute the correct technique for trapping in the game of soccer.

- **SLO #2:** Apply and demonstrate an understanding of tactical knowledge of the game of soccer.
  - Analyze and execute a possession oriented offense.
  - Analyze and execute a playing out of the defensive third.
  - Analyze and execute playing through the middle third of the field.
  - Analyze and execute attacking third options and possibilities.
  - Analyze and execute the functional responsibilities of their positions.
  - Evaluate and solve soccer problems through tactical awareness and knowledge.
  - Analyze situations on the field and make the correct choice with the ball at the correct time.
  - Analyze and execute set plays both offensively and defensively.
  - Evaluate a correct response based on the strengths and weaknesses of the opponent.
  - Evaluate how to analyze a game both pre- and post-competition.

- **SLO #3:** Apply and demonstrate the physical skills that are required in the game of soccer.
  - Apply the process for acquiring appropriate fitness levels for intercollegiate soccer competition.
  - Recognize the difference between aerobic and anaerobic fitness as it pertains to their individual fitness levels.
  - Recognize the value of power, strength, speed and agility for the game of soccer.

- **SLO #4:** Apply and demonstrate the psychological skills needed in the game of soccer.
  - Demonstrate and execute visualization exercises.
  - Demonstrate and execute self control.
  - Demonstrate and execute mental toughness.
  - Value and demonstrate self confidence.
  - Value team confidence.
  - Analyze the four moments of the game; attacking, defending, transition and set plays.
This course is designed to prepare the collegiate soccer player for the competitive season and reduce the risk of injury. Course content will include: collegiate level soccer-specific skill and tactical development, a solid aerobic conditioning plan, sport specific strength training, agility work, plyometrics, speed training and flexibility exercises as well as team play combination of activities designed to prepare the athlete both physically and mentally. This course is designed to prepare students for intercollegiate soccer competition and may be repeated to meet requirements for CCCAA eligibility.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO #1 Evaluate strength and fitness levels for competition using standard fitness testing.
- assess their fitness level for competition by applying the following fitness tests: body fat analysis, abdominal seat, flexibility, and strength tests. Students will be challenged to improve their level of fitness and knowledge of conditioning concepts.
- demonstrate increased cardiovascular endurance, flexibility, strength, and muscle size. Students will be challenged to improve their level of fitness and knowledge of conditioning concepts.
- improve soccer fitness through weight training and aerobic conditioning. Students will be challenged to improve their level of fitness and knowledge of conditioning concepts. Advanced students will be encouraged to help the beginners.
- SLO #2 Identify and apply exercises used in motion as related to the sport.
- apply kinesiology principles of sport motion to the exercises needed to enhance their physical strength in that particular muscle group movement. Students will be challenged to improve their level of fitness and knowledge of conditioning concepts.
- measure their improvement and apply needed resistance or intensity in order to maximize efficiency in their workout. Students will be challenged to improve their level of fitness and knowledge of conditioning concepts.
- improve in individual defensive and offensive basic skills. Students will be challenged to improve their level of fitness and knowledge of conditioning concepts.
- SLO #3 Design, implement, and evaluate a personalized training program for athletes.
- describe the theory of conditioning as it relates to the development of individual programs. Students will be challenged to improve their level of fitness and knowledge of conditioning concepts.
- apply principles in cardiovascular fitness to enhance and support a training program. Students will be challenged to improve their level of fitness and knowledge of conditioning concepts.
- employ goal-setting techniques toward establishing their fitness program. Students will be challenged to improve their level of fitness and knowledge of conditioning concepts.
- use proper safety procedures and techniques while training. Students will be challenged to improve their level of fitness and knowledge of conditioning concepts.
- illustrate proper etiquette and demonstrate an ability to relate to others while training. Students will be challenged to improve their level of fitness and knowledge of conditioning concepts.

SPORT 352 Off-Season Conditioning for Women's Soccer

Units: 0.5 - 3
Hours: 27 - 162 hours LAB
Prerequisite: None.
Transferable: CSU; UC
General Education: AA/AS Area III(a); CSU Area E2
Catalog Date: June 1, 2020

The student must demonstrate intercollegiate athletic soccer skills as determined by a try-out conducted by the coaching staff to remain in the course.

The student must demonstrate intercollegiate athletic soccer skills as determined by a try-out conducted by the coaching staff to remain in the course.
This course covers off-season training and conditioning skills and techniques specific for intercollegiate soccer. Topics include skill development, strength training, cardiovascular conditioning, and speed training. Students will need to provide themselves with appropriate soccer attire, soccer cleats, and shin guards. This course may be repeated a maximum of four times to meet California Community College Athletic Association requirements for eligibility.

### Student Learning Outcomes

Upon completion of this course, the student will be able to:

- **SLO #1**: Evaluate strength and fitness levels for competition using standard fitness testing.
  - assess their fitness level for competition by applying the following fitness tests: body fat analysis, abdominal seat, flexibility, and strength tests. Students will be challenged to improve their level of fitness and knowledge of conditioning concepts.
  - demonstrate increased cardiovascular endurance, flexibility, strength, and muscle size. Students will be challenged to improve their level of fitness and knowledge of conditioning concepts.
  - improve soccer fitness through weight training and aerobic conditioning. Students will be challenged to improve their level of fitness and knowledge of conditioning concepts. Advanced students will be encouraged to help the beginners.

- **SLO #2**: Identify and apply exercises used in motion as related to the sport.
  - apply kinesiology principles of sport motion to the exercises needed to enhance their physical strength in that particular muscle group movement. Students will be challenged to improve their level of fitness and knowledge of conditioning concepts.
  - measure their improvement and apply needed resistance or intensity in order to maximize efficiency in their workout. Students will be challenged to improve their level of fitness and knowledge of conditioning concepts.
  - improve in individual defensive and offensive basic skills. Students will be challenged to improve their level of fitness and knowledge of conditioning concepts.
  - improve individual defense and understand its importance with regard to team defense. Students will be challenged to improve their level of fitness and knowledge of conditioning concepts. Advanced students will be encouraged to help the beginners.

- **SLO #3**: Design, implement, and evaluate a personalized training program for athletes.
  - describe the theory of conditioning as it relates to the development of individual programs. Students will be challenged to improve their level of fitness and knowledge of conditioning concepts.
  - apply principles in cardiovascular fitness to enhance and support a training program. Students will be challenged to improve their level of fitness and knowledge of conditioning concepts.
  - employ goal-setting techniques toward establishing their fitness program. Students will be challenged to improve their level of fitness and knowledge of conditioning concepts.
  - use proper safety procedures and techniques while training. Students will be challenged to improve their level of fitness and knowledge of conditioning concepts.
  - illustrate proper etiquette and demonstrate an ability to relate to others while training. Students will be challenged to improve their level of fitness and knowledge of conditioning concepts.

### SPORT 355 Soccer, Intercollegiate-Women

<table>
<thead>
<tr>
<th>Units:</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hours:</td>
<td>175 hours LAB</td>
</tr>
<tr>
<td>Prerequisite:</td>
<td>None.</td>
</tr>
<tr>
<td>Transferable:</td>
<td>CSU; UC</td>
</tr>
<tr>
<td>General Education:</td>
<td>AA/AS Area III(a); CSU Area E2</td>
</tr>
<tr>
<td>Catalog Date:</td>
<td>June 1, 2020</td>
</tr>
</tbody>
</table>

This course is for students who wish to participate in intercollegiate soccer. This course may be repeated a maximum of four times to meet California Community College Athletic Association requirements for eligibility.

### Student Learning Outcomes

Upon completion of this course, the student will be able to:

- **SLO #1**: Apply and demonstrate an understanding of the technical knowledge of soccer.
  - Recognize and execute the correct technique for passing in the game of soccer.
SPORT 357 Pre-Season Conditioning For Women's Soccer

Units: 0.5 - 3
Hours: 27 - 162 hours LAB
Prerequisite: None.
Transferable: CSU; UC (All PE Activity courses: combined maximum transfer credit, 4 units)
General Education: AA/AS Area III(a); CSU Area E2
Catalog Date: June 1, 2020

This course is designed to increase sport performance and overall understanding of intercollegiate soccer concepts and strategic philosophies. Course content will include: collegiate level soccer-specific skill development, collegiate level offensive and defensive concepts, team specific soccer fundamentals, team specific drills for individual improvement and sport specific agility work, plyometrics and speed training. This course is designed to prepare students for intercollegiate soccer competition and may be repeated a maximum of four times to meet California Community College Athletic Association requirements for eligibility.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- Assess various practice situations and apply appropriate solutions (SLO 1)
Demonstrate and apply intercollegiate offensive and defensive philosophies (SLO 2)
Demonstrate proper technique in sport-specific fundamentals
Demonstrate an improved level of agility and speed training

SPORT 358 Pre-Season Conditioning for Men's Soccer

Units: 0.5 - 3
Hours: 27 - 162 hours LAB
Prerequisite: None.
Transferable: CSU; UC (All PE activity courses combined: maximum credit, 4 units)
General Education: AA/AS Area III(a); CSU Area E2
Catalog Date: June 1, 2020

This course is designed to increase sport performance and overall understanding of intercollegiate soccer concepts and strategic philosophies. Course content will include: collegiate level soccer-specific skill development, collegiate level offensive and defensive concepts, team specific soccer fundamentals, Team specific drills for individual improvement and sport specific agility work, plyometrics and speed training. This course may be repeated a maximum of four times to meet California Community College Athletic Association requirements for eligibility.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO #1: Apply and demonstrate proper footwork techniques specific to soccer.
- Analyze and employ the proficient advanced technique for dribbling in the game of soccer.
- Analyze and employ the proficient advanced technique for passing in the game of soccer.
- Analyze and employ the proficient advanced technique for receiving in the game of soccer.
- Analyze and employ the proficient advanced technique for crossing in the game of soccer.
- Analyze and employ the proficient advanced technique for shooting in the game of soccer.
- SLO #2: Apply and demonstrate endurance and strength needed in order to be competitive in soccer.
- Analyze and execute proficiently the training concepts for aerobic base training.
- Analyze and execute proficiently the training concepts for high intensity aerobic training.
- Analyze and execute proficiently the training concepts for speed endurance training.
- Analyze and execute proficiently the training concepts for speed training.
- Analyze and execute proficiently the training concepts for strength training.
- Analyze and execute proficiently the training concepts for core strength training.
- SLO #3: Apply and demonstrate proper form and techniques when executing various drills for soccer.
- Analyze and execute proficiently the technical concepts for training offense.
- Analyze and execute proficiently the technical concepts for training defense.
- Analyze and execute proficiently the technical concepts for training transition to offense.
- Analyze and execute proficiently the technical concepts for training transition to defense.
- SLO #4: Apply and demonstrate appropriate warm up and cool down procedures for injury prevention.
- Analyze and execute proficiently the training concepts for static warm ups and cooldowns.
- Analyze and execute proficiently the training concepts for dynamic warm ups and cooldowns.
- Analyze and execute proficiently the training concepts for neuromuscular control and balance.
- Analyze and execute proficiently the training concepts for plyometrics and agility.
- SLO #5: Apply and demonstrate proper technique in agility training.
- Analyze and execute proficiently the training concepts for agility training.
- Analyze and execute proficiently the training concepts for balance training.
- Analyze and execute proficiently the training concepts for coordination training.

**SPORT 365 Softball, Intercollegiate-Women**

Units: 3  
Hours: 175 hours LAB  
Prerequisite: None.  
Transferable: CSU; UC  
General Education: AA/AS Area III(a); CSU Area E2  
Catalog Date: June 1, 2020

This course is for students who wish to participate in intercollegiate softball. This course may be repeated a maximum of four times to meet California Community College Athletic Association requirements for eligibility.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- SLO #1: Develop the ability to utilize critical thinking skills, evaluate, plan, and create success as a participant on an athletic team.
- demonstrate knowledge of fast pitch softball rules.
- understand and apply strategies, both offensively and defensively, in competitive situations.
- SLO #2: Prepare for successful transfer to four year institutions and participate in athletics.
- identify the guidelines for academic success and athletic eligibility.
- SLO #3: Relate to teammates, coaches and the competitive atmosphere in a manner that enhances their participation as well as the team environment. Develop the ability to participate in athletic competition at a high level.
- improve both individual skill levels and team softball skills.
- evaluate and measure the skill levels, strengths, and weaknesses of other teams, in order to prepare for upcoming contests.
- apply off-season conditioning and strength training principles to the competitive environment.
- SLO #4: Become a responsible, productive citizen who represents the sport to themselves and others in a productive manner.
- examine the values of teamwork and demonstrate strategies to improve team cohesiveness and camaraderie.

**SPORT 366 Off Season Conditioning for Softball**

Units: 0.5 - 3  
Hours: 54 - 162 hours LAB  
Prerequisite: None.  
Enrollment Limitation: It is advised that athletes taking this course have participated at the varsity level in high school or competed on a summer travel ball team.  
Transferable: CSU; UC  
General Education: AA/AS Area III(a); CSU Area E2  
Catalog Date: June 1, 2020

This physical education course involves a combination of basic skills and strategy tactics with an emphasis on a fitness component for the sport of softball. The course will also offer a mental training component for peak performance. This course is designed to prepare students for intercollegiate softball competition and may be repeated a maximum of four times to meet California Community College Athletic Association requirements for eligibility.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- SLO #1: Demonstrate and increase proper muscular strength and endurance and cardiovascular endurance specific to the sport of softball.
- Perform weight lifting and/or body lifting techniques, develop core strengthening and flexibility. Apply and demonstrate speed, agility, and endurance training for the sport of softball.
• SLO #2 Comprehend, analyze and execute the basic fundamental skills as it relates to the sport of softball.

• Understand and properly perform the basic fundamentals of offense which consists of: • base-running; lead-offs and jumps, rounding bases, steals, tags, sliding • short game; bunts: sacrifice, sneaky, squeeze, fake slap sacrifice, slaps: left handed and right handed • hitting: proper stance, mechanics and handling of the bat, contact points, balance, extension

• Understand and properly perform the basic fundamentals of defense which consists of: • throwing; overhead, ¾, side arm, underhand tosses, crow hops, quick-hands • fielding: ground balls, fly balls, back hands, forehands, line drives, bunt pick up, short hops • pitching: proper grip and spins for fast ball, change up, drop, rise, curve, screw • catching: receiving, framing, blocking

• SLO #3 Combine the basic softball skills and distinguish which skills are most appropriate for specific softball game situations and apply the appropriate solutions.

• Understand and properly perform the fundamentals and strategy for the middle infield and corner position play which consists of:
  - steal coverage, position play dependent on batters, rundown, relay, bag coverage, tags vs. force outs, throws and catches on the run, communication between fielders, 1st and 3rd situations, slap defense, pick offs, back ups etc.
  - understanding and performing offensive situational play and strategies which consist of: hit and runs, bunt and runs, delay and straight steals, distinguishing out situations, squeeze, sacrifice, sneaky, slap placement, reading hit ball situations, tag ups, identify, recall and apply signs to each situation.

• SLO #4 Evaluate and perform peak performance techniques relevant to softball.

• Identify and formulate appropriate goals for softball skills and personal improvement. Recognize and become aware of self-talk, non-verbal language and the elements in one’s control. Employ and demonstrate the proper refocus techniques and perform a personally constructed routine to aid in refocusing for peak performance.

• SLO #5 Identify and develop ways to support, lead, and communicate amongst teammates in order for the team to succeed as a unit towards a common goal.

• Develop listening skills and provide feedback to coaches and teammates while performing basic softball skills, game strategy and the mental game. Demonstrate proper etiquette and sportsmanship during practice and competition. Participate in and contribute to team building activities.

SPORT 368 Pre-Season Conditioning for Softball

Units: 0.5
Hours: 27 hours LAB
Prerequisite: None.
Enrollment Limitation: Once enrolled, the student must demonstrate intercollegiate athletic skills as determined by the coaching staff to remain enrolled in this course. It is advised that athletes taking this course have participated at the varsity level in high school or competed on a summer travel ball team.
Transferable: CSU; UC
General Education: AA/AS Area III(a); CSU Area E2
Catalog Date: June 1, 2020

This physical education course involves a combination of basic skills and strategy tactics with an emphasis on a fitness component for the sport of softball. The course will also offer a mental training component for peak performance. This course is designed to prepare students for intercollegiate softball competition and may be repeated a maximum of four times to meet California Community College Athletic Association requirements for eligibility.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• SLO #1 Demonstrate and increase proper muscular strength and endurance and cardiovascular endurance specific to the sport of softball.

• Perform weight lifting and/or body lifting techniques, develop core strengthening and flexibility. Apply and demonstrate speed, agility, and endurance training for the sport of softball.

• SLO #2 Comprehend, analyze and execute the basic fundamental skills as it relates to the sport of softball.
Understand and properly perform the basic fundamentals of offense which consists of: • base-running; lead-offs and jumps, rounding bases; steals, tags, sliding; short game; bunts: sacrifice, sneaky, squeeze, fake slap sacrifice, slaps: left handed and right handed; hitting: proper stance, mechanics and handling of the bat, contact points, balance, extension

Understand and properly perform the basic fundamentals of defense which consists of: • throwing: overhand, ¾, side arm, underhand tosses, crow hops, quick-hands • fielding: ground balls, fly balls, back hands, forehands, line drives, bunt pick up, short hops • pitching: proper grip and spins for fast ball, change up, drop, rise, curve, screw • catching: receiving, framing, blocking

SLO #3 Combine the basic softball skills and distinguish which skills are most appropriate for specific softball game situations and apply the appropriate solutions.

Understand and properly perform the fundamentals and strategy for the middle infield and corner position play which consists of: steal coverage, position play dependent on batters, rundowns, relay, bag coverage, tags vs. force outs, throws and catches on the run, communication between fielders, 1st and 3rd situations, slap defense, pick offs, back-ups etc.

Understand and properly perform the basic fundamentals and strategy for left, center, and right field position play which consists of: reading the play, cutting angles, backing up bases, diving, relays, differentiating ground ball tactics according to the situation, communication between fielders, slap defense etc.

Understand and properly perform strategy and play for the catching position which consists of: • reading relays, calling pitches, dealing with 1st and 3rds, steals, squeezes, sacrifices, rundown, pick-offs, pitch outs, base coverage, tags etc.

Understand and properly perform strategy and play for the pitching position which consists of back-ups, moving the ball, reading signs, bag coverage, legal vs. non-legal pitches, reading bunt situations, pitch-outs and tags.

Understand and properly perform offensive situational play and strategies which consist of: hit and runs, bunt and runs, delay and straight steals, distinguishing out situations, squeeze, sacrifice, sneaky, slap placement, reading hit ball situations, tag ups, identify, recall and apply signs to each situation.

SLO #4 Evaluate and perform peak performance techniques relevant to softball.

Identify and formulate appropriate goals for softball skills and personal improvement. Recognize and become aware of self-talk, non-verbal language and the elements in ones control. Employ and demonstrate the proper refocus techniques and perform a personally constructed routine to aid in refocusing for peak performance.

SLO #5 Identify and develop ways to support, lead, and communicate amongst teammates in order for the team to succeed as a unit towards a common goal.

Develop listening skills and provide feedback to coaches and teammates while performing basic softball skills, game strategy and the mental game.

Demonstrate proper etiquette and sportsmanship during practice and competition. Participate in and contribute to team building activities.

SPORT 375 Swimming and Diving, Intercollegiate-Women

Units: 3
Hours: 175 hours LAB
Prerequisite: None.
Enrollment Limitation: Once enrolled, the student must demonstrate intercollegiate athletic skills as determined by the coaching staff to remain enrolled in this course
Transferable: CSU; UC (All PE Activity courses: combined maximum transfer credit, 4 units)
General Education: AA/AS Area III(a); CSU Area E2
Catalog Date: June 1, 2020

This is an advanced swimming and diving activity course that provides competition with other community college teams. Fundamentals, rules, team strategy, and aquatic skills appropriate to intercollegiate athletic competition are expected of competitors. This course is designed to prepare students for intercollegiate competition and may be repeated a maximum of four times to meet California Community College Athletic Association requirements for eligibility.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO #1: Develop the ability to utilize critical thinking skills, evaluate, plan and create success as a participant on an athletic team.
- improve in advanced swimming skills.
- explain and demonstrate advanced concepts in swimming technique.
- improve individual fitness level through conditioning for swimming.
- explain and demonstrate the personal skills necessary to be a viable, contributing team player.
**SPORT 376 Off Season Swim & Dive**

- **Units:** 0.5 - 3
- **Hours:** 27 - 162 hours LAB
- **Prerequisite:** None.
- **Enrollment Limitation:** Once enrolled, the student must demonstrate intercollegiate athletic skills as determined by the coaching staff to remain enrolled in this course.
- **Transferable:** CSU; UC (All PE Activity courses: combined maximum transfer credit, 4 units)
- **General Education:** AA/AS Area III(a); CSU Area E2
- **Catalog Date:** June 1, 2020

This course combines basic skills and stroke technique with an emphasis on a fitness component for the sport of swim and dive. It also offers a dry-land training component for peak performance. This course is designed to prepare students for intercollegiate swim and dive competition. This course is designed to prepare students for intercollegiate competition and may be repeated a maximum of four times to meet California Community College Athletic Association requirements for eligibility. The participant must adhere to CCCAA eligibility requirements.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- **SLO #1** Evaluate strength and fitness levels for competition using standard fitness testing.
- **SLO #2** Identify and apply exercises used in motion as related to the sport.
- **SLO #3** Design, implement, and evaluate a personalized training program for athletes.
- **SLO #4** Understand and apply safety techniques and training etiquette to training.

- **SLO #1:** Evaluate strength and fitness levels for competition using standard fitness testing.
  - assess their fitness level for competition by applying the following fitness tests: body fat analysis, abdominal test, flexibility, and strength tests. Students will be challenged to improve their level of fitness and knowledge of conditioning concepts.
  - demonstrate increased cardiovascular endurance, flexibility, strength, and muscle size. Students will again be challenged to improve their level of fitness and knowledge of conditioning concepts.
  - **SLO #2:** Identify and apply exercises used in motion as related to the sport.
  - apply and demonstrate speed, agility, and endurance training to the sport of swim and dive.
  - apply kinesiology principles of sport motion to the exercises needed to enhance their physical strength in that particular muscle group movement.
  - measure their improvement and apply needed resistance or intensity in order to maximize efficiency in their workout.
  - improve in their swimming technique to maximize efficiency and speed.
  - **SLO #3:** Design, implement, and evaluate a personalized training program for athletes.
  - describe the theory of conditioning as it relates to the development of individual programs.
  - apply principles in cardiovascular fitness to enhance and support a training program.
  - employ goal-setting techniques toward establishing their fitness program.
  - **SLO #4:** Understand and apply safety techniques and training etiquette to training.
  - use proper safety procedures and techniques while training.
SPORT 377 Pre-Season Conditioning Swim & Dive

### Units:
0.5 - 3

### Hours:
27 - 162 hours LAB

### Prerequisite:
None.

### Enrollmnet Limitation:
Once enrolled, the student must demonstrate intercollegiate athletic skills as determined by the coaching staff to remain enrolled in this course.

### Transferable:
CSU; UC (All PE Activity courses: combined maximum transfer credit, 4 units)

### General Education:
AA/AS Area III(a); CSU Area E2

### Catalog Date:
June 1, 2020

This course is a preparation for the competitive swimming and dive intercollegiate season. It also offers a dry-land and weight training components for peak performance. This course is designed to prepare students for intercollegiate competition and may be repeated a maximum of four times to meet California Community College Athletic Association requirements for eligibility.

### Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO #1 Evaluate strength and fitness levels for competition using standard fitness testing.
- Assess their fitness level for competition by applying the following fitness tests: body fat analysis, abdominal teat, flexibility, and strength tests. Students will be challenged to improve their level of fitness and knowledge of conditioning concepts.
- Demonstrate increased cardiovascular endurance, flexibility, strength, and muscle size. Students will again be challenged to improve their level of fitness and knowledge of conditioning concepts.
- SLO #2 Identify and apply exercises used in motion as related to the sport.
- Apply and demonstrate speed, agility, and endurance training to the sport of swim and dive.
- Apply kinesiology principles of sport motion to the exercises needed to enhance their physical strength in that particular muscle group movement.
- Measure their improvement and apply needed resistance or intensity in order to maximize efficiency in their workout.
- Improve in their swimming technique to maximize efficiency and speed.
- SLO #3 Design, implement, and evaluate a personalized training program for athletes.
- Describe the theory of conditioning as it relates to the development of individual programs.
- Apply principles in cardiovascular fitness to enhance and support a training program.
- Employ goal-setting techniques toward establishing their fitness program.
- SLO #4 Understand and apply safety techniques and training etiquette to training.
- Use proper safety procedures and techniques while training.
- Illustrate proper etiquette and demonstrate an ability to relate to others while training.

SPORT 380 Tennis, Intercollegiate-Men

### Units:
3

### Hours:
175 hours LAB

### Prerequisite:
None.

### Advisory:
Athletes are expected to have high school experience.

### Transferable:
CSU; UC (All PE Activity courses: combined maximum transfer credit, 4 units)

### General Education:
AA/AS Area III(a); CSU Area E2

### Catalog Date:
June 1, 2020

This course covers fundamentals, rules, and individual and/or team strategy appropriate to intercollegiate athletic competition in tennis. It may be repeated a maximum of four times to meet California Community College Athletic Association requirements for eligibility.

### Student Learning Outcomes

Upon completion of this course, the student will be able to:

- Illustrate proper etiquette and demonstrate an ability to relate to others while training.
SLO#1 Students will apply and demonstrate an understanding of the technical knowledge of tennis
   - Demonstrate and execute a fundamental forehand stroke
   - Demonstrate and execute a fundamental backhand stroke
   - Demonstrate and execute a fundamental approach shot
   - Demonstrate and execute a fundamental volley and half volley
   - Demonstrate and execute a fundamental overhead
   - Demonstrate and execute a variety of serves including flat, slice, and kick serve.
   - Demonstrate and execute a variety of defensive strokes including lob and slice
   - Demonstrate consistency and accuracy utilizing all of the fundamental strokes in a variety of capacities
SLO#2 Students will apply and demonstrate an understanding of the tactical strategies in tennis for both singles and doubles play.
   - Recognize ball and court relationship relative to the highest percentage shot available
   - Understand how to set up a point both as a server and a returner
   - Improve position relative ball placement
   - Understand strategy relative to score and situation and make the correct play at the correct time
   - Evaluate opponent's strengths and weaknesses and make correct adjustments
   - Correctly execute offensive and defensive shots and movements at appropriate times
   - Execute plays, both singles and doubles, which gain tactical and psychological advantage
   - Formulate pre-game strategies, and analyze and summarize post game experiences
SLO#3 Relate to teammates, coaches, and opponents in a manner that enhances their participation as well as the overall team experience.
   - Understand positive reinforcement and utilize opportunities in matches and practices to support teammates
   - Evaluate emotional demeanor and utilize strategies to stay under control
   - Be gracious in both victory and defeat

SPORT 385 Tennis, Intercollegiate-Women

Units: 3
Hours: 175 hours LAB
Prerequisite: None.
Advisory: Athletes must have high school experience.
Transferable: CSU; UC (All PE Activity courses: combined maximum transfer credit, 4 units)
General Education: AA/AS Area III(a); CSU Area E2
Catalog Date: June 1, 2020

This course is for students who wish to participate in intercollegiate tennis. This course may be repeated a maximum of four times to meet California Community College Athletic Association requirements for eligibility.

Student Learning Outcomes

Upon completion of this course, the student will be able to:
   - SLO#1 Students will apply and demonstrate an understanding of the technical knowledge of tennis
   - Demonstrate and execute a fundamental forehand stroke
   - Demonstrate and execute a fundamental backhand stroke
   - Demonstrate and execute a fundamental approach shot
   - Demonstrate and execute a fundamental volley and half volley
   - Demonstrate and execute a fundamental overhead
Demonstrate and execute a variety of serves including flat, slice, and kick serve.
Demonstrate and execute a variety of defensive strokes including lob and slice.
Demonstrate consistency and accuracy utilizing all of the fundamental strokes in a variety of capacities.
SLO#2 Students will apply and demonstrate an understanding of the tactical strategies in tennis for both singles and doubles play.
Recognize ball and court relationship relative to the highest percentage shot available.
Understand how to set up a point both as a server and a returner.
Improve position relative ball placement.
Understand strategy relative to score and situation and make the correct play at the correct time.
Evaluate opponent’s strengths and weaknesses and make correct adjustments.
Correctly execute offensive and defensive shots and movements at appropriate times.
Execute plays, both singles and doubles, which gain tactical and psychological advantage.
Formulate pre-game strategies, and analyze and summarize post game experiences.
SLO#3 Relate to teammates, coaches, and opponents in a manner that enhances their participation as well as the overall team experience.
Understand positive reinforcement and utilize opportunities in matches and practices to support teammates.
Evaluate emotional demeanor and utilize strategies to stay under control.
Be gracious in both victory and defeat.

SPORT 386 Off Season Conditioning for Tennis

Units: 0.5 - 3
Hours: 27 - 162 hours LAB
Prerequisite: None.
Transferable: CSU; UC
General Education: AA/AS Area III(a); CSU Area E2
Catalog Date: June 1, 2020

This course is designed to prepare the intercollegiate tennis player for the competitive season and reduce the risk of injury. Course content will include intercollegiate level tennis-specific skill development, a solid aerobic conditioning plan, sport specific - strength training, agility work, plyometrics, speed training and flexibility exercises and other activities designed to prepare the athlete both physically and mentally. This course is designed to prepare students for intercollegiate tennis competition and may be repeated to meet requirements for CCCAA eligibility.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO #1 Evaluate strength and fitness levels for competition using standard fitness testing.
- Assess their fitness level for competition by applying the following fitness tests: body fat analysis, abdominal test, flexibility, and strength tests. Students of different levels (beginning/intermediate/advanced) will be challenged to improve their level of fitness and knowledge of conditioning concepts.
- Demonstrate increased cardiovascular endurance, flexibility, strength, and muscle size. Students challenged to improve their level of fitness and knowledge of conditioning concepts.
- Improve tennis fitness through weight training and aerobic conditioning. Students will be challenged to improve their level of fitness and knowledge of conditioning concepts.
- SLO #2 Identify and apply exercises used in motion as related to the sport.
- Apply principles of kinesiology to the exercises needed to enhance their physical strength in that particular muscle group movement. Students of different levels (beginning/intermediate/advanced) will be challenged to improve their level of fitness and knowledge of conditioning concepts. Advanced students will be encouraged to help the beginners.
- Measure improvement and apply needed resistance or intensity in order to maximize efficiency in workouts. Students of different levels (beginning/intermediate/advanced) will be challenged to improve their level of fitness and knowledge of conditioning concepts. Advanced students will be encouraged to help the beginners.
improve in execution of basic fundamental skills. Students of different levels (beginning/intermediate/advanced) will be challenged to improve their level of fitness and knowledge of conditioning concepts. Advanced students will be encouraged to help the beginners.

Perform and execute various baseline shots directed to specific targets on the court. Students of different levels (beginning/intermediate/advanced) will be challenged to improve their level of fitness and knowledge of conditioning concepts. Advanced students will be encouraged to help the beginners.

explain and demonstrate tactics and strategies as they relate to both singles and doubles play. Students will be challenged to improve their level of fitness and knowledge of conditioning concepts. Advanced students will be encouraged to help the beginners.

explain and demonstrate the defensive strategies and tactics as they relate to successful tennis. Students of different levels (beginning/intermediate/advanced) will be challenged to improve their level of fitness and knowledge of conditioning concepts. Advanced students will be encouraged to help the beginners.

SLO #3 Design, implement, and evaluate a personalized training program for athletes.

describe the theory of conditioning as it relates to the development of individual programs. Students of different levels (beginning/intermediate/advanced) will be challenged to improve their level of fitness and knowledge of conditioning concepts. Advanced students will be encouraged to help the beginners.

apply principles in cardiovascular fitness to enhance and support a training program. Students of different levels (beginning/intermediate/advanced) will be challenged to improve their level of fitness and knowledge of conditioning concepts. Advanced students will be encouraged to help the beginners.

employ goal-setting techniques toward establishing their fitness program. Students of different levels (beginning/intermediate/advanced) will be challenged to improve their level of fitness and knowledge of conditioning concepts. Advanced students will be encouraged to help the beginners.

SLO #4 Understand and apply safety techniques and training etiquette to training.

use proper safety procedures and techniques while training. Students of different levels (beginning/intermediate/advanced) will be challenged to improve their level of fitness and knowledge of conditioning concepts. Advanced students will be encouraged to help the beginners.

illustrate proper etiquette and demonstrate an ability to relate to others while training. Students of different levels (beginning/intermediate/advanced) will be challenged to improve their level of fitness and knowledge of conditioning concepts. Advanced students will be encouraged to help the beginners.

SPORT 403 Pre-Season Conditioning for Volleyball

Units: 0.5 - 3
Hours: 27 - 162 hours LAB
Prerequisite: None.
Enrollment Limitation: Once enrolled, the student must demonstrate intercollegiate athletic skills as determined by the coaching staff to remain enrolled in this course. It is advised that athletes taking this course have participated at the varsity level in high school or competed on a club volleyball team.

Transferable: CSU; UC (All PE Activity courses: combined maximum transfer credit, 4 units)
General Education: AA/AS Area III(a); CSU Area E2
Catalog Date: June 1, 2020

This course involves a combination of skill development and tactical strategies with an emphasis on a fitness component for the sport of volleyball. The course will also offer a mental training component for peak performance. This course is designed to prepare students for intercollegiate volleyball competition and may be taken a maximum of four times to meet California Community College Athletic Association requirements for eligibility.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO #1 Evaluate strength and fitness levels for competition using standard fitness testing.
- assess their fitness level for competition by applying the following fitness tests: body fat analysis, abdominal test, flexibility, and strength tests.
- demonstrate increased cardiovascular endurance, flexibility, strength, and muscle size.
- improve volleyball fitness through weight training and aerobic conditioning.
- Students of different levels (beginning/intermediate/advanced) will be challenged to improve their level of fitness and knowledge of conditioning concepts.
Advanced students will be encouraged to help the beginners.

- SLO #2 Identify and apply exercises used in motion as related to the sport.
- apply principles of sport motion to the exercises needed to enhance their physical strength in that particular muscle group movement.
- measure their improvement and apply needed resistance or intensity in order to maximize efficiency in their workout.
- improve in individual defensive and offensive basic skills.
- improve individual defense and understand its importance with regard to team defense.
- explain and demonstrate the defensive tactics of volleyball.
- explain and demonstrate the offensive tactics of volleyball.
- Students of different levels (beginning/intermediate/advanced) will be challenged to improve their level of fitness and knowledge of conditioning concepts. Advanced students will be encouraged to help the beginners.

SPORT 405 Volleyball, Intercollegiate-Women

| Units: | 3 |
| Hours: | 175 hours LAB |
| Prerequisite: | None. |
| Transferable: | CSU; UC |
| General Education: | AA/AS Area III(a); CSU Area E2 |
| Catalog Date: | June 1, 2020 |

This course is for students who wish to participate in intercollegiate volleyball. This course may be repeated a maximum of four times to meet California Community College Athletic Association requirements for eligibility.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO#1: Apply and demonstrate an understanding of the technical knowledge of volleyball.
- Recognize and execute the correct technique of passing, setting, hitting, blocking, digging and serving.
- Recognize and practice situations of when to use a particular technique of a skill.
- SLO#2: Apply and demonstrate an understanding of strategic knowledge of the game of volleyball.
- Describe and employ transition offense.
- Examine strength and weaknesses of various defenses.
- Understand and apply the intricacies of an offense.
- SLO#3: Apply and demonstrate the physical training required to play volleyball.
- Use the process for acquiring appropriate fitness level for intercollegiate volleyball competition.
- Recognize the value of power, strength, speed and agility for the game of volleyball.
- SLO#4: Prepare for successful transfer to four year institutions and participate in athletics.
- Explain the importance of good study habits as they pertain to academic success to maintain good standing as a student and for athletic eligibility.
- Explain, demonstrate and practice strength building through weight training appropriate for intercollegiate volleyball.
- SLO #5: Develop the ability to utilize critical thinking skills, evaluate, plan and create success as a participant on an athletic team.
- Improve in advanced individual and team volleyball skills.
- Understand advanced concepts of volleyball.
- Explain and demonstrate the personal skills necessary to be a viable, contributing team player.
- Examine volleyball rules and regulations.
SPORT 406 Off Season Conditioning for Volleyball

Units: 0.5 - 3
Hours: 27 - 162 hours LAB
Prerequisite: None.
Enrollment Limitation: Once enrolled, the student must demonstrate intercollegiate athletic skills as determined by the coaching staff to remain enrolled in this course.
Transferable: CSU; UC
General Education: AA/AS Area III(a); CSU Area E2
Catalog Date: June 1, 2020

This course is designed to prepare the collegiate volleyball player for the competitive season and reduce risk of injury. Course content will include: Collegiate level volleyball-specific skill development, a solid aerobic conditioning plan, sport specific strength training, agility work, plyometric jump training, speed training and flexibility exercises as well as team play combination of activities designed to prepare the athlete both physically and mentally. This course is designed to prepare students for intercollegiate volleyball competition and may be repeated a maximum of four times to meet California Community College Athletic Association requirements for eligibility.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO #1 Evaluate strength and fitness levels for competition using standard fitness testing.
- Assess their fitness level for competition by applying the following fitness tests: body fat analysis, abdominal test, flexibility, and strength tests.
- Demonstrate increased cardiovascular endurance, flexibility, strength, and muscle size.
- Improve volleyball fitness through weight training and aerobic conditioning.
- Students of different levels (beginning/intermediate/advanced) will be challenged to improve their level of fitness and knowledge of conditioning concepts. Advanced students will be encouraged to help the beginners.
- SLO #2 Identify and apply exercises used in motion as related to the sport.
- Apply principles of sport motion to the exercises needed to enhance their physical strength in that particular muscle group movement.
- Measure their improvement and apply needed resistance or intensity in order to maximize efficiency in their workout.
- Improve in individual defensive and offensive basic skills.
- Improve individual defense and understand its importance with regard to team defense.
- Explain and demonstrate the defensive tactics of volleyball.
- Explain and demonstrate the offensive tactics of volleyball.
- Students of different levels (beginning/intermediate/advanced) will be challenged to improve their level of fitness and knowledge of conditioning concepts. Advanced students will be encouraged to help the beginners.
- SLO #3 Design, implement, and evaluate a personalized training program for athletes.
- Describe the theory of conditioning as it relates to the development of individual programs.
- Apply principles in cardiovascular fitness to enhance and support a training program.
- Employ goal-setting techniques toward establishing their fitness program.
Students of different levels (beginning/intermediate/advanced) will be challenged to improve their level of fitness and knowledge of conditioning concepts. Advanced students will be encouraged to help the beginners.

SLO #4 Understand and apply safety techniques and training etiquette to training.

Use proper safety procedures and techniques while training.

Illustrate proper etiquette and demonstrate an ability to relate to others while training.

Students of different levels (beginning/intermediate/advanced) will be challenged to improve their level of fitness and knowledge of conditioning concepts. Advanced students will be encouraged to help the beginners.

SPORT 495 Independent Studies in Sport

Units: 1 - 3
Hours: 54 - 162 hours LAB
Prerequisite: None.
Transferable: CSU; UC
General Education: AA/AS Area III(a); CSU Area E2
Catalog Date: June 1, 2020

An independent studies project involves an individual student or small group of students in study, research, or activities beyond the scope of regularly offered courses. See the current catalog section of “Special Studies” for full details of Independent Studies.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO #1: Actively engage in intellectual inquiry beyond that required in order to pass a course of study (College Wide Learning Outcome - Area 4).

- Discuss and outline a proposal of study (that can be accomplished within one semester term) with a supervising instructor qualified within the discipline.

- Design an independent study (to be completed individually or by collaboration of a small group) to foster special knowledge, skills, and experience that are not available in any one regularly scheduled course.

- Use information resources to gather discipline-specific information.

- SLO #2: Utilize modes of analysis and critical thinking to apply theoretical perspectives and/or concepts in the major discipline of study to significant problems and/or educational activities (College Wide Learning Outcome - Area 3).

- Analyze and apply the knowledge, skills and experience that are involved in the independent study to theoretical perspectives and/or concepts in the major discipline of study.

- Explain the importance of the major discipline of study in the broader picture of society.

- SLO #3: Communicate a complex understanding of content matter of the major discipline of study (College Wide Outcome - Area 3).

- Demonstrate competence in the skills essential to mastery of the major discipline of study that are necessary to accomplish the independent study.

- SLO #4: Identify personal goals and pursue these goals effectively (College Wide Outcome - Area 4).

- Utilize skills from the “academic tool kit” including time management, study skills, etc., to accomplish the independent study within one semester term.

Team Activity (TMACT)

TMACT 300 Soccer, Indoor

Units: 1
Hours: 54 hours LAB
Course Family: Soccer (http://crc.losrios.edu/course-families#id_100023)
Prerequisite: None.
Transferable: CSU; UC
General Education: AA/AS Area III(a); CSU Area E2
Catalog Date: June 1, 2020
The purpose of this course is to provide the student with beginning level knowledge and skills associated with indoor soccer. This course emphasizes defense, offense, passing, ball control, heading, and shooting. It covers the skills, strategy, and rules that govern the play of indoor soccer.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO #1: Apply and demonstrate an understanding of the technical knowledge of soccer.
  - Analyze and employ the correct technique for passing in the game of soccer.
  - Analyze and execute the correct technique for receiving in the game of soccer.
  - Analyze and execute the correct technique for shooting in the game of soccer.
  - Analyze and execute the correct technique for crossing in the game of soccer.
  - Analyze and execute the correct technique for dribbling in the game of soccer.
  - SLO #2: Apply and demonstrate basic understanding of tactical knowledge of the game of soccer.
  - Analyze and execute a basic offense.
  - Analyze and execute a basic defense.
  - Analyze and execute basic goalkeeping.
  - SLO #3: Apply and demonstrate the physical skills that are required in the game of soccer.
  - Recognize the difference between aerobic and anaerobic fitness as it pertains to fitness levels for indoor soccer.
  - Recognize the agility, balance, and coordination requirements as it pertains to indoor soccer.
  - Recognize the value of power, strength, speed involved in indoor soccer.
  - SLO #4 Recognize and apply the sociological and psychological skills needed in a team sport environment.
  - Demonstrate and execute self control.
  - Demonstrate and execute mental toughness.
  - Value and demonstrate self confidence.
  - Value team confidence.
  - Value the social aspects of a team sport environment.

TMACT 301 Indoor Soccer II

| Units: | 1 |
| Hours: | 54 hours LAB |
| Course Family: | Soccer (http://crc.losrios.edu/course-families#id_100023) |
| Prerequisite: | None. |
| Advisory: | TMACT 300; Student should have completed Indoor Soccer I, played 1 year of High School Varsity Soccer, completed 1 year of College Soccer, or satisfy the professor with a level of proficiency. |
| Transferable: | CSU; UC |
| General Education: | AA/AS Area III(a); CSU Area E2 |
| Catalog Date: | June 1, 2020 |

The purpose of this course is to provide the student with an intermediate level player environment to challenge the players knowledge and skills associated with indoor soccer. This course emphasizes an intermediate level of defending, attacking, and technical ability. It covers the skills, strategy, and rules that govern the play of indoor soccer. This class is not for beginners.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO #1: Apply and demonstrate an intermediate level of understanding of the technical aspects for indoor soccer.
  - Analyze and employ proficient technique for passing in the game of indoor soccer.
  - Analyze and execute proficient technique for receiving in the game of indoor soccer.
- Analyze and execute the proficient technique for shooting in the game of indoor soccer.
- Analyze and execute the proficient technique for crossing in the game of indoor soccer.
- Analyze and execute the proficient technique for dribbling in the game of soccer.
- SLO #2: Apply and demonstrate an intermediate level of tactical knowledge of the game for indoor soccer.
  - Analyze and execute an intermediate level for offense.
  - Analyze and execute an intermediate level for defense.
  - Analyze and execute an intermediate level for goalkeeping.
- SLO #3: Apply and demonstrate intermediate level of the physical skills that are required for the game of indoor soccer.
  - Recognize the difference between aerobic and anaerobic fitness as it pertains to intermediate fitness levels for indoor soccer.
  - Recognize the agility, balance, and coordination requirements as it pertains to intermediate levels for indoor soccer.
  - Recognize the value of power, strength, and speed involved at an intermediate level for indoor soccer.
- SLO #4 Recognize and apply the sociological and psychological skills needed in a team sport within an intermediate level environment.
  - Demonstrate and execute self control within the confines of an intermediate level environment.
  - Demonstrate and execute mental toughness within the confines of an intermediate level environment.
  - Value and demonstrate self-confidence within the confines of an intermediate level environment.
  - Value team confidence within the confines of an intermediate level environment.
  - Value the social aspects of a team sport environment within the confines of an intermediate level.

**TMACT 302 Soccer - Outdoor**

| Units: | 1 |
| Hours: | 54 hours LAB |
| Course Family: | Soccer (http://crc.losrios.edu/course-families#id_100023) |
| Prerequisite: | None. |
| Transferable: | CSU; UC |
| General Education: | AA/AS Area III(a); CSU Area E2 |
| Catalog Date: | June 1, 2020 |

The purpose of this course is to provide the student with beginning level knowledge and skills associated with outdoor soccer. This course emphasizes defense, offense, passing, ball control, heading, and shooting. It covers the skills, strategy, and rules that govern the play of outdoor soccer.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- SLO #1: Apply and demonstrate an understanding of the technical knowledge and skills of soccer.
- Analyze and employ the correct technique for passing in the game of soccer.
- Analyze and execute the correct technique for receiving in the game of soccer.
- Analyze and execute the correct technique for shooting in the game of soccer.
- Analyze and execute the correct technique for crossing in the game of soccer.
- Analyze and execute the correct technique for dribbling in the game of soccer.
- SLO #2: Apply and demonstrate basic understanding of tactical knowledge of the game of soccer.
- Analyze and execute a basic offense.
- Analyze and execute a basic defense.
- Analyze and execute basic goalkeeping.
- SLO #3: Apply and demonstrate the physical skills that are required in the game of soccer.
Recognize the difference between aerobic and anaerobic fitness as it pertains to fitness levels for soccer.

Recognize the agility, balance, and coordination requirements as it pertains to soccer.

Recognize the value of power, strength, and speed involved in soccer.

SLO #4 Recognize and apply the sociological and psychological skills needed in a team sport environment.

Demonstrate and execute self-control.

Demonstrate and execute mental toughness.

Value and demonstrate self-confidence

Value team confidence.

Value the social aspects of a team sport environment.

TMACT 303 Outdoor Soccer II

The purpose of this course is to provide the student with an intermediate level player environment to challenge and improve the player's knowledge and skills associated with outdoor soccer. This course emphasizes an intermediate level of defending, attacking, and technical ability. It covers the skills, strategy, and rules that govern the play of outdoor soccer. This class is not for beginners.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO #1: Apply and demonstrate an intermediate level of understanding of the technical aspects for outdoor soccer.
  - Analyze and employ proficient technique for passing in the game of outdoor soccer.
  - Analyze and execute proficient technique for receiving in the game of outdoor soccer.
  - Analyze and execute the proficient technique for shooting in the game of outdoor soccer.
  - Analyze and execute the proficient technique for crossing in the game of outdoor soccer.
  - Analyze and execute the proficient technique for dribbling in the game of outdoor soccer.

- SLO #2: Apply and demonstrate an intermediate level of tactical knowledge of the game for outdoor soccer.
  - Analyze and execute an intermediate level for offense.
  - Analyze and execute an intermediate level for defense.
  - Analyze and execute an intermediate level for goalkeeping.

- SLO #3: Apply and demonstrate an intermediate level of the physical skills that are required for the game of outdoor soccer.
  - Recognize the difference between aerobic and anaerobic fitness as it pertains to intermediate fitness levels for outdoor soccer.
  - Recognize the agility, balance, and coordination requirements as it pertains to intermediate levels for outdoor soccer.
  - Recognize the value of power, strength, and speed involved at an intermediate level for outdoor soccer.

- SLO #4 Recognize and apply the sociological and psychological skills needed in a team sport within an intermediate level environment.
  - Demonstrate and execute self-control within the confines of an intermediate level environment.
  - Demonstrate and execute mental toughness within the confines of an intermediate level environment.
  - Value and demonstrate self-confidence within the confines of an intermediate level environment.
TMACT 304 Outdoor Soccer III

Units: 1
Hours: 54 hours LAB
Course Family: Soccer
Prerequisite: None.
Advisory: TMACT 303; Student should have completed Outdoor Soccer II, played 2 years of High School Varsity Soccer, played at the competitive level of youth soccer, completed 1 year of College Soccer, or satisfy the professor with a level of proficiency.
Transferable: CSU; UC
General Education: AA/AS Area III(a); CSU Area E2
Catalog Date: June 1, 2020

The purpose of this course is to provide the student with an advanced level player environment to challenge the player's knowledge and skills associated with outdoor soccer. This course emphasizes an advanced level of defending, attacking, and technical ability. It covers the skills, strategy, and rules that govern the play of outdoor soccer. This class is not for beginners or intermediate players.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- **SLO #1**: Apply and demonstrate an advanced level of understanding of the technical aspects for outdoor soccer.
- **SLO #2**: Analyze and employ advanced proficient technique for passing in the game of outdoor soccer.
- **SLO #3**: Analyze and execute advanced proficient technique for receiving in the game of outdoor soccer.
- **SLO #4**: Analyze and execute advanced proficient technique for shooting in the game of outdoor soccer.
- **SLO #5**: Analyze and execute advanced proficient technique for crossing in the game of outdoor soccer.
- **SLO #6**: Analyze and execute advanced proficient technique for dribbling in the game of outdoor soccer.
- **SLO #7**: Apply and demonstrate an advanced level of tactical knowledge of the game for outdoor soccer.
- **SLO #8**: Analyze and execute an advanced level for offense.
- **SLO #9**: Analyze and execute an advanced level for defense.
- **SLO #10**: Analyze and execute an advanced level for goalkeeping.
- **SLO #11**: Apply and demonstrate an advanced level of the physical skills that are required for the game of outdoor soccer.
- **SLO #12**: Recognize the difference between aerobic and anaerobic fitness as it pertains to advanced fitness levels for outdoor soccer.
- **SLO #13**: Recognize the agility, balance, and coordination requirements as it pertains to advanced levels for outdoor soccer.
- **SLO #14**: Recognize the value of power, strength, and speed involved at an advanced level for outdoor soccer.
- **SLO #15**: Recognize and apply the sociological and psychological skills needed in a team sport within an advanced level environment.
- **SLO #16**: Demonstrate and execute self-control within the confines of an advanced level environment.
- **SLO #17**: Demonstrate and execute mental toughness within the confines of an advanced level environment.
- **SLO #18**: Value and demonstrate self-confidence within the confines of an advanced level environment.
- **SLO #19**: Value team confidence within the confines of an advanced level environment.

TMACT 320 Basketball
This course is a physical education course that covers a complete review of the basic fundamentals, tactics, rules, and systems of play, and will enhance the student's understanding and ability.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO #1: Identify and apply exercises used in motion as related to basketball.
- Demonstrate skill and knowledge of the game at a competitive level.
- SLO #2: Utilize critical thinking skills, evaluate, plan, and create success as a member of the basketball class.
- Demonstrate proper etiquette and sportsmanship during drills and during competition.
- Define game strategy in a variety of game and scrimmage conditions.
- Identify and explain the rules and regulations of the game of basketball.
- Execute proper playing techniques through participation in drills and games.
- SLO #3: Relate to classmates, teachers, and the competitive atmosphere in a manner that enhances individual participation as well as the team environment.
- Adapt to changing game situations within an informal basketball game.
- Apply individual skills with similarly skilled basketball players in an informal team environment.

TMACT 321 Basketball II

This is a physical education course that covers a complete review of the intermediate fundamentals, tactics, rules, and systems of play. The student will develop a better understanding of how to play competitive basketball in a team setting.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO #1: Identify and apply exercises used in motion as related to basketball.
- Execute proper playing techniques at an intermediate level through participation in drills and games.
- SLO #2: Utilize critical thinking skills to evaluate, plan, and create success as a member of the basketball class.
- Identify and explain the rules and regulations of the game of basketball.
- Define game strategy in a variety of game and scrimmage conditions.
- SLO #3: Relate to classmates, teachers, and the competitive atmosphere in a manner that enhances individual participation as well as the team environment.
- Apply individual skills with similarly skilled (intermediate-level) basketball players in an informal team environment.
- Adapt to changing game situations within an informal basketball game.
TMACT 322 Basketball III

This is a competitive physical education basketball course. This course will cover the basic as well as advanced fundamentals and skills of basketball, in addition to basic strategies, rules, and systems of competitive play. This course is designed to enhance the students' comprehension and ability.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO #1. Demonstrate advanced basketball related skills including strategies, shooting, passing, ball handling, and rebounding.
- properly demonstrate advanced shooting skills in game situations such as bank-shots, & floaters.
- identify when to utilize advanced ball handling skills such as crossovers, & spin moves.
- SLO #2. Apply advanced individual skills, concepts, and strategies in a competitive, yet informal team environment.
- develop efficient strategies in 1 on 1, 2 on 2, 3 on 3, & 5 on 5 game situations.
- SLO #3. Demonstrate knowledge of advanced offensive and defensive concepts, and strategies.
- demonstrate advanced knowledge of zone defensive principles, zone offensive principles, along with pressure man to man offensive & defensive principles.
- SLO #4. Demonstrate sportsmanship during drills and team competition of play.
- maintain focus, and positive attitudes during adverse situations during competition.
- SLO #5. Communicate effectively in a team setting.
- communicate in game situations with both teammates and officials.

TMACT 323 Basketball IV

This is an advanced basketball course. Instruction, demonstration, and participation will provide the student with knowledge of tournament, and bracketed style play for basketball at an advanced level. This course will focus on 2 on 2, 3 on 3, and 5 on 5 tournament style competition.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO #1. Demonstrate advanced level basketball-related skills including shooting, passing, ball-handling rebounding, defensive techniques, and strategy.
- display defensive concepts such as full court defense, trapping defense, and man to man defense.
- SLO #2. Apply individual skills with similarly skill advanced basketball players in a formal team environment.
- compete using a variety of advanced basketball movements.
- SLO #3. Demonstrate knowledge of advanced level team offense and team defense.
TMACT 330 Volleyball

Units: 1  
Hours: 54 hours LAB  
Course Family: Volleyball  
Prerequisite: None.  
Transferable: CSU; UC  
General Education: AA/AS Area III(a); CSU Area E2  
Catalog Date: June 1, 2020

This is a beginning volleyball class. Lecture, demonstration and participation will provide the student with sufficient knowledge for continued participation in volleyball. The fundamentals of passing, setting, serving, attacking, blocking, digging, rules of play and simple strategies will be covered.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO 1 - Apply basic knowledge and learned skills to enjoy the sport of volleyball.
- Execute all of the basic skills in volleyball including serving, passing, setting, spiking, blocking and digging.
- Identify and apply the basic terminology, concepts and rules of volleyball.
- SLO 2 - Explain the relationship between volleyball and wellness.
- Develop strategies for lifelong improvement in volleyball.
- SLO 3 - Identify the importance of team work.
- Illustrate the relationship between team work skills and everyday life experiences.
- SLO 4 - Identify the basic offensive and defensive team tactics.
- Employ knowledge of concepts to the strategies of volleyball.

TMACT 331 Volleyball II

Units: 1  
Hours: 54 hours LAB  
Course Family: Volleyball  
Prerequisite: None.  
Advisory: TMACT 330; Intermediate volleyball students should have some playing experience and basic volleyball knowledge and skills.  
Transferable: CSU; UC  
General Education: AA/AS Area III(a); CSU Area E2  
Catalog Date: June 1, 2020

This is an intermediate volleyball class. Lecture, demonstration and participation will provide the student with sufficient knowledge for continued participation in volleyball. This class will focus on refining basic skills, introducing more complicated techniques and teaching more advanced strategies.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO 1 - Apply basic and intermediate level knowledge and learned skills to enjoy the sport of volleyball.
- Execute and refine all of the skills in volleyball including serving, passing, setting, spiking, blocking and digging.
- Identify and apply more advanced terminology, concepts and rules of volleyball.
- SLO 2 - Identify the offensive and defensive systems.
Employ knowledge of concepts to the various offensive and defensive tactics.

Acquire and apply fundamental skills to execute offensive and defensive systems.

SLO 3 - Design and implement a basic game plan in match competition.

Explain and demonstrate the 4-2 and 6-2 offenses.

Explain and demonstrate the perimeter defense.

SLO 4 - Identify the importance of teamwork.

Illustrate the relationship between teamwork skills and everyday life experiences.

SLO 5 - Explain the relationship between volleyball and wellness.

Develop strategies for lifelong improvement in volleyball.

TMACT 333 Volleyball III

Units: 1
Hours: 54 hours LAB
Course Family: Volleyball (http://crc.losrios.edu/course-families#id_100025)
Prerequisite: None.
Advisory: TMACT 333; Advanced volleyball students are recommended to have significant experience, preferably at the high school varsity level.
Transferable: CSU; UC
General Education: AA/AS Area III(a); CSU Area E2
Catalog Date: June 1, 2020

This is an advanced volleyball class. Lecture, demonstration and participation will provide the student with sufficient knowledge for continued participation in volleyball at an advanced level. In advanced volleyball, students work on improving the more complicated skills and techniques of the sport and competitive play takes a higher priority.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO 1 - Apply advanced knowledge and learned skills to enjoy the sport of volleyball.
- Execute all of the skills in volleyball at an advanced level.
- Identify and apply the concepts, strategies and rules of volleyball.
- SLO 2 - Identify the advanced offensive and defensive team tactics.
- Employ knowledge of these tactics to the game of volleyball as a whole.
- Refine techniques in executing an effective offense and defense.
- SLO 3 - Design and implement a complex game plan in competitive play.
- Explain and demonstrate the 6'2 and 5'1 offenses.
- Compare and contrast various game strategies.
- Compare and contrast perimeter and rotation defense.
- SLO 4 - Identify the importance of teamwork.
- Illustrate the relationship between teamwork skills and everyday life experiences.
- SLO 5 - Explain the relationship between volleyball and wellness.
- Develop strategies for lifelong improvement in volleyball.

TMACT 335 Volleyball IV
This course is designed to teach advanced skills, principles and techniques necessary and fundamental to understanding and playing at an expert level. Emphasis is placed on the 6-2 and 5-1 team offensive/defensive systems and strategies. Includes participation in organized round robin competition preceded by a brief period of appropriate warm-up, skill development, and activities.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO #1: Apply advanced knowledge and learned skills to examine the sport of volleyball.
- Execute all of the skills in volleyball at an expert level.
- SLO #2: Employ team tactics utilizing theoretical concepts pertinent to competing at a high level.
- Design and implement the 6-2 and 5-1 offensive systems.
- Compare and contrast various game strategies.
- Compare and contrast perimeter and rotation defensive systems.
- SLO #3: Understand the procedures and participation of tournament play: Round-robin and bracket competition.
- Apply dynamic and static warm-up and cool-down strategies.
- SLO #4: Identify the relationship between team skills and life experiences.

TMACT 495 Independent Studies in Team Activity

An independent studies project involves an individual student or small group of students in study, research, or activities beyond the scope of regularly offered courses. See the current catalog section of "Special Studies" for full details of Independent Studies.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO #1: Actively engage in intellectual inquiry beyond that required in order to pass a course of study (College Wide Learning Outcome – Area 4).
- Discuss and outline a proposal of study (that can be accomplished within one semester term) with a supervising instructor qualified within the discipline.
- Design an independent study (to be completed individually or by collaboration of a small group) to foster special knowledge, skills, and experience that are not available in any one regularly scheduled course.
- Use information resources to gather discipline-specific information.
- SLO #2: Utilize modes of analysis and critical thinking to apply theoretical perspectives and/or concepts in the major discipline of study to significant problems and/or educational activities (College Wide Learning Outcome – Area 3).
- Analyze and apply the knowledge, skills and experience that are involved in the independent study to theoretical perspectives and/or concepts in the major discipline of study.
- Explain the importance of the major discipline of study in the broader picture of society.
- SLO #3: Communicate a complex understanding of content matter of the major discipline of study (College Wide Outcome – Area 3).
• Demonstrate competence in the skills essential to mastery of the major discipline of study that are necessary to accomplish the independent study.

• SLO #4: Identify personal goals and pursue these goals effectively (College Wide Outcome – Area 4).

• Utilize skills from the “academic tool kit” including time management, study skills, etc., to accomplish the independent study within one semester term.
The Associate Degree in Liberal Arts is designed for students who wish a broad knowledge of liberal arts and sciences, plus additional studies in one of four “Areas of Emphasis.” An area of emphasis can be an appropriate choice for a student planning to transfer to the California State University (CSU) or the University of California (UC), as the student may satisfy general education requirements, plus focus on transferable coursework that relates to majors at CSU or UC. Students must satisfactorily complete 60 units of collegiate coursework with a “C” (2.0) grade point average in curriculum that the district accepts toward this degree.

Dean

(916) 691-7350

CooperS@crc.losrios.edu

Associate Degrees

A.A. in Liberal Arts - Arts and Humanities

The Associate Degree in Liberal Arts - Arts and Humanities is designed for students who wish a broad knowledge of the arts and humanities. Students must satisfactorily complete 60 units of collegiate coursework with a “C” (2.0) grade point average in curriculum that the district accepts toward this degree.

Note: If you plan to transfer to a CSU, consider an Associate in Arts for Transfer degree such as the Art History, Art Design, History, Music, Spanish, Studio Arts or Theatre Arts AA-T rather than this degree. Please see a counselor for assistance with selecting the most appropriate transfer courses (i.e. 300 or higher numbered courses). If you plan to transfer to a UC campus or a private college or university, please see a counselor to determine if this degree is the most appropriate choice.

Catalog Date: June 1, 2020

Degree Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARCH 310</td>
<td>History of Architecture</td>
<td>3</td>
</tr>
<tr>
<td>ARCH 332</td>
<td>Design Awareness</td>
<td>3</td>
</tr>
<tr>
<td>ART 300</td>
<td>Drawing and Composition I</td>
<td>3</td>
</tr>
<tr>
<td>ART 302</td>
<td>Drawing and Composition II</td>
<td>3</td>
</tr>
<tr>
<td>ART 304</td>
<td>Figure Drawing I</td>
<td>3</td>
</tr>
<tr>
<td>ART 305</td>
<td>Figure Drawing II</td>
<td>3</td>
</tr>
<tr>
<td>ART 312</td>
<td>Portrait Drawing</td>
<td>3</td>
</tr>
<tr>
<td>ART 320</td>
<td>Design: Fundamentals</td>
<td>3</td>
</tr>
<tr>
<td>ART 323</td>
<td>Design: Color Theory</td>
<td>3</td>
</tr>
<tr>
<td>ART 324</td>
<td>Collage and Assemblage</td>
<td>3</td>
</tr>
<tr>
<td>ART 327</td>
<td>Painting I</td>
<td>3</td>
</tr>
</tbody>
</table>

A minimum of 18 units from the following:

Courses must be chosen from at least two disciplines:
<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 328</td>
<td>Painting II (3)</td>
<td></td>
</tr>
<tr>
<td>ART 361</td>
<td>Printmaking: Survey (3)</td>
<td></td>
</tr>
<tr>
<td>ART 370</td>
<td>Three Dimensional Design (3)</td>
<td></td>
</tr>
<tr>
<td>ART 372</td>
<td>Sculpture (3)</td>
<td></td>
</tr>
<tr>
<td>ART 430</td>
<td>Art and Children (3)</td>
<td></td>
</tr>
<tr>
<td>ARTH 300</td>
<td>Introduction to Art (3)</td>
<td></td>
</tr>
<tr>
<td>ARTH 303</td>
<td>Art Survey: Ancient to 14th Century (3)</td>
<td></td>
</tr>
<tr>
<td>ARTH 309</td>
<td>Art Survey: Renaissance to 19th Century (3)</td>
<td></td>
</tr>
<tr>
<td>ARTH 311</td>
<td>Art Survey: Modern Art (3)</td>
<td></td>
</tr>
<tr>
<td>ARTH 312</td>
<td>Women in Art (3)</td>
<td></td>
</tr>
<tr>
<td>ARTH 324</td>
<td>Art of the Americas (3)</td>
<td></td>
</tr>
<tr>
<td>ARTH 325</td>
<td>Native American Art History (3)</td>
<td></td>
</tr>
<tr>
<td>ARTH 328</td>
<td>Survey of African Art (3)</td>
<td></td>
</tr>
<tr>
<td>ARTH 332</td>
<td>Asian Art (3)</td>
<td></td>
</tr>
<tr>
<td>ARTH 333</td>
<td>Introduction to Islamic Art (3)</td>
<td></td>
</tr>
<tr>
<td>DEAF 310</td>
<td>American Sign Language I (4)</td>
<td></td>
</tr>
<tr>
<td>DEAF 314</td>
<td>American Sign Language III (4)</td>
<td></td>
</tr>
<tr>
<td>DEAF 316</td>
<td>American Sign Language IV (4)</td>
<td></td>
</tr>
<tr>
<td>ENGCW 400</td>
<td>Creative Writing (3)</td>
<td></td>
</tr>
<tr>
<td>ENGCW 410</td>
<td>Fiction Writing Workshop (3)</td>
<td></td>
</tr>
<tr>
<td>ENGCW 480</td>
<td>Honors Seminar: Creative Writing and Culture (3)</td>
<td></td>
</tr>
<tr>
<td>ENGLT 303</td>
<td>Introduction to the Short Story (3)</td>
<td></td>
</tr>
<tr>
<td>ENGLT 310</td>
<td>English Literature I (3)</td>
<td></td>
</tr>
<tr>
<td>ENGLT 311</td>
<td>English Literature II (3)</td>
<td></td>
</tr>
<tr>
<td>ENGLT 320</td>
<td>American Literature I (3)</td>
<td></td>
</tr>
<tr>
<td>ENGLT 321</td>
<td>American Literature II (3)</td>
<td></td>
</tr>
<tr>
<td>ENGLT 330</td>
<td>African American Literature (3)</td>
<td></td>
</tr>
<tr>
<td>ENGLT 336</td>
<td>Race and Ethnicity in Contemporary American Literature (3)</td>
<td></td>
</tr>
<tr>
<td>ENGLT 340</td>
<td>World Literature I (3)</td>
<td></td>
</tr>
<tr>
<td>ENGLT 341</td>
<td>World Literature II (3)</td>
<td></td>
</tr>
<tr>
<td>ENGLT 343</td>
<td>Contemporary Third World Literature (3)</td>
<td></td>
</tr>
<tr>
<td>ENGLT 345</td>
<td>Mythologies of the World (3)</td>
<td></td>
</tr>
<tr>
<td>ENGLT 360</td>
<td>Women in Literature (3)</td>
<td></td>
</tr>
<tr>
<td>ENGLT 370</td>
<td>Children and Literature (3)</td>
<td></td>
</tr>
<tr>
<td>ENGLT 402</td>
<td>Introduction to Shakespeare and Film (3)</td>
<td></td>
</tr>
<tr>
<td>ENGWR 301</td>
<td>College Composition and Literature (3)</td>
<td></td>
</tr>
<tr>
<td>FMS 300</td>
<td>Introduction to Film Studies (3)</td>
<td></td>
</tr>
<tr>
<td>FMS 305</td>
<td>Film History (3)</td>
<td></td>
</tr>
<tr>
<td>COURSE CODE</td>
<td>COURSE TITLE</td>
<td>UNITS</td>
</tr>
<tr>
<td>-------------</td>
<td>-------------------------------------------------------------------------------</td>
<td>-------</td>
</tr>
<tr>
<td>FMS 320</td>
<td>Film Genre (3)</td>
<td></td>
</tr>
<tr>
<td>FMS 488</td>
<td>Honors Seminar: Introduction to Critical Theory (3)</td>
<td></td>
</tr>
<tr>
<td>HIST 364</td>
<td>Asian Civilization (3)</td>
<td></td>
</tr>
<tr>
<td>HIST 365</td>
<td>Asian Civilization (3)</td>
<td></td>
</tr>
<tr>
<td>HIST 380</td>
<td>History of the Middle East (3)</td>
<td></td>
</tr>
<tr>
<td>HONOR 350</td>
<td>Honors Seminar: Introduction to Critical Theory (3)</td>
<td></td>
</tr>
<tr>
<td>HUM 300</td>
<td>Classical Humanities (3)</td>
<td></td>
</tr>
<tr>
<td>HUM 301</td>
<td>Introduction to the Humanities (3)</td>
<td></td>
</tr>
<tr>
<td>HUM 310</td>
<td>Modern Humanities (3)</td>
<td></td>
</tr>
<tr>
<td>HUM 320</td>
<td>Asian Humanities (3)</td>
<td></td>
</tr>
<tr>
<td>HUM 324</td>
<td>Global Islam: Culture and Civilization (3)</td>
<td></td>
</tr>
<tr>
<td>HUM 331</td>
<td>Latin American Humanities (3)</td>
<td></td>
</tr>
<tr>
<td>HUM 332</td>
<td>American Humanities (3)</td>
<td></td>
</tr>
<tr>
<td>MUFHL 300</td>
<td>Introduction to Music (3)</td>
<td></td>
</tr>
<tr>
<td>MUFHL 308</td>
<td>Introduction to Music: Rock &amp; Roll (3)</td>
<td></td>
</tr>
<tr>
<td>MUFHL 310</td>
<td>Survey of Music History and Literature (Greek Antiquity to 1750) (3)</td>
<td></td>
</tr>
<tr>
<td>MUFHL 311</td>
<td>Survey of Music History and Literature (1750 to the present) (3)</td>
<td></td>
</tr>
<tr>
<td>MUFHL 315</td>
<td>Jazz History (3)</td>
<td></td>
</tr>
<tr>
<td>MUFHL 321</td>
<td>Basic Musicianship (3)</td>
<td></td>
</tr>
<tr>
<td>MUFHL 330</td>
<td>World Music (3)</td>
<td></td>
</tr>
<tr>
<td>MUFHL 400</td>
<td>Music Theory and Musicianship I (4)</td>
<td></td>
</tr>
<tr>
<td>MUIVI 310</td>
<td>Voice Class I (2)</td>
<td></td>
</tr>
<tr>
<td>MUIVI 311</td>
<td>Voice Class II (2)</td>
<td></td>
</tr>
<tr>
<td>MUIVI 340</td>
<td>Beginning Piano (2)</td>
<td></td>
</tr>
<tr>
<td>MUIVI 341</td>
<td>Piano II (2)</td>
<td></td>
</tr>
<tr>
<td>MUIVI 350</td>
<td>Intermediate Piano (2)</td>
<td></td>
</tr>
<tr>
<td>MUIVI 351</td>
<td>Piano IV (2)</td>
<td></td>
</tr>
<tr>
<td>MUIVI 370</td>
<td>Beginning Guitar (2)</td>
<td></td>
</tr>
<tr>
<td>MUIVI 371</td>
<td>Intermediate Guitar (2)</td>
<td></td>
</tr>
<tr>
<td>MUIVI 495</td>
<td>Independent Studies in Music Instrumental/Voice Instruction (1 - 3)</td>
<td></td>
</tr>
<tr>
<td>MUSM 370</td>
<td>Music for Children (3)</td>
<td></td>
</tr>
<tr>
<td>MUP 310</td>
<td>Orchestra (2)</td>
<td></td>
</tr>
<tr>
<td>MUP 320</td>
<td>Jazz Band (2)</td>
<td></td>
</tr>
<tr>
<td>MUP 350</td>
<td>Concert Choir I (2)</td>
<td></td>
</tr>
<tr>
<td>MUP 357</td>
<td>College Chorus (2)</td>
<td></td>
</tr>
<tr>
<td>MUP 360</td>
<td>Chamber Singers (2)</td>
<td></td>
</tr>
<tr>
<td>COURSE CODE</td>
<td>COURSE TITLE</td>
<td>UNITS</td>
</tr>
<tr>
<td>-------------</td>
<td>-----------------------------------------------------------------</td>
<td>-------</td>
</tr>
<tr>
<td>PHIL 300</td>
<td>Introduction to Philosophy (3)</td>
<td></td>
</tr>
<tr>
<td>PHIL 304</td>
<td>Introduction to Asian Philosophy (3)</td>
<td></td>
</tr>
<tr>
<td>PHIL 310</td>
<td>Introduction to Ethics (3)</td>
<td></td>
</tr>
<tr>
<td>PHIL 330</td>
<td>History of Classical Philosophy (3)</td>
<td></td>
</tr>
<tr>
<td>PHIL 331</td>
<td>History of Modern Philosophy (3)</td>
<td></td>
</tr>
<tr>
<td>PHIL 338</td>
<td>Contemporary Philosophy (3)</td>
<td></td>
</tr>
<tr>
<td>PHIL 350</td>
<td>Philosophy of Religion (3)</td>
<td></td>
</tr>
<tr>
<td>PHIL 352</td>
<td>Introduction to World Religions (3)</td>
<td></td>
</tr>
<tr>
<td>PHIL 356</td>
<td>Introduction to the Bible (3)</td>
<td></td>
</tr>
<tr>
<td>PHIL 360</td>
<td>Social/Political Philosophy (3)</td>
<td></td>
</tr>
<tr>
<td>PHOTO 301</td>
<td>Beginning Photography (3)</td>
<td></td>
</tr>
<tr>
<td>PHOTO 420</td>
<td>History of Photography (3)</td>
<td></td>
</tr>
<tr>
<td>RTVF 305</td>
<td>Film History (3)</td>
<td></td>
</tr>
<tr>
<td>RTVF 378</td>
<td>Acting for the Camera (3)</td>
<td></td>
</tr>
<tr>
<td>SPAN 401</td>
<td>Elementary Spanish (4)</td>
<td></td>
</tr>
<tr>
<td>SPAN 402</td>
<td>Elementary Spanish (4)</td>
<td></td>
</tr>
<tr>
<td>SPAN 411</td>
<td>Intermediate Spanish (4)</td>
<td></td>
</tr>
<tr>
<td>SPAN 412</td>
<td>Intermediate Spanish (4)</td>
<td></td>
</tr>
<tr>
<td>SPAN 413</td>
<td>Spanish for Native Speakers I (4)</td>
<td></td>
</tr>
<tr>
<td>SPAN 415</td>
<td>Spanish for Native Speakers II (4)</td>
<td></td>
</tr>
<tr>
<td>SPAN 425</td>
<td>Advanced Reading and Conversation (3)</td>
<td></td>
</tr>
<tr>
<td>SPAN 426</td>
<td>Introduction to Mexican American Literature (3)</td>
<td></td>
</tr>
<tr>
<td>SPAN 427</td>
<td>Introduction to Spanish American Literature (3)</td>
<td></td>
</tr>
<tr>
<td>TA 300</td>
<td>Introduction to the Theatre (3)</td>
<td></td>
</tr>
<tr>
<td>TA 302</td>
<td>History and Theory of the Theatre I (3)</td>
<td></td>
</tr>
<tr>
<td>TA 303</td>
<td>History and Theory of the Theatre II (3)</td>
<td></td>
</tr>
<tr>
<td>TA 306</td>
<td>Diversity in American Drama (1960 to Present) (3)</td>
<td></td>
</tr>
<tr>
<td>TA 350</td>
<td>Theory and Techniques of Acting I (3)</td>
<td></td>
</tr>
<tr>
<td>TA 356</td>
<td>Acting for the Camera I (3)</td>
<td></td>
</tr>
<tr>
<td>TA 401</td>
<td>Children's Literature and Creative Drama (3)</td>
<td></td>
</tr>
<tr>
<td>VIET 401</td>
<td>Elementary Vietnamese (4)</td>
<td></td>
</tr>
<tr>
<td>VIET 402</td>
<td>Elementary Vietnamese (4)</td>
<td></td>
</tr>
<tr>
<td>VIET 411</td>
<td>Intermediate Vietnamese (4)</td>
<td></td>
</tr>
<tr>
<td>VIET 412</td>
<td>Intermediate Vietnamese (4)</td>
<td></td>
</tr>
</tbody>
</table>

Total Units: 18

The Liberal Arts - Arts and Humanities Associate in Arts (A.A.) degree may be obtained by completion of the required program, plus general education requirements, plus sufficient electives to meet a 60-unit total. See CRC graduation requirements.
Upon completion of this program, the student will be able to:

- Demonstrate an appreciation of artistic endeavors, cultural expressions, ideas and/or institutions through nonempirical, analytic, interpretive studies and critical thinking projects. (PSLO 1)
- Articulate the development of and relationships between different civilizations, cultural traditions, ideas and/or institutions through the application of non-empirical, analytical reasoning. (PSLO 2)
- Evaluate critically the analyses and interpretations by others (including significant historical or contemporary analyses and interpretations) of arts, ideas, skills (including language), and/or institutions. (PSLO 3)
- Express clearly her or his own analyses and interpretations of arts, ideas, skills (including language), and/or institutions, and will properly use the vocabulary appropriate to the field. (PSLO 4)

A.A. in Liberal Arts - Communication and Writing

The Associate Degree in Liberal Arts - Communication and Writing is designed for students who wish a broad knowledge of communication studies and writing. Students must satisfactorily complete 60 units of collegiate coursework with a "C" (2.0) grade point average in curriculum that the district accepts toward this degree.

Note: If you plan to transfer to a CSU, consider completing an Associates in Arts for Transfer degree such as the Communications Studies, English, or Journalism AA-T rather than this degree. Please see a counselor for assistance with selecting the most appropriate transfer courses (i.e. 300 or higher numbered courses). If you plan to transfer to a UC campus or a private college or university, please see a counselor to determine if this degree is the most appropriate choice.

Catalog Date: June 1, 2020

Degree Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>A minimum of 18 units from the following:</td>
<td>18</td>
<td></td>
</tr>
<tr>
<td>Courses must be chosen from at least two disciplines:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>COMM 301</td>
<td>Introduction to Public Speaking (3)</td>
<td></td>
</tr>
<tr>
<td>COMM 311</td>
<td>Argumentation and Debate (3)</td>
<td></td>
</tr>
<tr>
<td>COMM 315</td>
<td>Persuasion (3)</td>
<td></td>
</tr>
<tr>
<td>COMM 331</td>
<td>Group Discussion (3)</td>
<td></td>
</tr>
<tr>
<td>COMM 361</td>
<td>The Communication Experience (3)</td>
<td></td>
</tr>
<tr>
<td>ENGWR 300</td>
<td>College Composition (3)</td>
<td></td>
</tr>
<tr>
<td>ENGWR 301</td>
<td>College Composition and Literature (3)</td>
<td></td>
</tr>
<tr>
<td>ENGWR 302</td>
<td>Advanced Composition and Critical Thinking (3)</td>
<td></td>
</tr>
<tr>
<td>ENGRD 310</td>
<td>Critical Reading as Critical Thinking (3)</td>
<td></td>
</tr>
<tr>
<td>HONOR 341</td>
<td>Honors Seminar: Persuasion within Social Issues (3)</td>
<td></td>
</tr>
<tr>
<td>PHIL 300</td>
<td>Introduction to Philosophy (3)</td>
<td></td>
</tr>
<tr>
<td>PHIL 320</td>
<td>Logic and Critical Reasoning (3)</td>
<td></td>
</tr>
<tr>
<td>PHIL 325</td>
<td>Symbolic Logic (3)</td>
<td></td>
</tr>
<tr>
<td>SOC 305</td>
<td>Critical Thinking in the Social Sciences (3)</td>
<td></td>
</tr>
<tr>
<td>Total Units:</td>
<td></td>
<td>18</td>
</tr>
</tbody>
</table>

The Liberal Arts - Communication and Writing Associate in Arts (A.A.) degree may be obtained by completion of the required program, plus general education requirements, plus sufficient electives to meet a 60-unit total. See CRC graduation requirements.
Student Learning Outcomes

Upon completion of this program, the student will be able to:

- Conduct audience analysis to design an appropriate purpose, topic, style and speech structure within formal presentations. Express their ideas clearly in well-organized written messages. (PSLO 1)
- Construct an effective presentation to a specific topic by collecting relevant information and employing credible evidence with proper documentation. (PSLO 2)
- Determine and use appropriate communications technologies to convey information. (PSLO 3)
- Use correct and appropriate conventions of mechanics, usage, and style in written communication. (PSLO 4)

A.S. in Liberal Arts - Math and Science

The Associate Degree in Liberal Arts - Math and Science is designed for students who wish a broad knowledge of mathematics and the sciences. Students must satisfactorily complete 60 units of collegiate coursework with a "C" (2.0) grade point average in curriculum that the district accepts toward this degree.

Note: If you plan to transfer to the CSU after completing this degree, consider an Associates in Science for Transfer degree such as the Biology, Geography, Geology, Math, or Physics AS-T rather than this degree. Please see a counselor for assistance with selecting the most appropriate transfer courses (i.e. 300 or higher numbered courses). If you plan to transfer to a UC campus or a private college or university, please see a counselor to determine if this degree is the most appropriate choice.

Catalog Date: June 1, 2020

Degree Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>A minimum of 18 units from the following:</td>
<td>18</td>
<td></td>
</tr>
<tr>
<td><strong>Students must select 3 - 6 units in mathematics/statistics and 12 - 15 units in the remaining science disciplines.</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ANTH 300</td>
<td>Biological Anthropology (3)</td>
<td></td>
</tr>
<tr>
<td>ANTH 301</td>
<td>Biological Anthropology Laboratory (1)</td>
<td></td>
</tr>
<tr>
<td>ASTR 300</td>
<td>Introduction to Astronomy (3)</td>
<td></td>
</tr>
<tr>
<td>ASTR 400</td>
<td>Astronomy Laboratory (1)</td>
<td></td>
</tr>
<tr>
<td>BIOL 300</td>
<td>The Foundations of Biology (3)</td>
<td></td>
</tr>
<tr>
<td>BIOL 307</td>
<td>Biology of Organisms (4)</td>
<td></td>
</tr>
<tr>
<td>BIOL 310</td>
<td>General Biology (4)</td>
<td></td>
</tr>
<tr>
<td>BIOL 342</td>
<td>The New Plagues: New and Ancient Infectious Diseases Threatening World Health (3)</td>
<td></td>
</tr>
<tr>
<td>BIOL 350</td>
<td>Environmental Biology (3)</td>
<td></td>
</tr>
<tr>
<td>BIOL 352</td>
<td>Conservation Biology (3)</td>
<td></td>
</tr>
<tr>
<td>BIOL 400</td>
<td>Principles of Biology (5)</td>
<td></td>
</tr>
<tr>
<td>BIOL 410</td>
<td>Principles of Botany (5)</td>
<td></td>
</tr>
<tr>
<td>BIOL 420</td>
<td>Principles of Zoology (5)</td>
<td></td>
</tr>
<tr>
<td>BIOL 430</td>
<td>Anatomy and Physiology (5)</td>
<td></td>
</tr>
<tr>
<td>BIOL 431</td>
<td>Anatomy and Physiology (5)</td>
<td></td>
</tr>
<tr>
<td>BIOL 440</td>
<td>General Microbiology (4)</td>
<td></td>
</tr>
<tr>
<td>BIOL 462</td>
<td>Genetics in Contemporary Human Society (3)</td>
<td></td>
</tr>
<tr>
<td>BIOL 485</td>
<td>Honors Seminar in Genetics (3)</td>
<td></td>
</tr>
<tr>
<td>COURSE CODE</td>
<td>COURSE TITLE</td>
<td>UNITS</td>
</tr>
<tr>
<td>--------------</td>
<td>-----------------------------------------------------------------------------</td>
<td>-------</td>
</tr>
<tr>
<td>or HONOR 385</td>
<td>Honors Seminar in Genetics (3)</td>
<td></td>
</tr>
<tr>
<td>CHEM 300</td>
<td>Beginning Chemistry (4)</td>
<td></td>
</tr>
<tr>
<td>CHEM 305</td>
<td>Introduction to Chemistry (5)</td>
<td></td>
</tr>
<tr>
<td>CHEM 306</td>
<td>Introduction to Organic and Biological Chemistry (5)</td>
<td></td>
</tr>
<tr>
<td>CHEM 309</td>
<td>Integrated General, Organic, and Biological Chemistry (5)</td>
<td></td>
</tr>
<tr>
<td>CHEM 321</td>
<td>Environmental Chemistry (3)</td>
<td></td>
</tr>
<tr>
<td>CHEM 322</td>
<td>Environmental Chemistry Laboratory (1)</td>
<td></td>
</tr>
<tr>
<td>CHEM 400</td>
<td>General Chemistry I (5)</td>
<td></td>
</tr>
<tr>
<td>CHEM 401</td>
<td>General Chemistry II (5)</td>
<td></td>
</tr>
<tr>
<td>CHEM 420</td>
<td>Organic Chemistry I (5)</td>
<td></td>
</tr>
<tr>
<td>CHEM 421</td>
<td>Organic Chemistry II (5)</td>
<td></td>
</tr>
<tr>
<td>GEOG 300</td>
<td>Physical Geography: Exploring Earth's Environmental Systems (3)</td>
<td></td>
</tr>
<tr>
<td>GEOG 301</td>
<td>Physical Geography Laboratory (1)</td>
<td></td>
</tr>
<tr>
<td>GEOG 305</td>
<td>Global Climate Change (3)</td>
<td></td>
</tr>
<tr>
<td>GEOG 306</td>
<td>Weather and Climate (3)</td>
<td></td>
</tr>
<tr>
<td>GEOL 300</td>
<td>Physical Geology (3)</td>
<td></td>
</tr>
<tr>
<td>GEOL 301</td>
<td>Physical Geology Laboratory (1)</td>
<td></td>
</tr>
<tr>
<td>GEOL 305</td>
<td>Earth Science (3)</td>
<td></td>
</tr>
<tr>
<td>GEOL 310</td>
<td>Historical Geology (3)</td>
<td></td>
</tr>
<tr>
<td>GEOL 311</td>
<td>Historical Geology Laboratory (1)</td>
<td></td>
</tr>
<tr>
<td>GEOL 330</td>
<td>Introduction to Oceanography (3)</td>
<td></td>
</tr>
<tr>
<td>MATH 300</td>
<td>Introduction to Mathematical Ideas (3)</td>
<td></td>
</tr>
<tr>
<td>MATH 310</td>
<td>Mathematical Discovery (3)</td>
<td></td>
</tr>
<tr>
<td>MATH 335</td>
<td>Trigonometry with College Algebra (5)</td>
<td></td>
</tr>
<tr>
<td>MATH 341</td>
<td>Calculus for Business and Economics (4)</td>
<td></td>
</tr>
<tr>
<td>MATH 343</td>
<td>Modern Business Mathematics (4)</td>
<td></td>
</tr>
<tr>
<td>MATH 350</td>
<td>Calculus for the Life and Social Sciences I (3)</td>
<td></td>
</tr>
<tr>
<td>MATH 351</td>
<td>Calculus for the Life and Social Sciences II (3)</td>
<td></td>
</tr>
<tr>
<td>MATH 355</td>
<td>Calculus for Biology and Medicine I (4)</td>
<td></td>
</tr>
<tr>
<td>MATH 356</td>
<td>Calculus for Biology and Medicine II (4)</td>
<td></td>
</tr>
<tr>
<td>MATH 370</td>
<td>Pre-Calculus Mathematics (5)</td>
<td></td>
</tr>
<tr>
<td>MATH 400</td>
<td>Calculus I (5)</td>
<td></td>
</tr>
<tr>
<td>MATH 401</td>
<td>Calculus II (5)</td>
<td></td>
</tr>
<tr>
<td>MATH 402</td>
<td>Calculus III (5)</td>
<td></td>
</tr>
<tr>
<td>MATH 410</td>
<td>Introduction to Linear Algebra (3)</td>
<td></td>
</tr>
<tr>
<td>MATH 420</td>
<td>Differential Equations (4)</td>
<td></td>
</tr>
<tr>
<td>PHYS 310</td>
<td>Conceptual Physics (3)</td>
<td></td>
</tr>
</tbody>
</table>
### Student Learning Outcomes

Upon completion of this program, the student will be able to:

- Explain the core perspectives of the scientific method and apply it to at least one scientific discipline. (PSLO 1)
- Solve introductory problems of a conceptual and/or quantitative nature in at least one scientific discipline. (PSLO 2)
- Apply accurately the basic vocabulary and concepts of at least one scientific discipline verbally and in writing. (PSLO 3)
- Recognize the use and misuse of scientific concepts in society including politics and the media. (PSLO 4)
- Use appropriate quantitative skills at college level to solve problems applicable to occupational and personal activities. (PSLO 5)

### A.A. in Liberal Arts - Social and Behavioral Sciences

The Associate Degree in Liberal Arts - Social and Behavioral Sciences is designed for students who wish a broad knowledge of social and behavioral sciences. Students must satisfactorily complete 60 units of collegiate coursework with a "C" (2.0) grade point average in curriculum that the district accepts toward this degree.

Note: If you plan to transfer to a CSU after completing this Liberal Arts - Social and Behavioral Sciences degree, please consider an Associate in Arts for Transfer degree such as the Anthropology, Communication Studies, Early Childhood Education, Geography, History, Psychology or Sociology AA-T rather than this degree. See a counselor for assistance with selecting the most appropriate transfer courses (i.e. 300 or higher numbered courses). If you plan to transfer to a UC campus or a private college or university, please see a counselor to determine if this degree is the most appropriate choice.

**Catalog Date:** June 1, 2020

### Degree Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>A minimum of 18 units from the following:</td>
<td>18</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Courses must be chosen from at least two disciplines:</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGB 321</td>
</tr>
</tbody>
</table>

---

The Liberal Arts - Math and Science Associate in Science (A.S.) degree may be obtained by completion of the required program, plus general education requirements, plus sufficient electives to meet a 60-unit total. See CRC graduation requirements.
<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANTH 310</td>
<td>Cultural Anthropology (3)</td>
<td></td>
</tr>
<tr>
<td>ANTH 316</td>
<td>Global Forces in Culture Change (3)</td>
<td></td>
</tr>
<tr>
<td>ANTH 323</td>
<td>Introduction to Archaeology (3)</td>
<td></td>
</tr>
<tr>
<td>ANTH 324</td>
<td>World Prehistory (3)</td>
<td></td>
</tr>
<tr>
<td>ANTH 331</td>
<td>The Anthropology of Religion (3)</td>
<td></td>
</tr>
<tr>
<td>ANTH 332</td>
<td>Native Peoples of California (3)</td>
<td></td>
</tr>
<tr>
<td>ANTH 334</td>
<td>Native Peoples of North America (3)</td>
<td></td>
</tr>
<tr>
<td>ANTH 341</td>
<td>Introduction to Linguistics (3)</td>
<td></td>
</tr>
<tr>
<td>ANTH 374</td>
<td>Birth to Death: The Anthropology of Primate Culture and Behavior (3)</td>
<td></td>
</tr>
<tr>
<td>BUS 330</td>
<td>Managing Diversity in the Workplace (3)</td>
<td></td>
</tr>
<tr>
<td>BUS 345</td>
<td>Law and Society (3)</td>
<td></td>
</tr>
<tr>
<td>COMM 325</td>
<td>Intercultural Communication (3)</td>
<td></td>
</tr>
<tr>
<td>COMM 341</td>
<td>Organizational Communication (3)</td>
<td></td>
</tr>
<tr>
<td>COMM 363</td>
<td>Introduction to Communication Theory (3)</td>
<td></td>
</tr>
<tr>
<td>COMM 480</td>
<td>Honors Seminar: Political Campaign Communication (3)</td>
<td></td>
</tr>
<tr>
<td>ECE 312</td>
<td>Child Development (3)</td>
<td></td>
</tr>
<tr>
<td>ECE 314</td>
<td>The Child, the Family and the Community (3)</td>
<td></td>
</tr>
<tr>
<td>ECON 302</td>
<td>Principles of Macroeconomics (3)</td>
<td></td>
</tr>
<tr>
<td>ECON 304</td>
<td>Principles of Microeconomics (3)</td>
<td></td>
</tr>
<tr>
<td>ECON 306</td>
<td>Environmental Economics (3)</td>
<td></td>
</tr>
<tr>
<td>ETHNS 300</td>
<td>Introduction to Ethnic Studies (3)</td>
<td></td>
</tr>
<tr>
<td>ETHNS 320</td>
<td>The African American Experience (3)</td>
<td></td>
</tr>
<tr>
<td>ETHNS 330</td>
<td>The Asian American Experience in America (3)</td>
<td></td>
</tr>
<tr>
<td>ETHNS 340</td>
<td>Chicanos/Mexican Americans in the U.S. (3)</td>
<td></td>
</tr>
<tr>
<td>ETHNS 344</td>
<td>The Latino Experience in America (3)</td>
<td></td>
</tr>
<tr>
<td>GEOG 302</td>
<td>Environmental Studies &amp; Sustainability (3)</td>
<td></td>
</tr>
<tr>
<td>GEOG 310</td>
<td>Human Geography: Exploring Earth's Cultural Landscapes (3)</td>
<td></td>
</tr>
<tr>
<td>GEOG 322</td>
<td>Geography of California (3)</td>
<td></td>
</tr>
<tr>
<td>HIST 301</td>
<td>History of Western Civilization (to 1660) (3)</td>
<td></td>
</tr>
<tr>
<td>HIST 302</td>
<td>History of Western Civilization (3)</td>
<td></td>
</tr>
<tr>
<td>HIST 307</td>
<td>History of World Civilizations to 1500 (3)</td>
<td></td>
</tr>
<tr>
<td>HIST 308</td>
<td>History of World Civilizations, 1500 to Present (3)</td>
<td></td>
</tr>
<tr>
<td>HIST 310</td>
<td>History of the United States (3)</td>
<td></td>
</tr>
<tr>
<td>HIST 311</td>
<td>History of the United States (3)</td>
<td></td>
</tr>
<tr>
<td>HIST 314</td>
<td>Recent United States History (3)</td>
<td></td>
</tr>
<tr>
<td>HIST 320</td>
<td>History of the United States: African-American Emphasis (3)</td>
<td></td>
</tr>
<tr>
<td>COURSE CODE</td>
<td>COURSE TITLE</td>
<td>UNITS</td>
</tr>
<tr>
<td>-------------</td>
<td>-----------------------------------------------------------------------------</td>
<td>------------------------------</td>
</tr>
<tr>
<td>HIST 331</td>
<td>Women in American History (3)</td>
<td></td>
</tr>
<tr>
<td>HIST 344</td>
<td>Survey of California History: A Multicultural Perspective (3)</td>
<td></td>
</tr>
<tr>
<td>HIST 360</td>
<td>History of African Civilizations (3)</td>
<td></td>
</tr>
<tr>
<td>HIST 364</td>
<td>Asian Civilization (3)</td>
<td></td>
</tr>
<tr>
<td>HIST 365</td>
<td>Asian Civilization (3)</td>
<td></td>
</tr>
<tr>
<td>HIST 370</td>
<td>History of the Americas through the 19th Century Wars of Independence (3)</td>
<td></td>
</tr>
<tr>
<td>HIST 371</td>
<td>History of the Americas from the 19th Century Wars of Independence to the Present (3)</td>
<td></td>
</tr>
<tr>
<td>HIST 373</td>
<td>History of Mexico (3)</td>
<td></td>
</tr>
<tr>
<td>HIST 380</td>
<td>History of the Middle East (3)</td>
<td></td>
</tr>
<tr>
<td>HONOR 340</td>
<td>Honors Seminar: Political Campaign Communication (3)</td>
<td></td>
</tr>
<tr>
<td>JOUR 310</td>
<td>Mass Media and Society (3)</td>
<td></td>
</tr>
<tr>
<td>or RTVF 300</td>
<td>Mass Media and Society (3)</td>
<td></td>
</tr>
<tr>
<td>JOUR 320</td>
<td>Race and Gender in the Media (3)</td>
<td></td>
</tr>
<tr>
<td>PHIL 360</td>
<td>Social/Political Philosophy (3)</td>
<td></td>
</tr>
<tr>
<td>POLS 301</td>
<td>Introduction to Government: United States (3)</td>
<td></td>
</tr>
<tr>
<td>POLS 302</td>
<td>Comparative Politics (3)</td>
<td></td>
</tr>
<tr>
<td>POLS 304</td>
<td>Introduction to Government: California (3)</td>
<td></td>
</tr>
<tr>
<td>POLS 310</td>
<td>Introduction to International Relations (3)</td>
<td></td>
</tr>
<tr>
<td>POLS 311</td>
<td>International Political Economy (3)</td>
<td></td>
</tr>
<tr>
<td>POLS 312</td>
<td>Politics of the Middle East (3)</td>
<td></td>
</tr>
<tr>
<td>POLS 313</td>
<td>Latin America (3)</td>
<td></td>
</tr>
<tr>
<td>POLS 314</td>
<td>Modern Europe and the Unification Process (3)</td>
<td></td>
</tr>
<tr>
<td>POLS 315</td>
<td>Pacific Rim (3)</td>
<td></td>
</tr>
<tr>
<td>POLS 317</td>
<td>Global Studies: Africa (3)</td>
<td></td>
</tr>
<tr>
<td>POLS 318</td>
<td>Global Studies: Central Asia (3)</td>
<td></td>
</tr>
<tr>
<td>POLS 319</td>
<td>Global Studies: Southeast Asia (3)</td>
<td></td>
</tr>
<tr>
<td>POLS 320</td>
<td>Introduction to Political Theory (3)</td>
<td></td>
</tr>
<tr>
<td>PSYC 300</td>
<td>General Principles (3)</td>
<td></td>
</tr>
<tr>
<td>PSYC 312</td>
<td>Biological Psychology (4)</td>
<td></td>
</tr>
<tr>
<td>PSYC 320</td>
<td>Social Psychology (3)</td>
<td></td>
</tr>
<tr>
<td>PSYC 335</td>
<td>Research Methods in Psychology (3)</td>
<td></td>
</tr>
<tr>
<td>PSYC 340</td>
<td>Abnormal Behavior (3)</td>
<td></td>
</tr>
<tr>
<td>PSYC 356</td>
<td>Human Sexuality (3)</td>
<td></td>
</tr>
<tr>
<td>PSYC 368</td>
<td>Cross Cultural Psychology (3)</td>
<td></td>
</tr>
<tr>
<td>PSYC 371</td>
<td>Life Span Developmental Psychology (3)</td>
<td></td>
</tr>
<tr>
<td>SOC 300</td>
<td>Introductory Sociology (3)</td>
<td></td>
</tr>
<tr>
<td>COURSE CODE</td>
<td>COURSE TITLE</td>
<td>UNITS</td>
</tr>
<tr>
<td>-------------</td>
<td>--------------------------------------------------</td>
<td>-------</td>
</tr>
<tr>
<td>SOC 301</td>
<td>Social Problems (3)</td>
<td></td>
</tr>
<tr>
<td>SOC 302</td>
<td>Introduction to Social Research Methods (3)</td>
<td></td>
</tr>
<tr>
<td>SOC 305</td>
<td>Critical Thinking in the Social Sciences (3)</td>
<td></td>
</tr>
<tr>
<td>SOC 321</td>
<td>Race, Ethnicity and Inequality in the United States (3)</td>
<td></td>
</tr>
<tr>
<td>SOC 341</td>
<td>Sex and Gender in the U.S. (3)</td>
<td></td>
</tr>
<tr>
<td>TA 306</td>
<td>Diversity in American Drama (1960 to Present) (3)</td>
<td></td>
</tr>
</tbody>
</table>

Total Units: 18

The Liberal Arts - Social and Behavioral Sciences Associate in Arts (A.A.) degree may be obtained by completion of the required program, plus general education requirements, plus sufficient electives to meet a 60-unit total. See CRC graduation requirements.

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- Apply accurately the basic vocabulary and concepts of at least one social or behavioral science discipline verbally and in writing. (PSLO 1)
- Examine the possible causes and suggest solutions to introductory problems of a conceptual nature using the methods of at least one social or behavioral scientific discipline. (PSLO 2)
- Recognize the use and misuse of social and behavioral science concepts in society including politics and the media. (PSLO 3)
- Describe both verbally and in writing the role of diverse ethnic, religious and social groups in American political, economic and social development. (PSLO 4)
LIBR 318 Library Research and Information Literacy

Units: 1  
Hours: 18 hours LEC  
Prerequisite: None.  
Transferable: CSU; UC (UC Transfer Credit Limitation: Library 318 and 324 combined: maximum transfer credit is one course)  
General Education: AA/AS Area III(b)  
Catalog Date: June 1, 2020

This course will help students acquire the information competency skills necessary to conduct academic or personal research. It provides a step-by-step guide to the research process that is applicable to term papers, course work and life-long learning.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO(1): Determine the nature and extent of the information needed.
- Identify different types and formats of potential sources of information.
- SLO(2): Access needed information effectively and efficiently.
- Construct and implement effectively-designed search strategies.
- SLO(3): Use information to accomplish a specific purpose.
- Maintain a journal or log of activities related to the information seeking, evaluating, and communicating process.
- SLO(4): Evaluate information and its sources critically in order to build knowledge.
- Examine and compare information from various sources in order to evaluate reliability, validity, accuracy, authority, timeliness, and point of view or bias.
- SLO(5): Understand the economic, legal, social, and ethical issues surrounding information.
- Demonstrate an understanding of what constitutes plagiarism and select an appropriate documentation style and uses it consistently to cite sources.
This course teaches critical thinking and information literacy to allow students to thoughtfully navigate an information-rich environment. Students will learn to critically seek, access, evaluate, and use information in a variety of contexts. This includes recognizing and using inductive and deductive reasoning, rhetorical appeals, and identifying flawed logic in information sources. These are skills that are invaluable for the college classroom, the workplace, and for lifelong information consumers.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- **SLO-1**: Cultivate and apply searching skills in order to retrieve and use information in academic and other contexts.
  - Objective 1A: Formulate questions for research.
  - Objective 1B: Apply critical thinking to determine appropriate search strategies and information tools based on scope, audience, and type of research.
  - Objective 1C: Use different types of searching language (e.g. controlled vocabulary, keywords, natural language) in appropriate context (information need & tool).
  - Objective 1D: Organize information in meaningful ways while synthesizing ideas gathered from multiple sources.

- **SLO-2**: Critically analyze information in order to evaluate quality, relevance, authority, and purpose.
  - Objective 2A: Demonstrate knowledge of critical reading skills to evaluate information.
  - Objective 2B: Use research tools and indicators of authority to determine usefulness and credibility of sources.
  - Objective 2C: Distinguish different types of authority for given contexts (formal and informal).

- **SLO-3**: Apply critical thinking and critical reading skills to evaluate and use logical arguments in a variety of informational contexts (formal and informal).
  - Objective 3A: Recognize inductive and deductive reasoning.
  - Objective 3B: Identify rhetorical appeals and fallacies in reasoning.
  - Objective 3C: Distinguish between credible evidence (facts), misinformation, and opinions.
  - Objective 3D: Use research to create persuasive arguments that are appropriate for the identified audience.

- **SLO-4**: Explore and analyze the value of information (both monetary value and value in society) in order to use it effectively in college and in the workplace.
  - Objective 4A: Critically analyze the value placed upon different types of information in different contexts.
  - Objective 4B: Recognize how and why some individuals or groups may be underrepresented or marginalized within information systems.
  - Objective 4C: Choose appropriate sources for information needs.
  - Objective 4D: Give credit to the original works and ideas of others through proper attribution and citation.

- **SLO-5**: Contribute to scholarly and professional information environments.
  - Objective 5A: Identify paths to enter and contribute to scholarly and professional conversations.
  - Objective 5B: Recognize that any given source may not represent the only (or even the majority) perspective on an issue.
  - Objective 5C: Use information responsibly (seeking accurate and reliable sources while respecting intellectual property).
An independent studies project involves an individual student or small group of students in study, research, or activities beyond the scope of regularly offered courses. See the current catalog section of “Special Studies” for full details of Independent Studies.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- **SLO #1**: Actively engage in intellectual inquiry beyond that required in order to pass a course of study (College Wide Learning Outcome – Area 4).

- Discuss and outline a proposal of study (that can be accomplished within one semester term) with a supervising instructor qualified within the discipline.

- Design an independent study (to be completed individually or by collaboration of a small group) to foster special knowledge, skills, and experience that are not available in any one regularly scheduled course.

- Use information resources to gather discipline-specific information.

- **SLO #2**: Utilize modes of analysis and critical thinking to apply theoretical perspectives and/or concepts in the major discipline of study to significant problems and/or educational activities (College Wide Learning Outcome – Area 3).

- Analyze and apply the knowledge, skills and experience that are involved in the independent study to theoretical perspectives and/or concepts in the major discipline of study.

- Explain the importance of the major discipline of study in the broader picture of society.

- **SLO #3**: Communicate a complex understanding of content matter of the major discipline of study (College Wide Outcome – Area 3).

- Demonstrate competence in the skills essential to mastery of the major discipline of study that are necessary to accomplish the independent study.

- **SLO #4**: Identify personal goals and pursue these goals effectively (College Wide Outcome – Area 4).

- Utilize skills from the “academic tool kit” including time management, study skills, etc., to accomplish the independent study within one semester term.
Management | Cosumnes River College

This broad-based management program offers introductory courses as well as more specialized ones ranging from studies of the standard corporate organization to analyzing the small business. Managers help organizations achieve their objectives through effective planning, organizing, directing, and controlling. The management program attempts to develop an understanding of the importance and diversity of its related fields. This program prepares students for entry into a company management training program and upgrades the skills of those already working in industry, allowing them to advance to supervisory positions. Students planning vocations in personnel services or analyst positions in state or federal government service should also consider this degree program.

Dean

 (916) 691-7226
 PowellJ@crc.losrios.edu

Associate Degree

A.A. in Management

This program provides an overview of business fundamentals for students interested in most business occupations. Topics include management communication, human resources, organizational behavior, and diversity management.

Catalog Date: June 1, 2020

Degree Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS 300</td>
<td>Introduction to Business</td>
<td>3</td>
</tr>
<tr>
<td>BUS 340</td>
<td>Business Law</td>
<td>3</td>
</tr>
<tr>
<td>ACCT 301</td>
<td>Financial Accounting</td>
<td>4</td>
</tr>
<tr>
<td>ECON 302</td>
<td>Principles of Macroeconomics</td>
<td>3</td>
</tr>
<tr>
<td>MKT 300</td>
<td>Principles of Marketing</td>
<td>3</td>
</tr>
<tr>
<td>MGMT 362</td>
<td>Techniques of Management</td>
<td>3</td>
</tr>
<tr>
<td>MGMT 372</td>
<td>Human Relations and Organizational Behavior</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>A minimum of 6 units from the following:</td>
<td>6</td>
</tr>
<tr>
<td>BUS 310</td>
<td>Business Communications (3)</td>
<td></td>
</tr>
<tr>
<td>BUS 330</td>
<td>Managing Diversity in the Workplace (3)</td>
<td></td>
</tr>
<tr>
<td>BUS 350</td>
<td>Small Business Management/Entrepreneurship (3)</td>
<td></td>
</tr>
<tr>
<td>MGMT 308</td>
<td>Personnel and Human Resources Management (3)</td>
<td></td>
</tr>
<tr>
<td>MGMT 495</td>
<td>Independent Studies in Management (1 - 3)</td>
<td></td>
</tr>
<tr>
<td>MGMT 498</td>
<td>Work Experience in Management (1 - 4)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>A minimum of 3 units from the following:</td>
<td>3</td>
</tr>
<tr>
<td>CISC 310</td>
<td>Introduction to Computer Information Science (3)</td>
<td></td>
</tr>
</tbody>
</table>
The Management Associate in Arts (A.A.) degree may be obtained by completion of the required program, plus general education requirements, plus sufficient electives to meet a 60-unit total. See CRC graduation requirements.

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- Incorporate leadership skills and abilities that are effective in managing a multicultural workforce.
- Analyze practical business problems.
- Apply current management philosophies to current management problems.
- Integrate management principles in relationship to finance, personnel, products, services and information.
- Communicate effectively verbally and in writing in various business settings.
- Utilize critical thinking and research skills in the evaluation of alternative solutions.

Certificate of Achievement

Management in Business Certificate

This Certificate of Achievement provides an overview of business fundamentals for students interested in most business occupations. Topics include management techniques, human resources, and organizational behavior. Students wanting to earn the A.A. degree in Business, General can do so by taking additional courses beyond the 18 units required for this certificate. Please seek advice from your counselor to verify the correct courses to take towards the A.A degree.

Catalog Date: June 1, 2020

Certificate Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>MGMT 362</td>
<td>Techniques of Management</td>
<td>3</td>
</tr>
<tr>
<td>MGMT 372</td>
<td>Human Relations and Organizational Behavior</td>
<td>3</td>
</tr>
<tr>
<td>BUS 300</td>
<td>Introduction to Business</td>
<td>3</td>
</tr>
<tr>
<td>MKT 300</td>
<td>Principles of Marketing</td>
<td>3</td>
</tr>
<tr>
<td>BUS 340</td>
<td>Business Law</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>A minimum of 3 units from the following:</td>
<td></td>
</tr>
<tr>
<td>MGMT 308</td>
<td>Personnel and Human Resources Management (3)</td>
<td>3</td>
</tr>
<tr>
<td>BUS 310</td>
<td>Business Communications (3)</td>
<td></td>
</tr>
<tr>
<td>BUS 330</td>
<td>Managing Diversity in the Workplace (3)</td>
<td></td>
</tr>
<tr>
<td>BUS 350</td>
<td>Small Business Management/Entrepreneurship (3)</td>
<td></td>
</tr>
<tr>
<td>ACCT 301</td>
<td>Financial Accounting (4)</td>
<td></td>
</tr>
<tr>
<td>CISC 310</td>
<td>Introduction to Computer Information Science (3)</td>
<td></td>
</tr>
</tbody>
</table>
Management (MGMT)

MGMT 295 Independent Studies in Management

Units: 1 - 3
Hours: 54 - 162 hours LAB
Prerequisite: None.
Catalog Date: June 1, 2020

An independent studies project involves an individual student or small group of students in study, research, or activities beyond the scope of regularly offered courses. See the current catalog section of "Special Studies" for full details of Independent Studies.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO #1: Actively engage in intellectual inquiry beyond that required in order to pass a course of study (College Wide Learning Outcome – Area 4).
- Discuss and outline a proposal of study (that can be accomplished within one semester term) with a supervising instructor qualified within the discipline.
- Design an independent study (to be completed individually or by collaboration of a small group) to foster special knowledge, skills, and experience that are not available in any one regularly scheduled course.
- Use information resources to gather discipline-specific information.
- SLO #2: Utilize modes of analysis and critical thinking to apply theoretical perspectives and/or concepts in the major discipline of study to significant problems and/or educational activities (College Wide Learning Outcome – Area 3).
- Analyze and apply the knowledge, skills and experience that are involved in the independent study to theoretical perspectives and/or concepts in the major discipline of study.
- Explain the importance of the major discipline of study in the broader picture of society.
- SLO #3: Communicate a complex understanding of content matter of the major discipline of study (College Wide Outcome – Area 3).
- Demonstrate competence in the skills essential to mastery of the major discipline of study that are necessary to accomplish the independent study.
- SLO #4: Identify personal goals and pursue these goals effectively (College Wide Outcome – Area 4).
- Utilize skills from the "academic tool kit" including time management, study skills, etc., to accomplish the independent study within one semester term.

Career Information

First-line Supervisor or Manager in general business or government service settings.
MGMT 308 Personnel and Human Resources Management

This course presents the student with the materials necessary to begin the complex study and analysis of such areas as civil rights, labor law, the personnel “Human Resources” organization and various management theories currently found in both public and private sector organization.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO 1: DEMONSTRATE SKILL AND COMPREHENSION IN PERSONNEL AND HUMAN RESOURCES MANAGEMENT.
  - Evaluate the role of the human resource management in public and private organizations.
  - Explain the key challenges to personnel and human resource management in developing the flexible and skilled workforce needed in governmental and private organizations.
  - Evaluate the impact of cost pressures on human resource policies.

- SLO 2: EXAMINE AND DEMONSTRATE APPROPRIATE RESPONSES TO PERSONNEL AND HUMAN RESOURCES MANAGEMENT DECISIONS
  - Analyze and decide upon the use of personnel recruitment and selection methods for different sets of conditions.
  - Compare and contrast various performance appraisal techniques, explaining the advantages and disadvantages of each.

- SLO 3: DEMONSTRATE THE ABILITY TO THINK CRITICALLY AND ANALYZE PROBLEMS
  - Explain how careful and astute management of human resources can result in better job performance. Analyze the dynamics and legal foundations of labor and management relations.
  - Analyze the dynamics and legal foundations of labor and management relations.

MGMT 362 Techniques of Management

This is a basic course in management that introduces a variety of modern management concepts. This course includes the basic management functions of planning, organization, staffing, leadership, and control. In addition, such concepts as team development, communication, business ethics, and global management perspectives will be discussed.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO 1: DEMONSTRATE SKILL AND COMPREHENSION IN TECHNIQUES OF MANAGEMENT (AS INDICATED BY COURSE OUTCOMES).
  - Recognize the duties that managers must accomplish in order to facilitate work accomplishments by people in organizations.
  - Identify the five functions of management and apply the planning, organization, staffing, leadership roles, and controlling functions in a variety of real-life business situations.
  - Define various organizational design essentials.
  - Describe the various approaches to modern job enrichment.
  - Explain the concept that organizations are a collection of people working together to a common purpose.

- SLO 2: EXAMINE AND DEMONSTRATE APPROPRIATE RESPONSES TO KEY DIVERSITY ISSUES IN THE WORKPLACE.
Describe the needed management activities to meet the demands and needs of an increasingly diverse work force.

SLO 3: DEMONSTRATE THE ABILITY TO THINK CRITICALLY AND ANALYZE PROBLEMS.

Describe a variety of current management philosophies to current management problems.

Describe why technological changes may require the manager to become a “knowledge worker.”

Evaluate the impact of TQM in the modern management process.

Categorize and evaluate the various Process Theories of Motivation; such as, Maslow, Alderfer, Hersberg, McGregor, and McClelland.

MGMT 372 Human Relations and Organizational Behavior

3 units

- Utilize major approaches to understanding people at work.
- Describe theories of human behavior at work.
- Describe an effective philosophy of human behavior in the workplace of a professional setting.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO 1: DEMONSTRATE SKILL AND COMPREHENSION IN TECHNIQUES OF MANAGEMENT IN TERMS OF HUMAN RELATIONS AND ORGANIZATIONAL BEHAVIOR (AS INDICATED BY COURSE OUTCOMES).
- Apply skills in effective human interaction within the workplace.
- Analyze employee performance and determine performance improvement (in such areas as goal orientation, innovation and creativity, constructive discipline, delegation and responsibility).

MGMT 495 Independent Studies in Management

1 - 3 units

An independent studies project involves an individual student or small group of students in study, research, or activities beyond the scope of regularly offered courses. See the current catalog section of “Special Studies” for full details of Independent Studies.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO #1: Actively engage in intellectual inquiry beyond that required in order to pass a course of study (College Wide Learning Outcome – Area 4).
- Discuss and outline a proposal of study (that can be accomplished within one semester term) with a supervising instructor qualified within the discipline.
- Design an independent study (to be completed individually or by collaboration of a small group) to foster special knowledge, skills, and experience that are not available in any one regularly scheduled course.
Use information resources to gather discipline-specific information.

SLO #2: Utilize modes of analysis and critical thinking to apply theoretical perspectives and/or concepts in the major discipline of study to significant problems and/or educational activities (College Wide Learning Outcome – Area 3).

Analyze and apply the knowledge, skills and experience that are involved in the independent study to theoretical perspectives and/or concepts in the major discipline of study.

Explain the importance of the major discipline of study in the broader picture of society.

SLO #3: Communicate a complex understanding of content matter of the major discipline of study (College Wide Outcome – Area 3).

Demonstrate competence in the skills essential to mastery of the major discipline of study that are necessary to accomplish the independent study.

SLO #4: Identify personal goals and pursue these goals effectively (College Wide Outcome – Area 4).

Utilize skills from the "academic tool kit" including time management, study skills, etc., to accomplish the independent study within one semester term.

MGMT 498 Work Experience in Management

Units: 1 - 4
Hours: 60 - 300 hours LAB
Prerequisite: None.
Enrollment Limitation: Students must be in a paid or unpaid internship, volunteer position or job related to career goals in Management.
Transferable: CSU
General Education: AA/AS Area III(b)
Catalog Date: June 1, 2020

This course provides students with opportunities to develop marketable skills in preparation for employment in their major field of study or advancement within their career. It is designed for students interested in work experience and/or internships in transfer level degree occupational programs. Course content includes understanding the application of education to the workforce; completion of required forms which document the student’s progress and hours spent at the work site; and developing workplace skills and competencies. Appropriate level learning objectives are established by the student and the employer. During the semester, the student is required to participate in a weekly orientation and 75 hours of related paid work experience, or 60 hours of unpaid work experience for one unit. An additional 75 or 60 hours of related work experience is required for each additional unit. Work Experience may be taken for a total of 16 units when there are new or expanded learning objectives. Only one Work Experience course may be taken per semester.

Upon completion of this course, the student will be able to:

DEMONSTRATE AN UNDERSTANDING AND APPLICATION OF PROFESSIONAL WORKPLACE BEHAVIOR IN A FIELD OF STUDY RELATED TO ONE’S CAREER(SLO 1)

Understand the effects time, stress, and organizational management have on performance.

Demonstrate an understanding of consistently practicing ethics and confidentiality in a workplace.

Examine the career/life planning process and relate its relevancy to the student.

Demonstrate an understanding of basic communication tools and their appropriate use.

Demonstrate an understanding of workplace etiquette.

DESCRIBE THE CAREER/LIFE PLANNING PROCESS AND RELATE ITS RELEVANCY TO ONE’S CAREER(SLO 2)

Link personal goals to long term achievement.

Display an understanding of creating a professional first impression.

Understand how networking is a powerful job search tool.

Understand necessary elements of a résumé.

Understand the importance of interview preparation.

Identify how continual learning increases career success.

DEMONSTRATE APPLICATION OF INDUSTRY KNOWLEDGE AND THEORETICAL CONCEPTS AS WRITTEN IN LEARNING OBJECTIVES IN PARTNERSHIP WITH THE EMPLOYER WORK SITE SUPERVISOR(SLO 3)
Marketing | Cosumnes River College

Marketing is a dynamic area of study that provides immediate job and career opportunities after one course or the completion of a degree. The skills learned are easily converted into well-paying careers by many students. There is no limit to your success when these areas of study are utilized successfully. The skills learned are essential for international and domestic business and for companies large and small. Please refer to the Business section for additional marketing courses.

Dean

 (916) 691-7226

.PowellJ@crc.losrios.edu

Associate Degree

A.A. in Marketing

The Marketing degree provides an opportunity for students to acquire knowledge and training for careers in sales, advertising, and marketing. The competency-based curriculum is designed to prepare students for a variety of positions and to provide basic training for advancement to management positions and for transfer to four-year universities.

Catalog Date: June 1, 2020

Degree Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS 300</td>
<td>Introduction to Business</td>
<td>3</td>
</tr>
<tr>
<td>BUS 340</td>
<td>Business Law</td>
<td>3</td>
</tr>
<tr>
<td>ACCT 301</td>
<td>Financial Accounting</td>
<td>4</td>
</tr>
<tr>
<td>ECON 302</td>
<td>Principles of Macroeconomics</td>
<td>3</td>
</tr>
<tr>
<td>MKT 300</td>
<td>Principles of Marketing</td>
<td>3</td>
</tr>
<tr>
<td>MKT 310</td>
<td>Selling Professionally</td>
<td>3</td>
</tr>
<tr>
<td>MKT 314</td>
<td>Advertising</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>A minimum of 6 units from the following:</td>
<td>6</td>
</tr>
<tr>
<td>MKT 330</td>
<td>Internet Marketing (3)</td>
<td></td>
</tr>
<tr>
<td>MKT 312</td>
<td>Retailing (3)</td>
<td></td>
</tr>
<tr>
<td>BUS 310</td>
<td>Business Communications (3)</td>
<td></td>
</tr>
<tr>
<td>BUS 330</td>
<td>Managing Diversity in the Workplace (3)</td>
<td></td>
</tr>
<tr>
<td>BUS 350</td>
<td>Small Business Management/Entrepreneurship (3)</td>
<td></td>
</tr>
<tr>
<td>MKT 495</td>
<td>Independent Studies in Marketing (1 - 3)</td>
<td></td>
</tr>
<tr>
<td>MKT 498</td>
<td>Work Experience in Marketing (1 - 4)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>A minimum of 3 units from the following:</td>
<td>3</td>
</tr>
<tr>
<td>COURSE CODE</td>
<td>COURSE TITLE</td>
<td>UNITS</td>
</tr>
<tr>
<td>-------------</td>
<td>------------------------------------------------------</td>
<td>-------</td>
</tr>
<tr>
<td>CISC 310</td>
<td>Introduction to Computer Information Science (3)</td>
<td></td>
</tr>
<tr>
<td>CISA 305</td>
<td>Beginning Word Processing (2)</td>
<td></td>
</tr>
<tr>
<td>CISA 308</td>
<td>Exploring Word Processing Software (1)</td>
<td></td>
</tr>
<tr>
<td>CISA 315</td>
<td>Introduction to Electronic Spreadsheets (2)</td>
<td></td>
</tr>
<tr>
<td>CISA 320</td>
<td>Introduction to Database Management (1)</td>
<td></td>
</tr>
<tr>
<td>Total Units:</td>
<td></td>
<td>31</td>
</tr>
</tbody>
</table>

The Marketing Associate in Arts (A.A.) degree may be obtained by completion of the required program, plus general education requirements, plus sufficient electives to meet a 60-unit total. See CRC graduation requirements.

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- Integrate the functions of the marketing mix.
- Identify and examine consumer’s buying behavior and evaluate which marketing communications medium will most effectively meet the needs of the marketplace.
- Incorporate principles of product development, pricing, distribution strategies, promotion strategies and market research.
- Apply the marketing mix to create and analyze various marketing strategies.
- Plan, produce and select the appropriate media for advertising.
- Communicate effectively verbally and in writing in various business settings.

Career Information

Buyer, Account Executive, Entrepreneur; Investment Counselor, Marketing Services, Purchasing Agent, Salesperson, Shipping Clerk, Marketing Manager, or Importer/Exporter. Some career options may require more than two years of college study.

Certificate of Achievement

Marketing Certificate

This Certificate of Achievement in Marketing provides an opportunity for students to acquire knowledge and training for business marketing and prepares them for careers in sales, advertising, customer service, and business development. Students wanting to earn the A.A. degree in Marketing can do so by taking additional courses beyond the 18 units required for this certificate. Please seek advice from your counselor to verify the correct courses to take towards the A.A degree.

Catalog Date: June 1, 2020

Certificate Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>MKT 300</td>
<td>Principles of Marketing</td>
<td>3</td>
</tr>
<tr>
<td>MKT 310</td>
<td>Selling Professionally</td>
<td>3</td>
</tr>
<tr>
<td>MKT 314</td>
<td>Advertising</td>
<td>3</td>
</tr>
<tr>
<td>BUS 300</td>
<td>Introduction to Business</td>
<td>3</td>
</tr>
<tr>
<td>BUS 340</td>
<td>Business Law</td>
<td>3</td>
</tr>
<tr>
<td>A minimum of 3 units from the following:</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>BUS 310</td>
<td>Business Communications (3)</td>
<td></td>
</tr>
<tr>
<td>BUS 330</td>
<td>Managing Diversity in the Workplace (3)</td>
<td></td>
</tr>
</tbody>
</table>
Marketing (MKT)

MKT 120 Survey of International Business

| Units: | 3 |
| Hours: | 54 hours LEC |
| Prerequisite: | None. |
| Catalog Date: | June 1, 2020 |

This course is a comprehensive overview of international business designed to provide both beginners and experienced business people with a global perspective on international trade including foreign investments, impact of financial markets, and the operation of multinational corporations.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- analyze the effect of international monetary markets on import and export trade.
- describe the effects of cultural, political, and legal forces on international business.
- explain fundamental principles of global marketing.

MKT 295 Independent Studies in Marketing

| Units: | 1 - 3 |
| Hours: | 54 - 162 hours LAB |
| Prerequisite: | None. |
| Catalog Date: | June 1, 2020 |

An independent studies project involves an individual student or small group of students in study, research, or activities beyond the scope of regularly offered courses. See the current catalog section of "Special Studies" for full details of Independent Studies.
Student Learning Outcomes

Upon completion of this course, the student will be able to:

- **SLO #1:** Actively engage in intellectual inquiry beyond that required in order to pass a course of study (College Wide Learning Outcome – Area 4).
- Discuss and outline a proposal of study (that can be accomplished within one semester term) with a supervising instructor qualified within the discipline.
- Design an independent study (to be completed individually or by collaboration of a small group) to foster special knowledge, skills, and experience that are not available in any one regularly scheduled course.
- Use information resources to gather discipline-specific information.
- **SLO #2:** Utilize modes of analysis and critical thinking to apply theoretical perspectives and/or concepts in the major discipline of study to significant problems and/or educational activities (College Wide Learning Outcome – Area 3).
- Analyze and apply the knowledge, skills and experience that are involved in the independent study to theoretical perspectives and/or concepts in the major discipline of study.
- Explain the importance of the major discipline of study in the broader picture of society.
- **SLO #3:** Communicate a complex understanding of content matter of the major discipline of study (College Wide Outcome – Area 3).
- Demonstrate competence in the skills essential to mastery of the major discipline of study that are necessary to accomplish the independent study.
- **SLO #4:** Identify personal goals and pursue these goals effectively (College Wide Outcome – Area 4).
- Utilize skills from the “academic tool kit” including time management, study skills, etc., to accomplish the independent study within one semester term.

MKT 300 Principles of Marketing

| Units: | 3 |
| Hours: | 54 hours LEC |
| Prerequisite: | None. |
| Transferable: | CSU |
| Catalog Date: | June 1, 2020 |

This course is a general overview of marketing principles. The course covers the process of planning and executing the conception, pricing, promotion, and distribution of ideas, goods and services to create exchanges that satisfy individual and organizational goals. Elements of the marketing environment such as government regulation, environmental protection, competition, and consumer behavior will be analyzed.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- **SLO 1:** DEMONSTRATE SKILL AND COMPREHENSION IN MARKETING AS INDICATED BY COURSE OUTCOMES.
  - This includes the ability to describe and apply the various elements of marketing such as those involved in pricing, promotion, product development, location, and distribution.
- **SLO 2:** DEMONSTRATE UNDERSTANDING OF FACTORS THAT AFFECT MARKETING.
  - This includes the ability to describe marketing ethics, major government regulations, and other external forces that impact a company's marketing effort.
- **SLO 3:** DEMONSTRATE THE ABILITY TO THINK CRITICALLY AND ANALYZE PROBLEMS.
  - This includes the ability to identify various forms of consumer behavior and illustrate how marketing may benefit each group of consumers.
- APPLY COURSE CONCEPTS TO THE REAL PRACTICE OF MARKETING.
- **SLO 4:** This includes the ability to describe and differentiate controllable and uncontrollable variables in marketing and see how they are practiced in the real world.
MKT 310 Selling Professionally

This course shows the importance of good selling techniques and the personal qualifications required for effective selling. It emphasizes the development of a business personality and its application to the approach direction, and closing of a sale. It also examines various kinds of selling experience: direct, industrial, wholesale and retail. This course is recommended for men and women preparing for various technical fields as well as all business majors.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO 1: DEMONSTRATE SKILL AND COMPREHENSION IN BUSINESS SALES (AS INDICATED BY COURSE OUTCOMES).
  - Recognize and demonstrate the qualifications and characteristics necessary for effective selling.
- SLO 2: DEMONSTRATE THE ABILITY TO THINK CRITICALLY AND ANALYZE PROBLEMS.
  - Analyze career opportunities and benefits available in selling.
  - Understand marketing and apply this knowledge to the approach, direction and closing of a sale.
  - Analyze differences in techniques used in direct, industrial, wholesale and retail sales.

MKT 312 Retailing

Retailing is a business that provides goods and services to customers for their personal use. This course will study modern retail operations with emphasis on consumer behavior, store location and layout, sourcing of goods, pricing, organization, promotion, management and other pertinent factors of retail operations.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- analyze the position of retailing in the wider scope of other marketing institutions (SLO #1).
- examine the various types of retail organizations and their internal structure.
- relate business location theories to the local retail market.
- compare and be able to utilize various sources of merchandise and develop a usable buying plan (SLO #2).
- identify the characteristics of the various types of promotions and be able to plan and schedule promotional programs.
- apply basic mathematics to retail markup procedures and be able to use that skill in a variety of retail applications.
- illustrate various consumer behavior patterns and how the retail store should adapt to them (SLO#3).
- recognize various fashion retailing trends and applications.
- understand and recognize the variables in service retailing.

MKT 314 Advertising
This course is an introduction to the field of advertising, its history, purpose, institutions, and functions. Studies are made of the various media used in general advertising, as well as the effective use of these media. Students will produce ads and advertising campaigns. This course is the same as RTVF 376, and only one may be taken for credit.

Student Learning Outcomes
Upon completion of this course, the student will be able to:

- SLO 1: DEMONSTRATE THE ABILITY TO THINK CRITICALLY AND ANALYZE PROBLEMS.
  - Establish criteria for planning, advertising, and selecting appropriate media.
  - Evaluate state and federal laws applicable in the field of advertising.
- SLO 2: DEMONSTRATE SKILL AND COMPREHENSION IN ADVERTISING FORMATS (AS INDICATED BY COURSE OUTCOMES).
  - Demonstrate an awareness of the importance of advertising in our economy and society.
  - Establish criteria for recognizing and analyzing various forms of advertising.

MKT 330 Internet Marketing

This course introduces students to the use of social media and other Internet technologies, with an emphasis on the theory and practice of marketing in an electronic environment. Topics will include strategies to help students build customer relations through technological strategies. Students will have a good understanding of how this technology can be used to help his/her business be more successful.

Student Learning Outcomes
Upon completion of this course, the student will be able to:

- SLO 1: DEMONSTRATE SKILL AND COMPREHENSION IN INTERNET MARKETING
  - Create effective internet marketing strategies that enhance the business relationship with present and future customers.
  - Explain the basic terminology and technology of the Internet.
  - Apply the principles of e-business to various industries and marketing opportunities.
- SLO 2: EXAMINE AND DEMONSTRATE APPROPRIATE RESPONSES INTERNET MARKETING DECISIONS
  - Examine the steps in developing a mobile marketing campaign.
  - Identify and evaluate decisions in the selection of Internet marketing strategies to make a business more effective.
  - Describe the benefits of an Internet business presence.

MKT 495 Independent Studies in Marketing

An independent studies project involves an individual student or small group of students in study, research, or activities beyond the scope of regularly offered courses. See the current catalog section of "Special Studies" for full details of Independent Studies.
Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO #1: Actively engage in intellectual inquiry beyond that required in order to pass a course of study (College Wide Learning Outcome – Area 4).
- Discuss and outline a proposal of study (that can be accomplished within one semester term) with a supervising instructor qualified within the discipline.
- Design an independent study (to be completed individually or by collaboration of a small group) to foster special knowledge, skills, and experience that are not available in any one regularly scheduled course.
- Use information resources to gather discipline-specific information.
- SLO #2: Utilize modes of analysis and critical thinking to apply theoretical perspectives and/or concepts in the major discipline of study to significant problems and/or educational activities (College Wide Learning Outcome – Area 3).
- Analyze and apply the knowledge, skills and experience that are involved in the independent study to theoretical perspectives and/or concepts in the major discipline of study.
- Explain the importance of the major discipline of study in the broader picture of society.
- SLO #3: Communicate a complex understanding of content matter of the major discipline of study (College Wide Outcome – Area 3).
- Demonstrate competence in the skills essential to mastery of the major discipline of study that are necessary to accomplish the independent study.
- SLO #4: Identify personal goals and pursue these goals effectively (College Wide Outcome – Area 4).
- Utilize skills from the "academic tool kit" including time management, study skills, etc., to accomplish the independent study within one semester term.

MKT 498 Work Experience in Marketing

Units: 1 - 4
Hours: 60 - 300 hours LAB
Prequisite: None.
Enrollment Limitation: Students must be in a paid or unpaid internship, volunteer position or job related to career goals in Marketing.
Transferable: CSU
General Education: AA/AS Area III(b)
Catalog Date: June 1, 2020

This course provides students with opportunities to develop marketable skills in preparation for employment in their major field of study or advancement within their career. It is designed for students interested in work experience and/or internships in transfer level degree occupational programs. Course content includes understanding the application of education to the workforce; completion of required forms which document the student's progress and hours spent at the work site; and developing workplace skills and competencies. Appropriate level learning objectives are established by the student and the employer. During the semester, the student is required to participate in a weekly orientation and 75 hours of related paid work experience, or 60 hours of unpaid work experience for one unit. An additional 75 or 60 hours of related work experience is required for each additional unit. Work Experience may be taken for a total of 16 units when there are new or expanded learning objectives. Only one Work Experience course may be taken per semester.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- DEMONSTRATE AN UNDERSTANDING AND APPLICATION OF PROFESSIONAL WORKPLACE BEHAVIOR IN A FIELD OF STUDY RELATED TO ONE'S CAREER(SLO 1)
- Understand the effects time, stress, and organizational management have on performance.
- Demonstrate an understanding of consistently practicing ethics and confidentiality in a workplace.
- Examine the career/life planning process and relate its relevancy to the student.
- Demonstrate an understanding of basic communication tools and their appropriate use.
- Demonstrate an understanding of workplace etiquette.
- DESCRIBE THE CAREER/LIFE PLANNING PROCESS AND RELATE ITS RELEVANCY TO ONE’S CAREER(SLO 2)
- Link personal goals to long term achievement.
• Display an understanding of creating a professional first impression.
• Understand how networking is a powerful job search tool.
• Understand necessary elements of a résumé.
• Understand the importance of interview preparation.
• Identify how continual learning increases career success.

• DEMONSTRATE APPLICATION OF INDUSTRY KNOWLEDGE AND THEORETICAL CONCEPTS AS WRITTEN IN LEARNING OBJECTIVES IN PARTNERSHIP WITH THE EMPLOYER WORK SITE SUPERVISOR (SLO 3)
CRC's Mathematics program offers a comprehensive mathematics curriculum addressing the needs of both transfer and non-transfer students. The study of mathematics provides students with the ability to think logically and abstractly and to use problem-solving and computational skills necessary for success in any field of study.

Dean
Ryan Cox
 (916) 691-7537
 CoxR@crc.losrios.edu

Associate Degrees for Transfer

A.S.-T. in Mathematics

The Associate in Science in Mathematics for Transfer degree is designed to meet common lower-division requirements for a major in mathematics at most California State University (CSU) campuses. Satisfactory completion of the CRC Associate in Science in Mathematics for Transfer (AS-T) degree provides a solid foundation and satisfies the standard prerequisites for upper division coursework for mathematics majors at most CSU and other four-year universities. However, it is highly recommended that students meet with a counselor since major and general education requirements vary for each college/university.

Catalog Date: June 1, 2020

Degree Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 400</td>
<td>Calculus I</td>
<td>5</td>
</tr>
<tr>
<td>MATH 401</td>
<td>Calculus II</td>
<td>5</td>
</tr>
<tr>
<td>MATH 402</td>
<td>Calculus III</td>
<td>5</td>
</tr>
<tr>
<td>MATH 410</td>
<td>Introduction to Linear Algebra</td>
<td>3</td>
</tr>
<tr>
<td>MATH 420</td>
<td>Differential Equations</td>
<td>4</td>
</tr>
<tr>
<td>Total Units:</td>
<td></td>
<td>22</td>
</tr>
</tbody>
</table>

The Associate in Science in Mathematics for Transfer (AS-T) degree may be obtained by completion of 60 transferable, semester units with a minimum 2.0 GPA, including (a) the major or area of emphasis described in the Required Program, and (b) either the Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education-Breadth Requirements.

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- explain and apply basic concepts of single variable calculus including various forms of derivatives and integrals, their interconnections, and their uses in analyzing and solving real-world problems.

- explain and apply basic concepts of multivariable calculus, linear algebra, or differential equation techniques, their interconnections, and their uses in analyzing and solving real-world problems.
prepare logical arguments and use them to prove basic mathematical theorems.

solve real-world application problems using appropriate mathematical problem-solving skills.

Career Information

Mathematicians work as statisticians, analysts, computer programmers, actuaries, researchers, planners, and educators. NOTE TO TRANSFER STUDENTS: The Associate Degree for Transfer program is designed for students who plan to transfer to a campus of the California State University (CSU). Other than the required core, the courses you choose to complete this degree will depend to some extent on the selected CSU for transfer. In addition, some CSU-GE Breadth or IGETC requirements can also be completed using courses required for this associate degree for transfer major (known as “double-counting”). Meeting with a counselor to determine the most appropriate course choices will facilitate efficient completion of your transfer requirements. For students wishing to transfer to other universities (UC System, private, or out-of-state), the Associate Degree for Transfer may not provide adequate preparation for upper-division transfer admissions; it is critical that you meet with a CRC counselor to select and plan the courses for the major, as programs vary widely in terms of the required preparation.

Associate Degrees

A.S. in Mathematics

This degree is designed to provide a foundation in mathematics and to meet common lower-division requirements for a major in Mathematics or Statistics at many four-year institutions. It is highly recommended that students meet with a counselor because major and general education requirements vary for each college/university.

NOTE TO TRANSFER STUDENTS:
If you are interested in transferring to a four-year college or university to pursue a bachelor’s degree in Mathematics, it is critical that you meet with a CRC counselor to select and plan the courses for your major. Schools vary widely in terms of the required preparation. The courses that CRC requires for an Associate’s degree in Mathematics may be different from the courses required for the Bachelor’s degree.

Catalog Date: June 1, 2020

Degree Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 400</td>
<td>Calculus I</td>
<td>5</td>
</tr>
<tr>
<td>MATH 401</td>
<td>Calculus II</td>
<td>5</td>
</tr>
<tr>
<td>MATH 402</td>
<td>Calculus III</td>
<td>5</td>
</tr>
<tr>
<td>MATH 420</td>
<td>Differential Equations</td>
<td>4</td>
</tr>
<tr>
<td>MATH 410</td>
<td>Introduction to Linear Algebra</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>A minimum of 4 units from the following:</strong></td>
<td></td>
</tr>
<tr>
<td>CISP 360</td>
<td>Introduction to Structured Programming (4)</td>
<td>4</td>
</tr>
<tr>
<td>or CISP 370</td>
<td>Beginning Visual Basic (4)</td>
<td></td>
</tr>
<tr>
<td>or CISP 400</td>
<td>Object Oriented Programming with C++ (4)</td>
<td></td>
</tr>
<tr>
<td>or CISP 401</td>
<td>Object Oriented Programming with Java (4)</td>
<td></td>
</tr>
<tr>
<td>or STAT 300</td>
<td>Introduction to Probability and Statistics (4)</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Total Units:</strong></td>
<td><strong>26</strong></td>
</tr>
</tbody>
</table>

The Mathematics Associate in Science (A.S.) degree may be obtained by completion of the required program, plus general education requirements, plus sufficient electives to meet a 60-unit total. See CRC graduation requirements.

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- explain and apply basic concepts of single variable calculus including various forms of derivatives and integrals, their interconnections, and their uses in analyzing and solving real-world problems (P-SLO #1)
Mathematics (MATH)

MATH 20 Arithmetic
This course provides instruction in the fundamentals of arithmetic with emphasis on computational skills. Topics include whole numbers, fractions, decimals, percents, ratios, proportions, problem solving, and applications. Upon completion of this course, the student will be able to:

SLO (1): CORRECTLY USE THE ORDER OF OPERATIONS TO EVALUATE EXPRESSIONS. ACCURATELY COMPUTE PROBLEMS INVOLVING THE BASIC OPERATIONS OF ARITHMETIC (ADDITION, SUBTRACTION, MULTIPLICATION, DIVISION, EXPONENTS, ORDER OF OPERATIONS) ON WHOLE NUMBERS, FRACTIONS, AND DECIMALS.

Identify the prime numbers from 2 to 50. Use divisibility tests, factorization, and the concept of prime and composite to construct the least common multiple. Understand the process of rewriting a given number as the product of all distinct prime numbers.

Express numeric information in one of the following three forms: fraction, percent, decimal.

Convert numeric information into and out of scientific notation.

Incorporate concepts of prime factorization and greatest common factor to simplify fractions.

Evaluate problems involving ratios, proportions, and percents.

Perform unit conversions for American measurements which involve length, capacity, weight, and times. Use the method of unit conversions to solve application problems.

Demonstrate concepts of rounding and estimation of whole numbers and decimals to nearest place value.

SLO (2): DEMONSTRATE THE ABILITY TO TRANSLATE MATHEMATICAL PROBLEMS IN WORD FORM TO AN EXPRESSION OR SINGLE VARIABLE EQUATION, AND SOLVE SINGLE VARIABLE ONE-STEP EQUATIONS.

Translate simple English phrases and sentences into simple algebraic expressions and equations.

Construct equations by translating information from word form to symbolic form with use of a variable.

Set up applied problems involving ratios, proportions, and percents.

Calculate solutions of one-step single variable equations.

Solve applications problems involving whole numbers, fractions, decimals, ratios, proportions, and percents.

Find perimeter and area of basic Euclidean and compound shapes.

SLO (3): ANALYZE PATTERNS AND ORGANIZE MATHEMATICAL THOUGHTS TO INCREASE THE LEVEL OF ABSTRACT THINKING THAT IS ESSENTIAL FOR REAL LIFE PROBLEM SOLVING.

Apply mathematical concepts and patterns to new problems and new situations.

Career Information
Mathematicians work as statisticians, analysts, computer programmers, actuaries, researchers, planners, and educators. Most of these careers require education beyond the two-year college level.
MATH 30 Pre-Algebra Mathematics

Units: 5
Hours: 90 hours LEC
Prerequisite: MATH 20 with a grade of "C" or better; or equivalent skills demonstrated through the assessment process.
Catalog Date: June 1, 2020

This pre-algebra mathematics course emphasizes: fundamental operations on integers, fractions, and decimals; formulas involving geometric figures; measurement; and solving basic equations. Topics include: fractions; decimals; signed numbers; properties of exponents; scientific notation; conversions; metric system; square and cube roots; formula evaluation; solving equations; ratios; proportions; algebraic manipulations; descriptive statistics; the rectangular coordinate system; and elementary calculator use.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO 1: ARTICULATE THE IMPORTANCE OF THE ORDER OF OPERATIONS AND HOW THEY RELATE TO THE REAL NUMBER SYSTEM, EXPRESSIONS, EQUATIONS AND EVALUATION OF MATHEMATICAL FORMULAS.
- Compute with accuracy problems involving the basic operations of arithmetic (addition, subtraction, multiplication, division, exponents, order of operations) on signed numbers.
- Multiply and divide numbers expressed in scientific notation.
- Simplify expressions involving variables by adding, subtracting, multiplying, dividing, or reducing.
- Use and evaluate formulas with more than one variable.
- Demonstrate accurate use of the properties of real numbers and the exponent rules in addition, subtraction, and multiplication of polynomials.
- SLO 2: DEMONSTRATE THE ABILITY TO RECOGNIZE KEY WORDS OR PHRASES THAT WOULD GUIDE ONE THROUGH THE TRANSLATION OF A MATHEMATICAL PROBLEM IN WORD FORM TO AN ALGEBRAIC EXPRESSION OR EQUATION.
- Solve applied problems using signed numbers, variable expressions, scientific notation, and equations.
- Solve linear equations in one variable involving signed numbers, fractions, and decimals.
- Directly translate equations in word form to symbolic form with use of variables and solve them.
- SLO 3: INVESTIGATE AND MODEL REAL LIFE PHENOMENA THROUGH THE USE OF LINEAR EQUATIONS IN TWO VARIABLES AND THEIR CORRESPONDING GRAPHS (ALGEBRAICALLY AND GEOMETRICALLY), AND THINK CRITICALLY ABOUT HOW THE MATHEMATICS IS RELEVANT TO ONE’S LIFE.
- Find solutions to linear equations in two variables and plot these points on the two-dimensional coordinate system.
- Interpret graphs of two-dimensional data, such as bar graphs, line graphs and pie charts.
- SLO 4: UTILIZE AND APPLY THE METHOD OF DIMENSIONAL ANALYSIS (OR UNIT ANALYSIS) TO COMPARE AND CONVERT QUANTITIES.
- Solve applied problems using measurement conversions, proportions, and percent.
- Perform accurate computations involving measurement conversion.
- SLO 5: POSSESS THE ABILITY TO RECOGNIZE PATTERNS, ORGANIZE MATHEMATICAL THOUGHTS, AND INCREASE THE LEVEL OF ABSTRACT THINKING THAT IS ESSENTIAL FOR REAL LIFE PROBLEM SOLVING.

MATH 70 Arithmetic Skills Lab

Units: 0.25 - 2
Hours: 13.5 - 108 hours LAB
Prerequisite: None.
Corequisite: MATH 20
Catalog Date: June 1, 2020

Demonstrate ability to communicate mathematically by writing and presenting the work of the problems in an organized way.
This laboratory course provides the student with assistance in arithmetic skills via enrollment in the campus' Math Center. It is recommended for students who are encountering difficulties in the areas of math anxiety, basic skills, problem solving, and/or arithmetic concepts. Students may enter the Skills Lab course at any time during the first 12 weeks of the semester. It is recommended that the student register for 0.25 units. This recommended unit enrollment will require the student to spend a minimum of 13.5 hours throughout the semester in the Math Center studying for the relevant course. Students can take this course again in subsequent semesters until 2.0 total units have been completed. Students must be concurrently enrolled in an arithmetic-level course (MATH 20 - 29) in order to enroll in MATH 70. Placement into this Skills Lab can be made through student request, instructor recommendation, or an assessment process. This course is graded on a pass/no-pass basis.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- **SLO(1): BUILD STUDY SKILLS AND LEARNING STRATEGIES NEEDED FOR CONTINUED SUCCESS IN MATHEMATICS EDUCATION.**
  - demonstrate improved math study skills.
  - exhibit increased confidence level in approaching mathematics.
- **SLO(2): UTILIZE MATHEMATICAL SKILLS IN A VARIETY OF CONTEXTS.**
  - demonstrate an improved performance at the arithmetic level.
- **SLO(3): FORMULATE STRATEGIES AND CHOOSE AN APPROPRIATE COMBINATION OF TECHNIQUES FOR SOLVING APPLIED PROBLEMS.**
  - employ problem solving strategies to improve specific course skills.

MATH 71 Pre-Algebra Skills Lab

**Units:** 0.25 - 2  
**Hours:** 13.5 - 108 hours LAB  
**Prerequisite:** None  
**Corequisite:** MATH 30  
**Catalog Date:** June 1, 2020

This laboratory course provides the student with assistance in pre-algebra skills via enrollment in the campus' Math Center. It is recommended for students who are encountering difficulties in the areas of math anxiety, basic skills, problem solving, algebraic manipulations and/or algebra concepts. Students may enter the Skills Lab course at any time during the first 12 weeks of the semester. It is recommended that the student register for 0.25 units. This recommended unit enrollment will require the student to spend a minimum of 13.5 hours throughout the semester in the Math Center studying for the relevant course. Students can take this course again in subsequent semesters until 2.0 total units have been completed. Students must be concurrently enrolled in a pre-algebra-level course (MATH 30 - 39) in order to enroll in MATH 71. Placement into this Skills Lab can be made through student request, instructor recommendation, or an assessment process. This course is graded on a pass/no-pass basis.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- **SLO(1): BUILD STUDY SKILLS AND LEARNING STRATEGIES NEEDED FOR CONTINUED SUCCESS IN MATHEMATICS EDUCATION.**
  - demonstrate improved math study skills.
  - exhibit increased confidence level in approaching mathematics.
- **SLO(2): UTILIZE MATHEMATICAL SKILLS IN A VARIETY OF CONTEXTS.**
  - demonstrate an improved performance at the prealgebra level.
- **SLO(3): FORMULATE STRATEGIES AND CHOOSE AN APPROPRIATE COMBINATION OF TECHNIQUES FOR SOLVING APPLIED PROBLEMS.**
  - employ problem solving strategies to improve specific course skills.

MATH 72 Elementary Algebra Skills Lab
This laboratory course provides the student with assistance in elementary algebra skills via enrollment in the campus' Math Center. It is recommended for students who are encountering difficulties in the areas of math anxiety, basic skills, problem solving, algebraic manipulations and/or algebra concepts. Students may enter the Skills Lab course at any time during the first 12 weeks of the semester. It is recommended that the student register for 0.25 units. This recommended unit enrollment will require the student to spend a minimum of 13.5 hours throughout the semester in the Math Center studying for the relevant course. Students can take this course again in subsequent semesters until 2.0 total units have been completed. Students must be concurrently enrolled in an elementary algebra-level course (MATH 100 - 109) in order to enroll in MATH 72. Placement into this Skills Lab can be made through student request, instructor recommendation, or an assessment process. This course is graded on a pass/no-pass basis.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- SLO(1): BUILD STUDY SKILLS AND LEARNING STRATEGIES NEEDED FOR CONTINUED SUCCESS IN MATHEMATICS EDUCATION.
- demonstrate improved math study skills.
- exhibit increased confidence level in approaching mathematics.
- SLO(2): UTILIZE MATHEMATICAL SKILLS IN A VARIETY OF CONTEXTS.
- demonstrate an improved performance at the elementary algebra level.
- SLO(3): FORMULATE STRATEGIES AND CHOOSE AN APPROPRIATE COMBINATION OF TECHNIQUES FOR SOLVING APPLIED PROBLEMS.
- employ problem solving strategies to improve specific course skills.

**MATH 73 Intermediate Algebra/Math Literacy Skills Lab**

This laboratory course provides the student with assistance in intermediate algebra skills via enrollment in the campus' Math Center. It is recommended for students who are encountering difficulties in the areas of math anxiety, basic skills, problem solving, algebraic manipulations and/or intermediate algebra concepts. Students may enter the Skills Lab course at any time during the first 12 weeks of the semester. It is recommended that the student register for 0.25 units. This recommended unit enrollment will require the student to spend a minimum of 13.5 hours throughout the semester in the Math Center studying for the relevant course. Students can take this course again in subsequent semesters until 2.0 total units have been completed. Students must be concurrently enrolled in an intermediate algebra-level course (MATH 120 - 129), including any mathematical literacy course (MATH 140 - 149) in order to enroll in MATH 73. Placement into this Skills Lab can be made through student request, instructor recommendation, or an assessment process. This course is graded on a pass/no-pass basis.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- SLO(1): BUILD STUDY SKILLS AND LEARNING STRATEGIES NEEDED FOR CONTINUED SUCCESS IN MATHEMATICS EDUCATION.
- demonstrate improved math study skills.
- exhibit increased confidence level in approaching mathematics.
- SLO(2): UTILIZE MATHEMATICAL SKILLS IN A VARIETY OF CONTEXTS.
- demonstrate an improved performance at the intermediate algebra level.
- SLO(3): FORMULATE STRATEGIES AND CHOOSE AN APPROPRIATE COMBINATION OF TECHNIQUES FOR SOLVING APPLIED PROBLEMS.
- employ problem solving strategies to improve specific course skills.
MATH 74 Statistics/Geometry Skills Lab

This laboratory course provides the student with assistance in statistics and/or geometry skills via enrollment in the campus' Math Center. It is recommended for students who are encountering difficulties in the areas of math anxiety, basic skills, problem solving, algebraic manipulations, statistics and/or geometry concepts. Students may enter the Skills Lab course at any time during the first 12 weeks of the semester. It is recommended that the student register for 0.25 units. This recommended unit enrollment will require the student to spend a minimum of 13.5 hours throughout the semester in the Math Center studying for the relevant course. Students can take this course again in subsequent semesters until 2.0 total units have been completed. Students must be concurrently enrolled in a statistics (STAT 300) or Geometry (MATH 110) course in order to enroll in MATH 74. Placement into this Skills Lab can be made through student request, instructor recommendation, or an assessment process. This course is graded on a pass/no-pass basis.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO(1): BUILD STUDY SKILLS AND LEARNING STRATEGIES NEEDED FOR CONTINUED SUCCESS IN MATHEMATICS EDUCATION.
  - demonstrate improved math study skills.
  - exhibit increased confidence level in approaching mathematics.
- SLO(2): UTILIZE MATHEMATICAL SKILLS IN A VARIETY OF CONTEXTS.
  - demonstrate an improved performance at the statistics and/or geometry level.
- SLO(3): FORMULATE STRATEGIES AND CHOOSE AN APPROPRIATE COMBINATION OF TECHNIQUES FOR SOLVING APPLIED PROBLEMS.
  - employ problem solving strategies to improve specific course skills.

MATH 75 Skills Lab for Miscellaneous Non-Transferable Math

This laboratory course provides the student with assistance in all non-transfer-level math courses via enrollment in the campus' Math Center. It is recommended for students who are encountering difficulties in the areas of math anxiety, basic skills, problem solving, algebraic manipulations, and/or algebra concepts. Students may enter the Skills Lab course at any time during the first 12 weeks of the semester. It is recommended that the student register for 0.25 units. This recommended unit enrollment will require the student to spend a minimum of 13.5 hours throughout the semester in the Math Center studying for the relevant course. Students can take this course again in subsequent semesters until 2.0 total units have been completed. Students must be concurrently enrolled in a non-transferable math course (MATH 20 – 199) in order to enroll in MATH 75. MATH 75 should only be used as a Skills Lab if there is not already a relevant Skills Lab course available that better fits the student's main math course. Placement into this Skills Lab can be made through student request, instructor recommendation, or an assessment process. This course is graded on a pass/no-pass basis.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO(1): BUILD STUDY SKILLS AND LEARNING STRATEGIES NEEDED FOR CONTINUED SUCCESS IN MATHEMATICS EDUCATION.
  - demonstrate improved math study skills.
  - exhibit increased confidence level in approaching mathematics.
- SLO(2): UTILIZE MATHEMATICAL SKILLS IN A VARIETY OF CONTEXTS.
  - demonstrate an improved performance at the non-transferable math level.
- SLO(3): FORMULATE STRATEGIES AND CHOOSE AN APPROPRIATE COMBINATION OF TECHNIQUES FOR SOLVING APPLIED PROBLEMS.
  - employ problem solving strategies to improve specific course skills.
MATH 76 Trigonometry/Precalculus Skills Lab

Units: 0.25 - 2
Hours: 13.5 - 108 hours LAB
Prerequisite: None.
Corequisite: MATH 335 or 370
Catalog Date: June 1, 2020

This laboratory course provides the student with assistance in trigonometry and/or precalculus (including college algebra) skills via enrollment in the campus' Math Center. It is recommended for students who are encountering difficulties in the areas of math anxiety, advanced algebra skills, problem solving, trigonometric concepts, functions, graphs, etc. Students may enter the Skills Lab course at any time during the first 12 weeks of the semester. It is recommended that the student register for 0.25 units. This recommended unit enrollment will require the student to spend a minimum of 13.5 hours throughout the semester in the Math Center studying for the relevant course. Students can take this course again in subsequent semesters until 2.0 total units have been completed. Students must be concurrently enrolled in a trigonometry (MATH 335) or precalculus (MATH 370) course in order to enroll in MATH 76. Placement into this Skills Lab can be made through student request, instructor recommendation, or an assessment process. This course is graded on a pass/no-pass basis.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO(1): BUILD STUDY SKILLS AND LEARNING STRATEGIES NEEDED FOR CONTINUED SUCCESS IN MATHEMATICS EDUCATION.
  - demonstrate improved math study skills.
  - exhibit increased confidence level in approaching mathematics.
- SLO(2): UTILIZE MATHEMATICAL SKILLS IN A VARIETY OF CONTEXTS.
  - demonstrate an improved performance at the trigonometry, college algebra, and/or precalculus level.
- SLO(3): FORMULATE STRATEGIES AND CHOOSE AN APPROPRIATE COMBINATION OF TECHNIQUES FOR SOLVING APPLIED PROBLEMS.
  - employ problem solving strategies to improve specific course skills.

MATH 77 Calculus I/II Skills Lab

Units: 0.25 - 2
Hours: 13.5 - 108 hours LAB
Prerequisite: None.
Corequisite: MATH 350, 351, 400, or 401
Catalog Date: June 1, 2020

This laboratory course provides the student with assistance in differential and/or integral calculus skills via enrollment in the campus' Math Center. It is recommended for students who are encountering difficulties in the areas of math anxiety, advanced algebra skills, problem solving, calculus concepts, etc. Students may enter the Skills Lab course at any time during the first 12 weeks of the semester. It is recommended that the student register for 0.25 units. This recommended unit enrollment will require the student to spend a minimum of 13.5 hours throughout the semester in the Math Center studying for the relevant course. Students can take this course again in subsequent semesters until 2.0 total units have been completed. Students must be concurrently enrolled in a differential or integral calculus course (MATH 350, 351, 400 or 401) in order to enroll in MATH 77. Placement into this Skills Lab can be made through student request, instructor recommendation, or an assessment process. This course is graded on a pass/no-pass basis.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO(1): BUILD STUDY SKILLS AND LEARNING STRATEGIES NEEDED FOR CONTINUED SUCCESS IN MATHEMATICS EDUCATION.
  - demonstrate improved math study skills.
  - exhibit increased confidence level in approaching mathematics.
- SLO(2): UTILIZE MATHEMATICAL SKILLS IN A VARIETY OF CONTEXTS.
  - demonstrate an improved performance at the differential and/or integral calculus level.
MATH 78 Calculus III/DE/Linear Algebra Skills Lab

Units: 0.25 - 2
Hours: 13.5 - 108 hours LAB
Prerequisite: None.
Corequisite: MATH 402, 410, or 420
Catalog Date: June 1, 2020

This laboratory course provides the student with assistance in multi-variable calculus, differential equations, and linear algebra skills via enrollment in the campus' Math Center. It is recommended for students who are encountering difficulties in the areas of math anxiety, advanced algebra skills, problem solving, calculus concepts, etc. Students may enter the Skills Lab course at any time during the first 12 weeks of the semester. It is recommended that the student register for 0.25 units. This recommended unit enrollment will require the student to spend a minimum of 13.5 hours throughout the semester in the Math Center studying for the relevant course. Students can take this course again in subsequent semesters until 2.0 total units have been completed. Students must be concurrently enrolled in a multi-variable calculus (MATH 402), linear algebra (MATH 410), or differential equations (MATH 420) course in order to enroll in MATH 78. Placement into this Skills Lab can be made through student request, instructor recommendation, or an assessment process. This course is graded on a pass/no-pass basis.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO(1): BUILD STUDY SKILLS AND LEARNING STRATEGIES NEEDED FOR CONTINUED SUCCESS IN MATHEMATICS EDUCATION.
- demonstrate improved math study skills.
- exhibit increased confidence level in approaching mathematics.
- SLO(2): UTILIZE MATHEMATICAL SKILLS IN A VARIETY OF CONTEXTS.
- demonstrate an improved performance at the vector calculus, differential equations, and/or linear algebra level.
- SLO(3): FORMULATE STRATEGIES AND CHOOSE AN APPROPRIATE COMBINATION OF TECHNIQUES FOR SOLVING APPLIED PROBLEMS.
- employ problem solving strategies to improve specific course skills.

MATH 79 Skills Lab for Miscellaneous Transferable Math

Units: 0.25 - 2
Hours: 13.5 - 108 hours LAB
Prerequisite: None.
Catalog Date: June 1, 2020

This laboratory course provides the student with assistance in all transfer-level math courses via enrollment in the campus' Math Center. It is recommended for students who are encountering difficulties in the areas of math anxiety, advanced algebra skills, problem solving, trigonometry, calculus, etc. Students may enter the Skills Lab course at any time during the first 12 weeks of the semester. It is recommended that the student register for 0.25 units. This recommended unit enrollment will require the student to spend a minimum of 13.5 hours throughout the semester in the Math Center studying for the relevant course. Students can take this course again in subsequent semesters until 2.0 total units have been completed. Students must be concurrently enrolled in a transfer-level math course (MATH 300 and above) in order to enroll in MATH 79. MATH 79 should only be used as a Skills Lab if there is not already a relevant Skills Lab course available that better fits the student's main math course. Placement into this Skills Lab can be made through student request, instructor recommendation, or an assessment process. This course is graded on a pass/no-pass basis.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO(1): BUILD STUDY SKILLS AND LEARNING STRATEGIES NEEDED FOR CONTINUED SUCCESS IN MATHEMATICS EDUCATION.
- demonstrate improved math study skills.
- exhibit increased confidence level in approaching mathematics.
- SLO(2): UTILIZE MATHEMATICAL SKILLS IN A VARIETY OF CONTEXTS.
- demonstrate an improved performance at the transferable math level.
- **SLO(3): FORMULATE STRATEGIES AND CHOOSE AN APPROPRIATE COMBINATION OF TECHNIQUES FOR SOLVING APPLIED PROBLEMS.**
- employ problem solving strategies to improve specific course skills.

**MATH 81 Academic Skills in Mathematics**

- **Units:** 0.25 - 6
- **Hours:** 13.5 - 324 hours LAB
- **Prerequisite:** None.
- **Catalog Date:** June 1, 2020

This course is designed for students concurrently enrolled in MATH 20, 30, 100, 101, 102, 110, 120, 125, or 144; placement can be made through student request, instructor recommendation, or an assessment process. This laboratory course provides assistance in math skills to students enrolled in a non-transferable mathematics course. Students may enter the course at any time during the first 12 weeks of the semester and earn 0.25 or 0.5 units. This course is graded on a pass/no-pass basis. MATH 81 is recommended for students who are encountering difficulties in the areas of math anxiety, basic skills, algebraic concepts or manipulation, graphing, problem solving, etc.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- **SLO(1): BUILD STUDY SKILLS AND LEARNING STRATEGIES NEEDED FOR CONTINUED SUCCESS IN MATHEMATICS EDUCATION.**
- demonstrate improved math study skills.
- exhibit increased confidence level in approaching mathematics.
- **SLO(2): UTILIZE MATHEMATICAL SKILLS IN A VARIETY OF CONTEXTS.**
- demonstrate an improved performance at the appropriate course level.
- **SLO(3): FORMULATE STRATEGIES AND CHOOSE AN APPROPRIATE COMBINATION OF TECHNIQUES FOR SOLVING APPLIED PROBLEMS.**
- employ problem solving strategies to improve specific course skills.

**MATH 82 Academic Skills in Mathematics for Transfer Level**

- **Units:** 0.25 - 6
- **Hours:** 13.5 - 324 hours LAB
- **Prerequisite:** None.
- **Catalog Date:** June 1, 2020

This course is designed for students concurrently enrolled in MATH 300, MATH 310, MATH 315, MATH 335, MATH 341, MATH 343, MATH 344, MATH 350, MATH 351, MATH 370, MATH 400, MATH 401, MATH 402, MATH 410, MATH 420, or STAT 300. This laboratory course provides assistance in math skills to students enrolled in a transferable mathematics or statistics course. Students may enter the course at any time during the first 12 weeks of the semester and earn 0.25 or 0.5 units. This course is graded on a pass/no-pass basis. MATH 82 is recommended for students who are encountering difficulties in the areas of math anxiety, basic skills, algebraic concepts or manipulations, graphing, statistics, problem solving, etc.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- **SLO(1): BUILD STUDY SKILLS AND LEARNING STRATEGIES NEEDED FOR CONTINUED SUCCESS IN MATHEMATICS EDUCATION.**
- apply problem solving strategies to improve specific skills at the appropriate course level.
- exhibit increased confidence level in approaching mathematics.
- **SLO(2): UTILIZE MATHEMATICAL SKILLS IN A VARIETY OF CONTEXTS.**
- demonstrate an improved performance at the appropriate course level.
SLO(3): FORMULATE STRATEGIES AND CHOOSE AN APPROPRIATE COMBINATION OF TECHNIQUES FOR SOLVING APPLIED PROBLEMS.

employ problem solving strategies to improve specific course skills.

MATH 83 Self Study Mathematics Modules

Units: 0.25 - 1
Hours: 13.5 - 54 hours LAB
Prerequisite: None.
Catalog Date: June 1, 2020

The course enables students to review specific math topics which are necessary for success in MATH 20, MATH 30, MATH 100 or any course requiring the skills taught in these classes. Learning objectives and the course of study will be designed for each individual based on the needs of the student. A partial list of modules includes fractions, decimals, signed number arithmetic, percent, simplifying algebraic expressions, factoring, and solving linear equations. Modules cannot replace any existing mathematics course, and successful completion of MATH 83 currently does not satisfy any mathematics prerequisite. MATH 83 is a credit/no-credit class and students can enroll in the class at any time during the semester.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO(1): UTILIZE MATHEMATICAL TERMINOLOGY AND ARTICULATE MATHEMATICAL CONCEPTS APPROPRIATE TO THE MODULE BEING STUDIED.
- Understand the terms and concepts covered by the module.
- SLO(2): EMPLOY MATHEMATICAL SKILLS AT A MASTERY LEVEL.
- Practice using the skills covered in the module.
- Demonstrate competency at an 80 percent level.
- ANALYZE A MATHEMATICAL PROBLEM AND APPLY AN APPROPRIATE SET OF PROBLEM-SOLVING SKILLS.
- Complete a critical thinking exercise applying the skills of the module.

MATH 85 Math Study Skills

Units: 1
Hours: 18 hours LEC
Prerequisite: None.
Catalog Date: June 1, 2020

This course is designed to assist students in learning mathematics through the development of successful math study skills, specifically at the basic skills level (arithmetic, prealgebra, and beginning algebra). This course addresses topics such as learning styles, tools and techniques for reading a math textbook, using math homework as a learning tool, taking notes in a math class, preparing and taking exams/quizzes in a math class, and techniques for overcoming math anxiety. It is strongly advised that students be concurrently enrolled in a math course, as an opportunity to apply the learned material in real time. For further guidance and/or recommendations, students are advised to speak with someone in the math department.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO#1: DEMONSTRATE AN UNDERSTANDING OF THE LEARNING PROCESS AS IT APPLIES TO MATHEMATICS AS SHOWN BY:
  - Analyzing his/her current study habits and attitudes as they pertain to math courses
  - Distinguishing the differences between learning mathematics and learning other subjects
  - Classifying individual learning styles

- SLO#2: RECOGNIZE AND APPLY VARIOUS STRATEGIES APPLICABLE TO A MATHEMATICS COURSE, SUCH AS:
  - Listening and note-taking skills as they pertain to math courses
  - Applying study techniques, including but not limited to, how to read a math textbook and using math homework as a learning tool
MATH 100 Elementary Algebra

This course includes the fundamental concepts and operations of algebra with problem solving skills emphasized throughout. Topics include: properties of real numbers, linear equations and inequalities, integer exponents, polynomials, factoring polynomials. Rational expressions and equations, radical expressions and equations, rational exponents, systems of linear equations and inequalities, the rectangular coordinate system, graphs and equations of lines, and solving quadratic equations.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- **SLO#1:** Use increased computational skills and number sense, recognize the order of operations and properties of real numbers; include evaluating various mathematical formulas and extending operations to variable expressions and combining like terms.
- **SLO#2:** Use increased computational skills and number sense, recognize the order of operations and properties of real numbers.
- **SLO#3:** Solve first degree equations, inequalities and applications.
- **SLO#4:** Identify the types of equations including conditional equations, contradiction and identity and techniques for their solution.
- **SLO#5:** Solve linear inequalities and write the solution in both set-builder and interval notation.
- **SLO#6:** Apply problem solving skills to construct equations and inequalities for application problems and solve the applications by solving the equations or inequalities and appropriately interpreting the results.
- **SLO#7:** Identify and analyze linear equations, and graphs of linear equations and linear inequalities.
- **SLO#8:** Interpret the slope of a line as a rate of change and graph a line.
- **SLO#9:** Generate an algebraic model for data that follows linear behavior and interpret the result of this model. Applications of linear models include linear growth, linear depreciations and rates.
- **SLO#10:** Apply mathematical terminology, symbols and operations to develop and extend arithmetic operations on polynomials and to evaluate polynomial expressions.
- **SLO#11:** Evaluate and expand polynomial expressions and expressions written in scientific notation.
- **SLO#12:** Apply rules of exponents (including negative exponents) to simplify algebraic expressions.
- **SLO#13:** Demonstrate proficiency in all arithmetic operations on polynomials, particularly multiplying using FOIL.
- **SLO#14:** Use operations on polynomials to solve certain polynomial equations and applications.
- **SLO#15:** Understand the concept of prime polynomials and factoring polynomials into primes using various techniques.
- **SLO#16:** Factor out common factors and factor by grouping.
- **SLO#17:** Factor the difference of two squares and factor trinomials including perfect square trinomials.
- **SLO#18:** Solve polynomial equations by factoring and using the zero factor property.
- **SLO#19:** Think critically and abstractly by modeling an application problem using a polynomial equation to solve and interpret the result.
MATH 101 Elementary Algebra - Part I

Units: 2
Hours: 36 hours LEC
Prerequisite: MATH 30 with a grade of "C" or better, or placement through the assessment process.
Catalog Date: June 1, 2020

This course presents the fundamental concepts and operations of algebra with problem solving and critical thinking skills incorporated throughout. Topics include: review of properties of real numbers and signed numbers; algebraic expressions, solving linear equations and inequalities; solving linear systems of equations; graphing, properties of exponents; operations on polynomials.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO#1: Use increased computational skills and number sense, recognizing the order of operations and the basic operations and properties of real numbers, including evaluating various mathematical formulas and extend operations to variable expressions and combining like terms.
- Simplify expressions using the order of operations and basic properties of real numbers.
- Compute with accuracy problems involving the basic operations of arithmetic (addition, subtraction, multiplication, division, exponents, order of operations) on signed numbers.
- Multiply and divide numbers expressed in scientific notation.
- Use and evaluate formulas with more than one variable.
- SLO#2: Solve first degree equations and inequalities and applications.
- Identify the types of equations including consistent, contradiction and identity and demonstrate proficiency in techniques for their solution.
- Solve linear inequalities and writing the solution in both set-builder and interval notation.
- Apply problem solving skills to construct equations and inequalities for application problems and solve the application by solving the equation or inequality and appropriately interpreting the solution.
- SLO#3: Identify linear equations, and accurately graph linear equations using various techniques.
Student Learning Outcomes

Upon completion of this course, the student will be able to:

- **SLO#1**: Understand the concept of prime polynomial and record the products of prime factors of polynomials using various techniques.
- Factor out common factors and factor using grouping.
- Factor difference of square expressions, and factoring trinomial expressions including perfect square trinomials.
- Solve polynomial equations by factoring and using the zero factor property.
- Think critically and abstractly by Modeling an application problem using a polynomial equation and solving and appropriately interpreting the solution.
- **SLO#2**: Simplify rational expressions and apply mathematical terminology, symbols, arithmetic operations and problem-solving on rational expressions.
- Multiply and divide rational expressions and incorporate factoring to simplify to lowest terms.
- Add rational equations using the algebraic method and least common denominator.
- Solve rational equations by multiplying by the least common denominator.
- Develop an appropriate rational equation to model an application problem and use problem-solving skills to solve interpreting the results.
- **SLO#3**: Identify and analyze linear equations, linear inequalities and effectively organize, present and summarize quantitative information using symbolic, numerical and graphical methods.
- Generate an algebraic model for data that follows linear behavior and interpret the results of this model.
- Applications of linear models including linear growth, linear depreciations and rates.
- Graph a linear inequality, compute and interpret the solution to a system of linear inequalities using a graph.
- **SLO#4**: Demonstrate with proficiency how to use arithmetic operations on radicals, simplify radical expressions and solve radical and quadratic equations.
- Simplify different types of radicals, rationalizing denominators and combining radicals when it is appropriate.

**MATH 102 Elementary Algebra - Part II**

| Units: | 3 |
| Hours: | 54 hours LEC |
| Prerequisite: | MATH 101 with a grade of "C" or better, or placement through the assessment process. |
| Catalog Date: | June 1, 2020 |

A continuation of MATH 101, this course presents the fundamental concepts and operations of algebra with problem solving and critical thinking skills incorporated throughout. Topics covered include: factoring and applications; operations on rational expressions and solving rational equations; rectangular coordinate systems; graphing lines and linear inequalities; equation of lines; roots and radical expressions; solving quadratic equations; complex numbers; continued study of problem solving and applications.
MATH 110 Elementary Geometry

Units: 5
Hours: 90 hours LEC
Prerequisite: MATH 100 or 102 with a grade of “C” or better, or placement through the assessment process.
General Education: AA/AS Area II(b)
Catalog Date: June 1, 2020

This course introduces Euclidean Geometry. Topics include sets, definitions, postulates, theorems, deductive and inductive reasoning, proof, parallel lines, triangles, polygons, congruence, similarity, constructions, the Pythagorean Theorem, right triangle trigonometry, circles, analytic geometry, and elementary solid geometry.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO #1: DEMONSTRATE UNDERSTANDING OF THE STEP-BY-STEP DEVELOPMENT OF A LOGICAL MATHEMATICAL SYSTEM
  - Clearly state and correctly use definitions, postulates, and theorems.
  - Write 2-column direct proofs, indirect proofs, and analytic proofs using the definitions, postulates, and theorems of Euclidean geometry.

- SLO #2: DEVELOP PROBLEM-SOLVING SKILLS USED TO SOLVE CALCULATIONS.
  - Find missing side lengths and angle measures in a diagram using appropriate theorems.
  - Find areas of planar figures, surface area and volume of solids.
  - Analyze diagrams in the Cartesian coordinate system.
  - Develop a fundamental understanding and application of right triangle trigonometry.

- SLO #3: CONSTRUCT PROOFS TO VERIFY GEOMETRIC RELATIONSHIPS.
  - Write 2-column direct proofs, indirect proofs, and analytic proofs using the definitions, postulates, and theorems of Euclidean geometry.

- SLO #4: PERFORM GEOMETRIC CONSTRUCTIONS USING A COMPASS AND STRAIGHTEDGE, AND USE A PROTRACTOR TO MEASURE ANGLES
  - Construction of parallel lines, perpendicular lines
  - Bisect an angle and a line segment
  - Copying an angle
  - Use a protractor to measure angles

MATH 120 Intermediate Algebra

Units: 5
Hours: 90 hours LEC
Prerequisite: MATH 100 or 102 with a grade of “C” or better; or equivalent skills demonstrated through the assessment process.
General Education: AA/AS Area II(b)
Catalog Date: June 1, 2020
This course extends the concepts of elementary algebra with problem solving skills and applications emphasized throughout. Topics which are briefly reviewed and subsequently extended include: solving equations (quadratic, radical, rational, and systems of linear equations), graphing linear equations, simplifying expressions (polynomial, rational, radical, and those involving integer exponents), and factoring polynomials. New topics include: solving more complex equations and inequalities (exponential, logarithmic, linear and quadratic inequalities, and systems of non-linear equations), graphing more complex equations (quadratics, circles, and various functions using transformations), functions and their properties, exponential and logarithmic functions and their properties.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- Identify and analyze linear behavior, models, and graphs of linear equations and linear inequalities. Utilize the properties of linear equations to solve linear inequalities, and solve absolute value equations and inequalities. Interpret the slope of a linear equation as a rate of change. Generate an algebraic model for data that follows linear behavior and interpret the results of this model. Sketch the graph of a linear inequality using its algebraic representation.

- Solve systems of linear equations and systems of linear inequalities as well as their applications graphically and algebraically. Calculate the solution to 2x2 and 3x3 systems of linear equations by using substitution, elimination, and graphs (for 2x2 systems), as well as determine whether a system is inconsistent, consistent and independent, or dependent. Construct systems of linear equations for applications and find their solution. Compute the solution to a system of linear inequalities using a graph and describe the meaning of this solution.

- Recognize the behavior of exponential and logarithmic functions and their graphs. Apply the properties of exponential and logarithmic expressions to simplify and solve equations involving such expressions. Evaluate algebraic expressions involving exponents and logarithms and convert between these two types of expressions. Produce the algebraic model of an exponential function using data points and use properties of exponential functions to derive conclusions. Employ the properties of exponents and logarithms to solve equations involving exponential and logarithmic expressions. Draw the graph of exponential and logarithmic functions using both point plotting and the properties of transformations. Consolidate and expand logarithmic expressions using the properties of logarithms.

- Identify, simplify, evaluate, and graph quadratic functions using the properties of quadratic functions and transformations. Demonstrate the properties of transformations by graphing a quadratic function, identifying the vertex and the intercepts with the axes. Choose from among factoring (and using the Zero Factor Property), extraction of roots, completing the square, or the quadratic formula to solve a quadratic equation. Apply properties of quadratic functions to create and solve quadratic models and to derive conclusions about the solutions.

- Simplify polynomial expressions, evaluate polynomial functions, and solve equations involving polynomial expressions and their applications. Investigate polynomial division by performing long division on polynomial expressions. Extend factoring techniques to include the sum and difference of cubes. Graph a circle given its equation in standard form as well as use the distance and midpoint formulas to find the equation of a circle given conditions.

- Simplify and solve rational and radical expressions and equations (including those with higher roots). Perform arithmetic on rational and radical expressions and write results in simplified form. Simplify complex fractions. Manipulate equations involving rational or radical expressions to arrive at a non-extraneous solution. Recognize and solve applications that involve rational or radical expressions.

- Use, interpret, and simplify functions, inverse functions, and combination functions. Understand and use the definition of a function and interpret the difference between a relation and a function. Describe the domain and range of functions. Compose the graph of a function from tabular data, a word problem, or algebraic form. Perform composition of functions as well as arithmetic on combinations of functions. Find the inverse of a function algebraically and graphically. Interpret the meaning of the inverse in application problems.

MATH 125 Intermediate Algebra for Statistics and Liberal Arts

Units: 4
Hours: 72 hours LEC
Prerequisite: MATH 100 or 102 with a grade of "C" or better; or equivalent skills demonstrated through the assessment process.
General Education: AA/AS Area II(b)
Catalog Date: June 1, 2020

This course is designed for the intermediate algebra student who plans to continue only into STAT 300, ECON 310, POLS 382, PSYC 330, MATH 300, MATH 310, or MATH 315. The course topics include linear behavior, functions and graphs, exponential and logarithmic functions, systems, and polynomial, rational, exponential, logarithmic and radical expressions and equations. This course will feature discovery activities, applications to real data sets and problems which are current and relevant.

Student Learning Outcomes

Upon completion of this course, the student will be able to:
- **SLO 1:** ANALYZE AND FIND BEST FIT EQUATIONS FOR REAL WORLD DATA GIVEN IN MANY FORMS.
- Organize information into any/all of its four forms: words, data tables, graphs, and algebraic equations.
- Design an accurately scaled and labeled scatterplot of data, use a best fit line to examine linear trends, interpret the meaning of slope as a rate of change.
- Accurately graph and analyze functions; use linear, quadratic, and exponential functions to model real world applications and interpret real data.
- Distinguish arithmetic and geometric progressions; develop formulas for arithmetic and geometric sequences; use summation notation to calculate finite series.

- **SLO 2:** SOLVE EQUATIONS AND INEQUALITIES WHICH COME FROM APPLIED PROBLEMS.
- Simplify and evaluate rational and radical expressions, compositions, exponentials and logarithms; solve linear, quadratic, rational, radical, exponential, logarithmic, and literal equations.
- Accurately solve absolute value inequalities and systems of linear equations; use systems of equations to solve applied problems.

**MATH 144 Math for Contemporary Careers**

- **Units:** 3
- **Hours:** 54 hours LEC
- **Prerequisite:** MATH 100 or 102 with a grade of "C" or better, or placement through the assessment process.
- **General Education:** AA/AS Area II(b)
- **Catalog Date:** June 1, 2020

In the current information age, what mathematics should every person know? This course examines the contributions of mathematics in today's world. Students will explore mathematics' on-going role in society beginning with the need for and development of number systems, logical thinking, and current processes for coding and decoding data. A major focus of the course will be contemporary methods for analyzing data and interpreting statistics to make informed decisions. Students will conclude the course by selecting a module of mathematical interest from a list of available topics drawn from vocational programs and contemporary careers such as automotive technology, construction technology, film, digital media and broadcasting, medical records, pharmacy technology or other emerging career fields.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- **SLO 1:** EXPLORE THE ORIGINS AND CULTURAL CONTRIBUTIONS OF EARLY NUMBER SYSTEMS INCLUDING WRITING AND CALCULATING IN OTHER SYSTEMS
  - Translate numbers in early and modern numeration systems.
  - Examine the diverse cultural history of early and modern numeration systems.

- **SLO 2:** ENCODE AND DECODE USING CRYPTOGRAPHY & OTHER CODING SYSTEMS
  - Calculate and translate numerical information in non-decimal base systems fundamental to computer programming and other digital systems.
  - Apply encryption algorithms for encoding and decoding used to protect the security of information interchange.
  - Perform arithmetic operations in modular systems used in modern business applications such as bar codes, UPC codes, ISBN numbers.

- **SLO 3:** CONSTRUCT AND TEST THE VALIDITY OF LOGIC STATEMENTS USING CONNECTIVES, TRUTH TABLES AND VENN DIAGRAMS
  - Construct truth tables, identify the hierarchy of connectives, and use truth tables to classify statements.
  - Test the validity of arguments by using common argument forms.

- **SLO 4:** EXPLORE THE TERMINOLOGY, METHODOLOGY, GRAPHICAL DISPLAYS AND CONCLUSIONS OF MODERN STATISTICS
  - Compare methods of modern data collection and other sampling methods.
  - Organize, display, describe and compare one-variable data.
  - Organize, display, describe and compare two variable data.
  - Apply statistical methods for computing confidence interval estimates and interpreting margin of error.
MATH 295 Independent Studies in Mathematics

Units: 1 - 3
Hours: 54 - 162 hours LAB
Prerequisite: None.
Catalog Date: June 1, 2020

An independent studies project involves an individual student or small group of students in study, research, or activities beyond the scope of regularly offered courses. See the current catalog section of “Special Studies” for full details of Independent Studies.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

1. SLO #1: Actively engage in intellectual inquiry beyond that required in order to pass a course of study (College Wide Learning Outcome – Area 4).
2. Discuss and outline a proposal of study (that can be accomplished within one semester term) with a supervising instructor qualified within the discipline.
3. Design an independent study (to be completed individually or by collaboration of a small group) to foster special knowledge, skills, and experience that are not available in any one regularly scheduled course.
4. Use information resources to gather discipline-specific information.
5. SLO #2: Utilize modes of analysis and critical thinking to apply theoretical perspectives and/or concepts in the major discipline of study to significant problems and/or educational activities (College Wide Learning Outcome – Area 3).
6. Analyze and apply the knowledge, skills and experience that are involved in the independent study to theoretical perspectives and/or concepts in the major discipline of study.
7. Explain the importance of the major discipline of study in the broader picture of society.
8. SLO #3: Communicate a complex understanding of content matter of the major discipline of study (College Wide Outcome – Area 3).
9. Demonstrate competence in the skills essential to mastery of the major discipline of study that are necessary to accomplish the independent study.
10. SLO #4: Identify personal goals and pursue these goals effectively (College Wide Outcome – Area 4).
11. Utilize skills from the “academic tool kit” including time management, study skills, etc., to accomplish the independent study within one semester term.

MATH 300 Introduction to Mathematical Ideas

Units: 3
Hours: 36 hours LEC; 54 hours LAB
Prerequisite: MATH 120 or 125 with a grade of "C" or better; or equivalent skills demonstrated through the assessment process.
Transferable: CSU; UC
General Education: AA/AS Area II(b); CSU Area B4; IGETC Area 2
Catalog Date: June 1, 2020

Introduction to Mathematical Ideas allows liberal arts students to meet general education mathematics requirements while exploring concepts and objects of mathematics in a meaningful way. This course is designed to show some of the essence and quality of mathematics, and to enhance precision in the evaluation and expression of ideas, thereby developing a student’s quantitative reasoning skills. It is recommended primarily for students who do not plan to major in a math-related field, but may be of interest to others as well. Course content may include topics from numeration systems, logic, geometry, probability, statistics, algebraic modeling, number theory, consumer mathematics, graph theory, voting and apportionment, and perhaps others; concepts of contemporary mathematics may be covered. Emphasis is placed on the deductive process.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

1. SLO 1: Categorize and analyze mathematical objects and apply them to real life problems
- define and setup tables, diagrams, graphs, and matrices
- SLO 2: Solve mathematical problems from different branches of mathematics
- manipulate and solve problems relating to algebra
- apply basic geometric axioms, definitions, and theorems to solve geometric problems
- recognize principles of counting techniques to determine number of ways to select members from a group for a specific task
- compute mean, median, mode, range, standard deviation, and variance of a set of data
- SLO 3: Interpretations of mathematical objects in a variety of analytical settings and performing different operations to combine these objects
- recognize different representations of sets and performing different set operations to combine sets
- apply the logic properties to assess the validity of an argument
- SLO 4: Apply the mathematical concepts or objects to assess a situation, make decisions, and solve the real life problems
- assess the risks and rewards of credit cards and investments, and select the optimal path for a delivery route
- create an efficient schedule, select a fair method for dividing valuable assets, and evaluate the efficiency of an algorithm
- SLO 5: Defend some aspects of the mathematics used in real life applications
- investigate and solve real life problems such as home mortgage loans and student loans
- pursue the meaning of mathematics through the history of different numeration system and the progression of mathematics

**MATH 310 Mathematical Discovery**

**Units:** 3  
**Hours:** 54 hours LEC  
**Prerequisites:** MATH 110 or Geometry; AND MATH 120 or 125 with a grade of "C" or better; or equivalent skills demonstrated through the assessment process.  
**Transferable:** CSU  
**General Education:** AA/AS Area II(b); CSU Area B4  
**Catalog Date:** June 1, 2020

This course is designed to introduce students to the spirit of mathematics by involving them in the mathematical process of exploration, conjecture, and proof. Students will explore mathematical patterns and relations, formulate conjectures, and prove their conjectures. Areas of mathematics from which content may be derived include number theory, statistics, probability, geometry, and sequences and series. This course is recommended for students interested in a career in education.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- SLO(1) EXPLORE MATHEMATICAL PATTERNS AND MAKE CONJECTURES  
  explore mathematical relationships inherent in problems and situations from new branches of mathematics (such as number theory or sequences and series) by recognizing patterns and connections to previously encountered topics.
- SLO(2) PROVE OR DISPROVE CONJECTURES  
  prove or disprove conjectures about mathematical relationships and content.
  develop skills in logical reasoning and making logical explanations.
- SLO(3) DEVELOP STRATEGIES FOR INDEPENDENT PROBLEM SOLVING  
  explore mathematical problems independently, extending their solutions to questions not necessarily posed by the instructor.
  develop and explain a mathematical solution to a problem not previously encountered by the student.
MATH 315 Exploratory Field Experience in Mathematics

This course is an education-based field experience in mathematics designed to allow students to explore learning styles, learning environments and learning methods as they apply to tutoring and teaching mathematics. While exploring teaching as a career choice, students will have the opportunity to learn and practice essential skills to motivate and assist younger students with their progress through the mathematics curriculum. Students will be assigned to area schools to observe and assist in a mathematics classroom and to work with selected students in structured one-on-one or group settings. Weekly seminars will allow students to share experiences and compare observations. Students will also have the opportunity to explore their own cognitive learning styles and consider how these learning styles relate to mathematics both as learner and as teacher. Students will have the opportunity to learn about social, cultural, and educational issues related to mathematics and the school environment.

This course is recommended for students considering a major in teaching preparation who may wish to pursue either a multiple subject credential or a single subject credential in mathematics. Prior to beginning work in the schools, students may be required to be fingerprinted and pass a TB test. This course may be taken two times for credit.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- **SLO 1: UNDERSTAND LEARNING**
  
  relate the learning process and the study of mathematics as the integration of the visual, auditory, psycho-social, and cognitive functioning.

- examine various tools used to assess learning, learning styles and cognitive processes.

- evaluate learning styles and teaching methods for their positive or negative effect on learning mathematics

- **SLO 2: LEARN STRATEGIES AND APPROACHES TO REACH THE MATHEMATICS LEARNER**

  examine and experience alternate approaches to teaching various topics in mathematics that use multiple learning modalities and enhance the learning process

- understand and apply questioning strategies and other techniques for assisting student learning.

- understand and apply principles of motivation, behavior modification and memory enhancement as they apply to the unmotivated and unskilled learner.

- demonstrate critical thinking, problem solving and informed decision making in analyzing areas of mathematical weakness, preparing lessons and implementing strategies to address the identified topics from the pre-algebra/algebra sequence.

- **SLO 3: REFLECT ON TUTORING EXPERIENCES AND CLASSROOM ENVIRONMENTS IN ORDER TO COMPARE AND EVALUATE THEIR EFFECT ON STUDENT LEARNING**

  evaluate and compare individual experiences with learning styles and teaching approaches for different mathematics topics and different student learners

  compare observations related to the social, cultural and educational environment in the mathematics classroom and examine how a student's environment can impact learning.

- **SLO 4: GAIN A POSITIVE EDUCATIONAL EXPERIENCE IN A MATHEMATICS CLASSROOM**

  validate personal career goals related to teaching as a career.

MATH 335 Trigonometry with College Algebra

This course covers trigonometry with an introduction to college algebra. It is designed to fulfill the general education requirements and is transferable to the California State University (CSU) and University of California (UC) systems. Prior to enrolling, students must have completed MATH 110 or Geometry; AND MATH 120; both with a grade of "C" or better; or equivalent skills demonstrated through the assessment process.

- **Units:** 5
- **Hours:** 90 hours LEC
- **Prerequisite:** MATH 110 or Geometry; AND MATH 120; both with a grade of "C" or better; or equivalent skills demonstrated through the assessment process.
- **Transferable:** CSU
- **General Education:** AA/AS Area II(b); CSU Area B4
- **Catalog Date:** June 1, 2020
This is a full trigonometry course with algebra concepts reviewed, extended, and integrated when they are relevant to the trigonometric concepts. The trigonometric topics include right triangle trigonometry, unit circle trigonometry, graphs of trigonometric functions, proofs of trigonometric identities, solving trigonometric equations, applications of trigonometric functions (law of sines and cosines), and inverse trigonometric functions. The algebra topics include exponential and logarithmic functions, complex numbers, conic sections, the polar coordinate system, and solving equations, inequalities, and systems of equations.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO#1: Cite the six fundamental trigonometric functions and be able to interpret and evaluate them
- define the trigonometric functions using right triangles and/or the unit circle
- evaluate the trigonometric functions using reference angles and special triangles
- calculate the values of the trigonometric functions using a calculator with angles in both degrees and radians
- SLO#2: Solve application problems by modeling them with appropriate functions
- recognize what type of function might be best to use in a given situation to model an applied problem
- distinguish between the various ways of solving application problems with trigonometric methods including the use of right triangles, oblique triangles, the law of sines, and the law of cosines
- use a polynomial, rational, exponential, logarithmic, or trigonometric function to model and solve an application
- analyze applications involving exponential and logarithmic growth and decay
- SLO#3: Graph a library of functions including trigonometric, polynomial, rational, absolute value, exponential, and logarithmic functions
- recognize a base graph when given the formula for a complex function
- employ the use of translations, reflections and nonrigid transformations to graph a function once the base graph is known
- express the domain and range of a function in interval notation given a formula or a graph of the function
- recognize important characteristics of graphs of functions including asymptotic behavior, periodic behavior, zeros, and end behavior patterns
- identify a function as even, odd or neither and be able to prove result
- extend quadratic functions to include methods for finding vertices, finding and interpreting intercepts, and minimizing and maximizing functions
- graph points and curves in the polar coordinate system
- SLO#4: Categorize types of equations, systems and inequalities and methods used to solve them
- employ algebraic and graphical methods to solve polynomial, rational, and absolute value equations, systems and inequalities
- use matrix methods to solve systems of equations including the Gauss-Jordan method
- recognize when to use logarithms to solve an equation
- integrate algebraic techniques with known identities to prove trigonometric identities
- solve trigonometric equations and be able to express solutions when restricted to an interval or when there are an infinite number of solutions
- use inverse trigonometric functions to solve an equation
- use sign graphs and graphs of functions to solve inequalities
- SLO#5: Manipulate mathematical expressions to accomplish a specific goal
- simplify and factor expressions when solving equations, working with rational expressions, and finding the difference quotient
- employ properties of exponents and logarithms to manipulate expressions
- use trigonometric identities to rewrite or expand an expression and to do proofs
- write equations of conic sections in standard form to graph them
- analyze conic sections using foci, directrices and asymptotes
- convert points and equations from polar coordinates to rectangular coordinates and the reverse
MATH 341 Calculus for Business and Economics

Units: 4
Hours: 72 hours LEC
Prerequisite: MATH 120 with a grade of "C" or better; or equivalent skills demonstrated through the assessment process.
Transferable: CSU; UC (MATH 341, 350, 355 and 400 combined: maximum transfer credit of one course)
General Education: AA/AS Area II(b); CSU Area B4; IGETC Area 2
C-ID: C-ID MATH 140
Catalog Date: June 1, 2020

This course offers an introduction to the concepts and techniques of sets, functions, limits, analytic geometry and the differential and integral calculus. This course is intended for business students; it is not recommended for mathematics, physical or life science majors.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO 1: SIMPLIFY ALGEBRAIC EXPRESSIONS AND SOLVE ALGEBRAIC EQUATIONS RELATED TO BUSINESS PROBLEMS.
  - Formulate expressions and equations important in business (e.g., profit, average cost, supply and demand, etc.).
  - Understand the concepts and definitions of intercepts and intersection point between two lines to find the intersection point between two lines.
- SLO 2: EVALUATE LIMITS AND DERIVATIVES OF ALGEBRAIC, EXPONENTIAL, AND LOGARITHMIC FUNCTIONS.
  - Use the definition of the limits to calculate the limits of algebraic, exponential, and logarithmic functions.
  - Use graphs, tables, and a variety of algebraic skills to compute limits.
  - Calculate derivatives of algebraic functions using the Power, Product, Quotient, and Chain rules.
- SLO 3: APPLY THE LIMITS AND DERIVATIVE TO BUSINESS APPLICATIONS.
  - Interpret the derivative to solve the optimization problems.
  - Apply the derivative to marginal cost, revenue, and profit analysis.
- SLO 4: COMPARE, CONTRAST, AND COMPUTE DEFINITE AND INDEFINITE INTEGRALS; UNDERSTAND THE RELATIONSHIP BETWEEN INTEGRAL AND ANTIDERIVATIVE.
  - Evaluate definite integrals using the Fundamental Theorem of Calculus.
  - Calculate antiderivatives of various functions using substitution, integration by parts, and other methods.
  - Formulate solutions to applications in business such as consumer and producer surplus models that require integration.
- SLO 5: STUDY MULTIVARIABLE FUNCTIONS AND ITS GRAPHS.
  - Analyze functions of several variables, three-dimensional coordinates and graphs, and its relevance to business.
  - Generate partial derivatives and then apply them to find extreme values of functions.
  - Apply Lagrange multipliers and Least Squares Method to predict business models.

MATH 343 Modern Business Mathematics

Units: 4
Hours: 72 hours LEC
Prerequisite: MATH 120 with a grade of "C" or better; or placement through the assessment process.
Transferable: CSU
General Education: AA/AS Area II(b); CSU Area B4
Catalog Date: June 1, 2020

This course is designed around applications of mathematics in an economic and business context. The major topics included are functions, finance (interest and exponential models), rates of change, optimization, and linear programming. The content of the course is structured to incorporate tables, graphs and data sets collected from real-world situations. This course is not recommended for mathematics or physical science majors.
MATH 350 Calculus for the Life and Social Sciences I

Upon completion of this course, the student will be able to:

- SLO 1: Evaluate and understand limits
- SLO 2: Derive and apply the derivative.
- SLO 3: Integrate algebraic functions.
- SLO 4: Investigate and model real life phenomenon using calculus.

This course is an introduction to calculus. Topics include functions, trigonometric functions, limits, analytic geometry, and differential calculus with applications to business, social, and biological sciences. This course is intended for students majoring in social and biological sciences.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO 1: Evaluate and understand limits
- SLO 2: Derive and apply the derivative.
- SLO 3: Integrate algebraic functions.
- SLO 4: Investigate and model real life phenomenon using calculus.
Apply the concepts and principles of calculus to find rates of change in populations, bacteria, blood flow, ecology, learning, drug absorption and other biological and life science situations.

MATH 351 Calculus for the Life and Social Sciences II

<table>
<thead>
<tr>
<th>Units:</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hours:</td>
<td>54 hours LEC</td>
</tr>
<tr>
<td>Prerequisite:</td>
<td>MATH 350 with a grade of &quot;C&quot; or better</td>
</tr>
<tr>
<td>Transferable:</td>
<td>CSU; UC (1) MATH 351, MATH 356 and MATH 401 combined: maximum credit, 1 course; 2) MATH 350, 351, 355, 356, 400, 401, &amp; 402 combined: maximum transfer credit of one series.</td>
</tr>
<tr>
<td>General Education:</td>
<td>AA/AS Area II(b); CSU Area B4; IGETC Area 2</td>
</tr>
<tr>
<td>Catalog Date:</td>
<td>June 1, 2020</td>
</tr>
</tbody>
</table>

This course is a continuation of Math 350. Topics include: definite and indefinite integrals, power series, analytic geometry, multivariate calculus, and differential equations with applications to business, social, and biological sciences. Not open to students who have received credit for MATH 401 or higher level mathematics course. See "Cross-Listed Courses" in the catalog.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- **SLO #1**: COMPARE AND CONTRAST BETWEEN THE CONCEPTS OF DERIVATIVES, ANTIDERIVATIVES, AND INTEGRALS.
  - Demonstrate an understanding of the concept of an antiderivative. Apply the techniques of the basic integration formulas to perform indefinite and definite integrals.
  - Apply the antiderivative and the Fundamental Theorem of Calculus to differentiate relationships between derivatives and integrals.

- **SLO #2**: APPROXIMATE AND INTERPRET THE INTEGRAL IN ALGEBRAIC, GRAPHICAL, AND NUMERICAL CONTEXTS TO MODEL AND SOLVE APPLICATION PROBLEMS.
  - Solve and interpret applications such as areas bounded by curves, average value, or total rate of change.
  - Recognize and choose the appropriate method of integrals and set up the integrals for different types of application problems.

- **SLO #3**: DETERMINE AN APPROPRIATE METHOD FOR INTEGRATING A FUNCTION.
  - Apply the methods of substitution, integration by parts, trigonometric substitution, numerical integration, integration using tables, etc. to perform the definite and indefinite integral.
  - Demonstrate an understanding of the concept of an improper integral. Utilize the concepts of limit and continuity to evaluate some classes of improper integrals.

- **SLO #4**: EVALUATE DERIVATIVES AND MULTIPLE INTEGRALS.
  - Analyze surfaces and graph functions of two variables in the three-dimensional coordinate system.
  - Compute partial derivatives.
  - Apply partial derivatives to find a maximum and/or minimum of multivariable functions.
  - Use LaGrange multiplier and methods of least squares for linear regression.
  - Demonstrate techniques of multiple integrals and compute iterated integration over rectangular and general regions.
  - Apply multiple integrals in problem solving situations involving area, volume, surface area, etc.

- **SLO #5**: CONSTRUCT A MATHEMATICAL MODEL BY GATHERING AND ANALYZING DATA, IDENTIFYING KEY VARIABLES, AND ESTABLISHING EQUATIONS RELATING THOSE VARIABLES.
  - Construct and solve elementary first order linear differential and separable equations.
  - Apply differential equations using exponential growth and decay, learning curves, and logistic growth models.

- **SLO #6**: ESTIMATE COMPLICATED FUNCTIONS BY USING SIMILAR FUNCTIONS TO GET AN APPROXIMATION.
  - Define sequences and series and determine convergence or divergence of them.
  - Construct Taylor series to represent elementary functions.
  - Apply power series and Taylor polynomials to the integration of functions not integrable by conventional methods.
This course is an introduction to differential calculus and elementary differential equations via applications in biology and medicine. It covers limits, derivatives of polynomials, trigonometric and exponential functions, graphing, and applications of the derivative to biology and medicine. Topics include the Fundamental Theorem of Calculus and techniques of integration, including integral tables and numerical methods.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- **SLO#1: EXAMINE THE GRAPHS AND LIMITS OF FUNCTIONS.**
  - Examine elementary functions and their graphs.
  - Explore discrete models of exponential growth and decay, log-log/semi-log graphing, discrete biological models, fixed points/steady states, stability, periodic solutions and chaos.
  - Evaluate and interpret limits: the definition of limits, continuity of functions, the intermediate value theorem, the bisection method, trigonometric limits, and limits at infinity.

- **SLO #2: DIFFERENTIATE POLYNOMIAL, RADICAL, TRIGONOMETRIC, LOGARITHMIC, AND EXPONENTIAL FUNCTIONS.**
  - Explore the definition of derivative, geometric interpretation of derivative, the derivative as rate of change, the differentiability of functions, and the properties of derivatives.
  - Learn and apply the basic rules for differentiation: the power rule, product rule, quotient rule and chain rule.
  - Differentiate exponential, logarithmic and trigonometric functions.
  - Extend differentiation methods to include implicit differentiation, related rates, higher-order derivatives, linear approximation and L'Hopital's Rule.

- **SLO#3: GRAPH, ANALYZE & OPTIMIZE FUNCTIONS.**
  - Calculate maxima and minima and explore monotonicity and concavity of elementary functions and other graphs including sigmoidal curves.
  - Test the stability of fixed points in differential equations and apply the Newton-Raphson method for numerical root finding.

- **SLO#4: APPLY DERIVATIVES TO APPLICATIONS IN BIOLOGY AND MEDICINE.**
  - Apply the concepts and principles of calculus to find rates of change in populations, bacteria, blood flow, ecology, learning, drug absorption and other biological and life science situations.

- **SLO#5: INTEGRATE BASIC ELEMENTARY FUNCTIONS.**
  - Apply the Fundamental Theorem of Calculus to the evaluation of definite integrals.
  - Integrate functions using the power rule, substitution, integration by parts, and partial fraction decomposition.
  - Explore numerical integration, tables of integrals and Taylor approximation.

- **SLO #6 SOLVE DIFFERENTIAL EQUATIONS.**
  - Solve initial value ordinary differential equations and differential equations related to biological models of growth and decay.
  - Solve first-order differential equations using integrating factors.
Student Learning Outcomes

Upon completion of this course, the student will be able to:

- **SLO #1: SOLVE SYSTEMS OF EQUATIONS.**
  - Use matrices, matrix operations and determinants to solve systems of linear equations.
  - Compute eigenvalues and eigenvectors for square matrices.
  - Solve linear systems of ordinary differential equations (ODEs).
  - Apply systems of linear differential equations to problems in biology and medicine.
  - Solve nonlinear systems of ordinary differential equations and apply these methods to biological models.

- **SLO #2: EXLORE FUNCTIONS OF TWO OR MORE VARIABLES.**
  - Evaluate and interpret limits and continuity of multivariate functions.

- **SLO #3: DIFFERENTIATE MULTIVARIATE FUNCTIONS.**
  - Compute partial derivatives of functions of several variables.
  - Interpret partial derivatives as slopes and rates of change.
  - Apply the chain rules for multivariate functions and parameterized curves.
  - Implicitly differentiate multivariate functions.

- **SLO #4: ANALYZE & OPTIMIZE MULTIVARIATE FUNCTIONS.**
  - Graph functions of two variables and calculate equations of tangent planes to the graph.
  - Find extrema of multivariate functions, identify local and global extrema and solve applications involving extrema.
  - Optimize multivariate functions and optimize multivariate functions with constraints.
  - Find the gradient vector and directional derivatives and interpret directional derivatives as slopes and rates of change.

- **SLO #5: INTEGRATE MULTIVARIATE FUNCTIONS.**
  - Compute and evaluate double integrals on multivariate functions.
  - Solve applications of double integrals.

- **SLO #6: COMPUTE PROBABILITIES FOR BIOLOGICAL SITUATIONS AND OTHER CHANCE OUTCOMES.**
  - Apply counting principles, permutations, and combinations to biological situations.
  - Compute probabilities using basic probability rules, conditional probability, independence, Bayes’ formula, and Bayesian probability and apply these methods to biological models and events.
  - Explore probability distributions of discrete random variables and use discrete probability distributions to solve applications in biology and medicine.
This course is designed to prepare students for the calculus sequence (MATH 400, 401, 402). Course content includes a brief review followed by an in-depth extension of the properties of polynomial, rational, exponential, logarithmic, and trigonometric functions. Additional topics include systems of linear and non-linear equations and inequalities, conic sections, sequences and series, analytic geometry, vectors, parametric, and polar equations. A graphing calculator may be required for this course.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- **SLO1**: Evaluate limits of algebraic and transcendental functions.
- **SLO2**: Graph and analyze polynomial, rational, absolute value, exponential, logarithmic, trigonometric functions, and inverse trigonometric functions, as well as conic sections, involving algebraic transformations (shifts, scale factors, reflections, and absolute value) in rectangular coordinate system.
- **SLO3**: Graph and analyze polar equations.
- **SLO4**: Use correct logic in reasonings

**MATH 400 Calculus I**

This course explores the basic concepts of analytic geometry, limits, derivatives, and integrals. Topics covered will include the graphs, derivatives, and integrals of algebraic, trigonometric, exponential, logarithmic, and hyperbolic functions, and indeterminate forms. Many applications will be covered, including those involving rectilinear motion, differentials, related rates, graphing, and optimization.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- **SLO1**: Evaluate limits of algebraic and transcendental functions.
Use algebraic, graphical, and numerical approaches to evaluate limits; Use the epsilon-delta definition to prove limits.

- Identify indeterminate forms and utilize L'Hôpital's Rule
- SLO2: Use definition to prove a function is continuous at a real number.
- Determine whether a function is continuous at a real number from the left or from the right; Identify the interval(s) on which a function is continuous.
- SLO3: Compute derivatives by using the definition of derivative and by applying differentiation rules to algebraic/transcendental and inverse functions.
- Compute derivatives by using implicit and logarithmic differentiation techniques.
- SLO4: Recognize and solve real world problems that require use of limits and/or derivatives.
- Graph functions using the limits to find asymptotes, using the first derivative to find relative extreme values, using the second derivative to find concavity and inflection points, and generate equations of tangent/normal lines.
- Solve problems involving velocity, acceleration, related rates and optimization.
- SLO5: Understand and apply the concept of the Riemann Sum to develop the formal definition of the definite integral and use the definition to evaluate definite integrals.
- Calculate definite integrals using the Fundamental Theorem of Calculus and appropriate substitution techniques.
- Interpret definite integral as area and use it to find the area under a curve.
- SLO6: Apply the definitions of limit, derivative, and integral to prove calculus theorems.
- Apply theorems such as the Intermediate Value Theorem, Rolle's Theorem, and the Mean Value Theorem to derive related theorems.

MATH 401 Calculus II

**Units:** 5

**Hours:** 90 hours LEC

**Prerequisite:** MATH 400 with a grade of "C" or better

**Transferable:**
MATH 351, MATH 356 and MATH 401 combined: maximum credit, 1 course; 2) MATH 350, 351, 355, 356, 400, 401, & 402 combined: maximum transfer credit of one series.

**General Education:**
AA/AS Area II(b); CSU Area B4; IGETC Area 2

**C-ID:** C-ID MATH 220

**Catalog Date:** June 1, 2020

This course is a continuation of MATH 400. Topics covered include techniques of integration, numerical integration, improper integrals, infinite series, parametric equations, polar coordinates, and conic sections. Many applications will be covered including those involving areas between plane regions, volumes of revolution, work, moments and concepts of mass, average value, arc length, and surface area.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- SLO#1: Understand the concept of using the limit of a Riemann sum to find areas and volumes.
- Calculate the area between two curves in a plane region.
- Find the volume of a solid of revolution using the disk or washer method.
- Find the volume of a solid of revolution using the cylindrical shell method.
- Find the volume of a solid by using the method of slicing.
- Analyze a problem to choose the best method to use to find an area or volume.
- SLO#2: Understand and appropriately apply techniques of integration.
- Use the method of integration by parts.
- Evaluate trigonometric integrals.
- Use the method of trigonometric substitution.
- Use partial fractions to integrate rational functions.
- Approximate definite integrals using numerical methods including Midpoint Rule, Trapezoidal rule, and Simpson's rule.
• Understand what improper integrals are and evaluate them by writing them as a limit of a proper integral
• Analyze a problem to choose the best method of integration
• Develop a strategy for integration techniques
• SLO#3: Understand other coordinate systems and how to apply calculus techniques to solve problems using them.
• Represent curves in parametric form and understand the calculus of parametric curves
• Represent curves in polar form and understand the calculus of polar curves
• Find areas, volumes, arc length, and surface area using Cartesian coordinates, polar coordinates and parametric equations
• SLO#4: Apply the techniques of integral calculus to solve applied problems.
• Apply calculus to physics and engineering problems
• Apply calculus to work and fluid force problems
• Apply calculus to find the average value of functions
• Apply calculus to solve separable differential equations and exponential growth and decay problems
• SLO#5: Understand the theory of series.
• Understand the definition of a sequence
• Understand the definition of a series
• Understand and apply both the basic comparison test and the limit comparison test
• Understand and apply the integral test
• Understand and apply the ratio and root tests
• Understand and apply the alternating series test
• Understand the difference between conditional and absolute convergence
• Develop a general strategy for testing series for convergence
• Identify power series and compute their radius and interval of convergence
• Represent functions as power series including Taylor and Maclaurin series
• Differentiate and integrate power series

MATH 402 Calculus III

Units: 5
Hours: 90 hours LEC
Prerequisite: MATH 401 with a grade of "C" or better
Transferable: CSU; UC (MATH 350, 351, 400, 401 and 402 combined: maximum transfer credit of one series)
General Education: AA/AS Area II(b); CSU Area B4; IGETC Area 2
C-ID: C-ID MATH 230
Catalog Date: June 1, 2020

This course extends the concepts of limits, derivatives and integrals to vector-valued functions and functions of more than one variable. Topics covered will include three-dimensional analytic geometry and vectors, partial derivatives, multiple integrals, line integrals, surface integrals, and the theorems of Green, Gauss (Divergence), and Stokes. Many applications of the calculus will be included.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• SLO 1: WORK WITH VECTORS AND GRAPHS IN BOTH TWO AND THREE DIMENSIONS.
  perform operations on vectors in R2 and R3, including the dot and cross products, limits, derivatives, and integrals.
  graph lines, planes, cylinders, and quadric surfaces in R3.
  find the equations of lines (in R3) and planes.
  find the distances between a point and a line, a point and a plane, two planes, two skew lines, etc.
compute the curvature at any point on a space curve along with the tangential and normal components of acceleration, the arc length, and the unit tangent and unit normal vectors.

SLO 2: EVALUATE FUNCTIONS OF MORE THAN ONE VARIABLE AS WELL AS THEIR LIMITS, CONTINUITY, AND DERIVATIVES, AND APPLY THEM TO REAL WORLD PROBLEMS.

evaluate functions of more than one variable, find their domain and range, and sketch level curves and level surfaces.

evaluate limits, prove limits using the epsilon-delta definition of a limit, show that limits do not exist using the “two path rule”.

examine the continuity for functions of more than one variable.

evaluate partial derivatives and directional derivatives and find local extrema and test for saddle points.

calculate the gradient and use it to find equations of tangent planes to surfaces in \( \mathbb{R}^3 \)

determine differentiability, calculate linearizations, differentials, and derivatives using the chain rule and apply them to real world problems.

optimize a multivariate function on a space curve or plane region, including both local extrema and absolute extrema, the latter including the use of Lagrange multipliers to solve constraint problems.

SLO 3 EVALUATE MULTIPLE INTEGRALS AND APPLY THEM TO REAL WORLD PROBLEMS.

evaluate double and triple integrals using rectangular, polar, cylindrical, and spherical coordinate systems as well as change of variables using the Jacobian.

calculate area, volume, mass, and center of mass using double and triple integrals.

SLO 4: EVALUATE LINE INTEGRALS AND SURFACE INTEGRALS AND APPLY THEM TO THE APPROPRIATE REAL WORLD PROBLEMS.

evaluate line integrals using parametrization, the Fundamental Theorem of Line Integrals, Green’s Theorem, and Stokes’ Theorem and apply them to real world problems, including work.

evaluate surface integrals using parametrization and the Divergence Theorem and apply them to real world problems, including flux.

Find the divergence and curl of a vector field.

MATH 410 Introduction to Linear Algebra

Units: 3
Hours: 54 hours LEC
Prerequisite: MATH 401 with a grade of “C” or better
Advisory: MATH 402
Transferable: CSU; UC
General Education: AA/AS Area II(b); CSU Area B4; IGETC Area 2
C-ID: C-ID MATH 250
Catalog Date: June 1, 2020

This course introduces linear algebra. Topics include matrices, determinants, systems of equations, vector spaces, linear transformations, eigenvectors, and applications. This course is intended for majors in mathematics, engineering, science, and related fields.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

SLO 1: SOLVE SYSTEMS OF LINEAR EQUATIONS

Solve systems of homogeneous and nonhomogeneous linear equations using Gaussian elimination, Gauss-Jordan elimination, and inverse matrices (in particular, the relationship between coefficient matrix invertibility and solutions to a system of linear equations).

Solve vector equations

Examine vector algebra on \( \mathbb{R}^n \)

Solve matrix equations.

Construct rigorous mathematical proofs involving linear equations, vector equations, vector algebra on \( \mathbb{R}^n \), and matrix equations.

SLO 2: EXAMINE BASES
- Test for linear independence of a set of vectors.
- Test for the span of a set of vectors.
- Construct a change of basis.
- Construct rigorous mathematical proofs involving independence, span, and basis.

**SLO 3: EXAMINE MATRICES**

- Calculate the inverse of a matrix.
- Construct factorizations of matrices.
- Compute determinants of matrices.
- Examine special matrices: diagonal and triangular

- Construct rigorous mathematical proofs involving matrices.

**SLO 4: EXAMINE VECTOR SPACES AND LINEAR TRANSFORMATIONS**

- Test the linearity of a transformation from one vector space to another.
- Test whether a linear transformation is an isomorphism.
- Compute the Kernel and Range of a linear transformation.
- Test a subset of a vector space to determine if it is a subspace of said vector space.
- Examine the Null Space and Column Space of a matrix.

- Construct rigorous mathematical proofs involving vector spaces.

**SLO 5: EXAMINE EIGENSPACES AND ORTHOGONALITY**

- Calculate dot product, norm of a vector, the angle between vectors in $\mathbb{R}^n$, eigenvalues and eigenvectors and their use in applications.
- Diagonalize matrices.
- Construct orthogonal bases using the Gram-Schmidt process.
- Examine symmetric matrices and orthogonally diagonalize them.

- Construct rigorous mathematical proofs involving eigenspaces and orthogonality.

---

**MATH 420 Differential Equations**

- **Units:** 4
- **Hours:** 72 hours LEC
- **Prerequisite:** MATH 401 with a grade of "C" or better
- **Advisory:** MATH 402 (may be taken concurrently)
- **Transferable:** CSU; UC
- **General Education:** AA/AS Area II(b); CSU Area B4
- **C-ID:** C-ID MATH 240
- **Catalog Date:** June 1, 2020

This course will cover the theory and the applications of the solutions of ordinary differential equations and systems of ordinary differential equations. The course will introduce students to various topics useful in the solution of differential equations including power series, Laplace transforms, matrices, eigenvalues and eigenvectors, and numerical methods.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- **SLO 1:** SOLVE FIRST ORDER DIFFERENTIAL EQUATIONS AND APPLY THEM TO REAL WORLD PROBLEMS.
- Apply the theory of first order differential equations, including existence and uniqueness theorems for ordinary differential equations.
- Solve first order differential equations using separation of variables, exactness, linearity, and substitutions (including homogeneous differential equations).
• Apply first order differential equations to real world problems, including exponential growth and decay, Newton's Law of Cooling, and mixture problems.

• SLO 2: SOLVE HIGHER ORDER DIFFERENTIAL EQUATIONS AND APPLY THEM TO REAL WORLD PROBLEMS.

• Examine the theory of higher order differential equations, including the fundamental set of solutions, linear independence, and the Wronskian.

• Solve higher order homogeneous and nonhomogeneous linear differential equations with constant coefficients.

• Solve Cauchy-Euler differential equations.

• Solve homogeneous and nonhomogeneous linear ordinary differential equations with variable coefficients using power series solutions.

• Apply higher order differential equations to real world problems, including spring/mass problems and circuits.

• SLO 3: SOLVE INITIAL VALUE PROBLEMS USING LAPLACE TRANSFORMS AND APPLY THEM TO REAL WORLD PROBLEMS.

• Examine the theory of Laplace transforms.

• Solve initial value problems using Laplace Transforms.

• Apply Laplace Transforms to real world problems.

• SLO 4: SOLVE SYSTEMS OF LINEAR DIFFERENTIAL EQUATIONS.

• Calculate eigenvalues and eigenvectors.

• Solve systems of linear homogeneous and nonhomogeneous differential equations using eigenvalues, eigenvectors, and inverse matrices.

• SLO 5: SOLVE INITIAL VALUE PROBLEMS USING NUMERICAL METHODS.

• Calculate numerical solutions to initial value problems.

MATH 483 Honors Seminar in Mathematics - Introduction to Mathematical Proof

- Same As: HONOR 391
- Units: 1
- Hours: 18 hours LEC
- Prerequisite: MATH 370 with a grade of "C" or better
- Transferable: CSU; UC (May be taken twice for credit.)
- Catalog Date: June 1, 2020

Honors Seminars in Mathematics are special one-unit intensive courses for academically accomplished students or those with the potential for high academic achievement. This particular course will study various methods of mathematical proof in a seminar setting, and will be particularly useful to students planning to study calculus, differential equations, and linear algebra. Topics include: deductive reasoning, proof by axioms, proofs of conditional and biconditional statements, proofs by contrapositive and contradiction, and proof by mathematical induction. Studies will include homework, discussions, oral presentations and lectures. Students will be expected to do independent problem solving and present their solutions to the class. Enrollment is limited to Honors Program students (see catalog). This course is the same as HONOR 391. This course, under either name, may be taken one time for credit. This course will be offered in spring semester only.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• SLO 1: EXAMINE METHODS OF PROOF
  - Prove statements using axioms
  - Prove statements using deductive reasoning
  - Prove conditional statements
  - Prove biconditional statements
  - Prove statements using the contrapositive
  - Prove statements using contradiction
  - Prove statements using mathematical induction
MATH 484 Honors Seminar in Mathematics - Topics in Number Theory

Honors Seminars in Mathematics are special one-unit intensive courses for academically accomplished students or those with the potential for high academic achievement. This particular course will study various topics in the field of number theory in a seminar setting. Topics include: the integers and their properties; finding integer solutions to Diophantine equations (equations with more variables than equations); and cryptography (the study of how secret codes are created and broken). Studies will include homework, discussions, oral presentations and lectures. Students will be expected to do independent problem solving and present their solutions to the class. Enrollment is limited to Honors Program students (see catalog). This course is the same as HONOR 392. This course, under either name, may be taken one time for credit. This course will be offered in spring semester only.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- **SLO 1: EXAMINE THE PROPERTIES OF THE INTEGERS**
  - Examine divisibility
  - Examine prime numbers
  - Calculate the greatest common divisor
  - Examine the fundamental theorem of arithmetic
  - Prove theorems involving the integers

- **SLO 2: EXAMINE DIOPHANTINE EQUATIONS**
  - Examine the Euclidean algorithm
  - Solve linear Diophantine equations
  - Prove theorems involving Diophantine equations

- **SLO 3: EXAMINE LINEAR CONGRUENCES**
  - Examine modular arithmetic
  - Examine the properties of congruences
  - Solve congruence equations
  - Prove theorems involving linear congruences

- **SLO 4: EXAMINE CRYPTOLOGY**
  - Examine the theory of cryptology
  - Examine encoding messages
  - Examine decoding messages
  - Prove theorems involving cryptology

MATH 495 Independent Studies in Mathematics

Units: 1 - 3
Hours: 54 - 162 hours LAB
Prerequisite: None.
Transferable: CSU
Catalog Date: June 1, 2020
Student Learning Outcomes

Upon completion of this course, the student will be able to:

- **SLO #1**: Actively engage in intellectual inquiry beyond that required in order to pass a course of study (College Wide Learning Outcome – Area 4).
- **SLO #2**: Utilize modes of analysis and critical thinking to apply theoretical perspectives and/or concepts in the major discipline of study to significant problems and/or educational activities (College Wide Learning Outcome – Area 3).
- **SLO #3**: Communicate a complex understanding of content matter of the major discipline of study (College Wide Outcome – Area 3).
- **SLO #4**: Identify personal goals and pursue these goals effectively (College Wide Outcome – Area 4).

Mathematics Support (MATHS)

Statistics (STAT)

STAT 100 Pre-Statistics

<table>
<thead>
<tr>
<th>Units:</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hours:</td>
<td>54 hours LEC; 54 hours LAB</td>
</tr>
<tr>
<td>Prerequisite:</td>
<td>MATH 30 with a grade of &quot;C&quot; or better, or placement through the assessment process</td>
</tr>
<tr>
<td>Catalog Date:</td>
<td>June 1, 2020</td>
</tr>
</tbody>
</table>

This course prepares students for transfer-level Statistics. Topics include computational mathematics needed for statistics: ratios, rates, and proportional reasoning; arithmetic with fractions, decimals and percents; evaluating expressions, solving equations and inequalities, and analyzing formulas to understand statistical measures; introduction to statistical terminology and use of statistical symbols; introduction to probability, venn diagrams, set theory and two-way statistical tables; graphical and numerical descriptive statistics for quantitative and categorical data; use of linear and exponential functions to model bivariate data. Note: This course is not intended as preparation for the PreCalculus/Trigonometry courses required for students as part of their pathway to science, computer information science, engineering, or mathematics.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- **SLO 1**: READ, EVALUATE AND CONVERSE USING BASIC STATISTICAL TERMINOLOGY.
- **SLO 2**: PERFORM AND INTERPRET COMPUTATIONAL MATHEMATICS USED IN STATISTICS AND PROBABILITY.
- Use and interpret fractions, decimals and percents, including use of decimal place values and rounding.
- Simplify linear expressions, solve linear equations and rewrite literal equations (formulas) to solve for a particular variable.
- Translate inequality statements, solve linear inequalities and demonstrate the solution on a number line.
- Translate applied situations (english) to statistical knowns and unknowns and apply these to evaluate statistical formulas using the order of operations.

SLO 3: CREATE AND INTERPRET STATISTICAL GRAPHS AND TABULAR DISPLAYS OF DATA.
- Create and interpret frequency tables, relative frequency tables, bar graphs, histograms, stem and leaf displays, boxplots and scatterplots.

SLO 4: APPLY PROBABILITY, SET THEORY AND ORGANIZATIONAL TOOLS SUCH AS VENN DIAGRAMS AND 2-WAY TABLES TO QUANTIFY THE LIKELIHOOD OF CHANCE OUTCOMES.
- Compute and interpret relative frequency observational probability and classical sample space probabilities.
- Compute and interpret the probabilities of an event, the complement of an event, and the union and intersection of events.
- Use Venn Diagrams and 2-way tables to compute and interpret the probabilities of and event, the complement of an event, unions and intersections of events, and conditional probabilities.
- Compute and interpret the area under a histogram to determine probabilities.
- Compute and interpret the area under continuous curves using symmetry or partial sums to determine probabilities.

SLO 5: CREATE AND INTERPRET GRAPHS OF LINEAR AND EXPONENTIAL FUNCTIONS AND USE THEM TO MODEL BIVARIATE DATA.
- Sketch the graphs of linear and exponential functions.
- Find the equations of linear and exponential functions given two points on the line or curve.
- Use technology to find the equations of linear and exponential functions given a data set.
- Interpret the parameters of the linear and exponential models and explain how these parameters describe relationships in the data.
- Use linear and exponential models to compute predictions and make comparisons between models.

STAT 300 Introduction to Probability and Statistics

Units: 4
Hours: 54 hours LEC; 54 hours LAB
Prerequisite: MATH 120, MATH 125, or STAT 100 with a grade of "C" or better, or placement through the assessment process.
Transferable: CSU; UC
General Education: AA/AS Area II(b); CSU Area B4; IGETC Area 2
C-ID: C-ID MATH 110
Catalog Date: June 1, 2020

This course is an introduction to probability and statistics. Topics include: elementary principles and applications of descriptive statistics, elementary probability principles, probability distributions, estimation of parameters, hypothesis testing, linear regression and correlation, and ANOVA. Scientific calculators with two-variable statistics capabilities may be required.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO 1: ORGANIZE, DISPLAY, DESCRIBE AND COMPARE REAL DATA SETS.
- Recognize data types and data sources: develop basic statistical terminology including population parameters & sample statistics; identify common sampling methods used for obtaining data and identify advantages & disadvantages of each; recognize bias in sampling; compare principles of good experimental design.
- Organize and display data appropriately by preparing tables and graphs.
- Analyze data by computing measures of central tendency, measures of dispersion, and measures of position.
- Analyze bivariate data for linear trends using the least-squares regression model and the correlation coefficient.
SLO 2: DISTINGUISH BETWEEN PROBABILITY MODELS APPROPRIATE TO DIFFERENT CHANCE EVENTS AND CALCULATE PROBABILITY ACCORDING TO THESE METHODS.

- Compute probabilities using sample spaces, the addition & multiplication rules, conditional probability, and complements.
- Develop and apply probability distributions for discrete random variables; compute probabilities and expected value.
- Analyze both discrete and continuous probability distributions by considering areas under the graph of a function or a histogram.
- Use the normal and binomial probability distributions to compute probabilities.

SLO 3: APPLY INFERENTIAL STATISTICAL METHODS TO MAKE PREDICTIONS, DRAW CONCLUSIONS ABOUT HYPOTHESES AND COMPARE POPULATIONS.

- Create and interpret confidence interval estimates for population mean and population proportion based on appropriate probability models.
- Select the appropriate hypothesis test, perform the necessary computations and comparisons to test hypotheses about one population mean or one population proportion and explain the conclusion of the test.
- Create and interpret confidence interval estimates for the difference in two population means (independent and dependent sampling) or two population proportions.
- Select the appropriate hypothesis test, perform the necessary computations and comparisons to test hypotheses about two-population means (independent & dependent sampling), more than two population means, and two or more population proportions and explain the conclusion of the test.
- Test significance of correlation and make predictions based on linear trends using the least-squares regression model.

SLO 4: USE APPROPRIATE STATISTICAL TECHNIQUES TO ANALYZE AND INTERPRET APPLICATIONS OF DATA including all of the following: business, economics, social sciences, psychology, life science, health science and education.

STAT 480 Introduction to Probability and Statistics - Honors

Same As: HONOR 393
Units: 4
Hours: 72 hours LEC
Prerequisite: MATH 120 or 125 with a grade of "C" or better, or placement through the assessment process.
Enrollment Limitation: Enrollment is limited to Honors Program students. Details about the Honors Program can be found in the Cosumnes River College Catalog.
Transferable: CSU; UC (UC transfer credit limitation: STAT 300, STAT 480, ECON 310 and POLS 382, PSYC 330 combined: maximum credit, 1 course)
General Education: AA/AS Area II(b); CSU Area B4; IGETC Area 2
C-ID: C-ID MATH 110
Catalog Date: June 1, 2020

This course is an introduction to probability and statistics designed for students in the honors program. Topics include elementary principles and applications of descriptive statistics, counting principles, elementary probability principles, probability distributions, estimation of parameters, hypothesis testing, linear regression and correlation, and ANOVA. Scientific calculators with two-variable statistical capabilities may be required for this class. This honors section uses an intensive instructional methodology designed to challenge motivated students. This course is the same as HONOR 393 and only one may be taken for credit.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO 1: ORGANIZE, DISPLAY, DESCRIBE AND COMPARE REAL DATA SETS.
  - Recognize data types and data sources: develop basic statistical terminology including population parameters & sample statistics; identify common sampling methods used for obtaining data and identify advantages & disadvantages of each; recognize bias in sampling; compare principles of good experimental design
  - Organize and display data appropriately by preparing tables and graphs.
  - Analyze data by computing measures of central tendency, measures of dispersion, and measures of position.
  - Analyze bivariate data for linear trends using the least-squares regression model and the correlation coefficient.
- SLO 2: DISTINGUISH BETWEEN PROBABILITY MODELS APPROPRIATE TO DIFFERENT CHANCE EVENTS AND CALCULATE PROBABILITY ACCORDING TO THESE METHODS
  - Compute probabilities using sample spaces, the addition & multiplication rules, conditional probability, and complements.
Develop and apply probability distributions for discrete random variables; compute probabilities and expected value.

Analyze both discrete and continuous probability distributions by considering areas under the graph of a function or a histogram.

Use the normal and binomial probability distributions to compute probabilities.

Develop and apply sampling distributions for the sample mean and sample proportion.

SLO 3: APPLY INFERENTIAL STATISTICAL METHODS TO MAKE PREDICTIONS, DRAW CONCLUSIONS ABOUT HYPOTHESES AND COMPARE POPULATIONS.

Create and interpret confidence interval estimates for population mean and population proportion based on appropriate probability models.

Select the appropriate hypothesis test, perform the necessary computations and comparisons to test hypotheses about one population mean or one population proportion and explain the conclusion of the test.

Create and interpret confidence interval estimates for the difference in two population means (independent and dependent sampling) or two population proportions.

Select the appropriate hypothesis test, perform the necessary computations and comparisons to test hypotheses about two-population means (independent & dependent sampling), more than two population means (ANOVA), and two or more population proportions (Chi-Sq. tests) and explain the conclusion of the test.

Test significance of correlation and make predictions based on linear trends using the least-squares regression model.

SLO 4: USE TECHNOLOGY TO PERFORM STATISTICAL COMPUTATIONS, PREDICTIONS AND HYPOTHESIS TESTS.

SLO 5: USE APPROPRIATE STATISTICAL TECHNIQUES TO ANALYZE AND INTERPRET APPLICATIONS OF DATA including all of the following: business, economics, social sciences, psychology, life science, health science and education.

SLO 6 (HONORS PROGRAM SLO 1): EXPRESSION OF IDEAS: EXPRESS IDEAS CLEARLY IN WELL-ORGANIZED WRITTEN MESSAGES (SLO #1, College Wide SLO – Area 1, and General Education SLO C5a – English Composition).

Express ideas clearly and completely in a variety of written formats.

Utilize correct and appropriate conventions of mechanics, usage, and style in written communication.

Comprehend main ideas and reasonably interpret written information.

Compose and apply properly documented sources of information.

SLO 7 (HONORS PROGRAM SLO 2): ANALYSIS AND CRITICAL THINKING: UTILIZE MODES OF ANALYSIS AND CRITICAL THINKING IN A DISCIPLINE OF STUDY AS APPLIED TO SIGNIFICANT ISSUES AND/OR PROBLEMS (SLO #2, College Wide SLO Area 3).

Analyze reasoning processes to evaluate issues, value judgments or conclusions that determine the quality, validity, and/or reliability of information.

Construct an accurate and/or logical interpretation of reasoning while applying a framework of analytic concepts.

Communicate a complex understanding of content matter of a major discipline of study.

Explain the importance of the major discipline of study in the broader picture of society.

SLO 8 (HONORS PROGRAM SLO 3): INTELLECTUAL INQUIRY: ACTIVELY ENGAGE IN INTELLECTUAL INQUIRY BEYOND THAT REQUIRED IN ORDER TO PASS A COURSE OF STUDY (SLO #3, College Wide SLO – Area 4).

Apply information and resources necessary to develop academically and personally.

Utilize skills from one’s “academic tool kit” including time management, study skills, etc.

SLO 9 (HONORS PROGRAM SLO 4): ETHICAL REASONING: RECOGNIZE THE ETHICAL DIMENSIONS OF DECISIONS AND ACTIONS (SLO #4, College Wide SLO – Area 5).

Demonstrate the ability to engage in ethical reasoning necessary to exercise responsibility as an ethical individual, professional, local and global citizen.

SLO 10 (HONORS PROGRAM SLO 5): ARTICULATE AN AWARENESS OF A VARIETY OF PERSPECTIVES WITHIN A DISCIPLINE AND THE RELEVANCE OF THESE PERSPECTIVES TO ONE’S OWN LIFE (SLO #5, College Wide SLO – Area 2).

STAT 495 Independent Studies in Statistics
An independent studies project involves an individual student or small group of students in study, research, or activities beyond the scope of regularly offered courses. See the current catalog section of "Special Studies" for full details of Independent Studies.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- **SLO #1**: Actively engage in intellectual inquiry beyond that required in order to pass a course of study (College Wide Learning Outcome – Area 4).
- **SLO #2**: Discuss and outline a proposal of study (that can be accomplished within one semester term) with a supervising instructor qualified within the discipline.
- **SLO #3**: Design an independent study (to be completed individually or by collaboration of a small group) to foster special knowledge, skills, and experience that are not available in any one regularly scheduled course.
- **SLO #4**: Use information resources to gather discipline-specific information.
- **SLO #5**: Utilize modes of analysis and critical thinking to apply theoretical perspectives and/or concepts in the major discipline of study to significant problems and/or educational activities (College Wide Learning Outcome – Area 3).
- **SLO #6**: Analyze and apply the knowledge, skills and experience that are involved in the independent study to theoretical perspectives and/or concepts in the major discipline of study.
- **SLO #7**: Explain the importance of the major discipline of study in the broader picture of society.
- **SLO #8**: Communicate a complex understanding of content matter of the major discipline of study (College Wide Outcome – Area 3).
- **SLO #9**: Demonstrate competence in the skills essential to mastery of the major discipline of study that are necessary to accomplish the independent study.
- **SLO #10**: Identify personal goals and pursue these goals effectively (College Wide Outcome – Area 4).
- **SLO #11**: Utilize skills from the “academic tool kit” including time management, study skills, etc., to accomplish the independent study within one semester term.
Medical Assisting | Cosumnes River College

The CRC Medical Assisting Program is designed to prepare competent entry-level medical assistants in the cognitive (knowledge), psychomotor (skills), and affective (behavior) learning domains. Upon completion of the Certificate in Medical Assisting, students may take the CMA certification exam administered by American Association of Medical Assistants (AAMA).

The Cosumnes River College Medical Assisting Program is accredited by the Commission on Accreditation of Allied Health Education Programs (www.caahep.org (http://www.caahep.org)) upon the recommendation of the Medical Assisting Education Review Board (MAERB).

Commission on Accreditation of Allied Health Education Programs
25400 US Highway 19 North
Suite 15B
Clearwater, FL 33763
(727) 210-2350

Dean Collin Pregliasco

(916) 691-7261
pregl@crc.losrios.edu

Associate Degree

A.S. in Medical Assisting

The Cosumnes River College Medical Assisting program is accredited by the Commission on Accreditation of Allied Health Education Programs (www.caahep.org) upon the recommendation of the Medical Assisting Education Review Board (MAERB).

Commission on Accreditation of Allied Health Education Programs
25400 US Highway 19 North, Suite 15B
Clearwater, FL 33763
727/210-2350
www.caahep.org

The CRC Medical Assisting program is designed to prepare competent entry-level medical assistants in the cognitive (knowledge), psychomotor (skills), and affective (behavior) learning domains. Upon completion of the Certificate in Medical Assisting, students may take the CMA (AAMA) certification exam administered by American Association of Medical Assistants.

Highlights include:

* According to the Occupational Outlook Handbook published by the Department of Labor's Bureau of Statistics, "Medical Assisting employment is projected to grow much faster than average, ranking medical assistants among the fastest growing occupations over the 2008–18 decade. Job opportunities should be excellent, particularly for those with formal training or experience, and certification."

* Eligibility to become members of AAMA and CSMA

* Accredited preparation for national board exams; CRC students have exceeded national averages in the top 5 percent consistently for the past 20 years

* Provides multiple skills for the entry-level health care professional

Catalog Date: June 1, 2020

Degree Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
</table>
### Fall Semester:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MEDA 124</td>
<td>Administrative Medical Assisting</td>
<td>3</td>
</tr>
<tr>
<td>MEDA 105</td>
<td>General Medical Assisting</td>
<td>3</td>
</tr>
<tr>
<td>COMM 325</td>
<td>Intercultural Communication (3)</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>or ANTH 313 Introduction to Cultural Anthropology: Medical Focus (3)</td>
<td>3&lt;sup&gt;1&lt;/sup&gt;</td>
</tr>
<tr>
<td>AH 120</td>
<td>Human Disease</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 300</td>
<td>General Principles (3)</td>
<td>3&lt;sup&gt;2&lt;/sup&gt;</td>
</tr>
</tbody>
</table>

### Spring Semester:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AH 124</td>
<td>Pharmacology for the Health Care Professional</td>
<td>2</td>
</tr>
<tr>
<td>FCS 324</td>
<td>Human Development: A Life Span (3)</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>or PSYC 371 Life Span Developmental Psychology (3)</td>
<td></td>
</tr>
<tr>
<td>MEDA 230</td>
<td>Clinical Procedures</td>
<td>5</td>
</tr>
</tbody>
</table>

### Summer Semester:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MEDA 140</td>
<td>Medical Assisting Practicum</td>
<td>3&lt;sup&gt;3&lt;/sup&gt;</td>
</tr>
</tbody>
</table>

**Total Units:** 28

<sup>1</sup>may be taken either fall or spring semester

<sup>2</sup>may be taken either fall or spring semester

<sup>3</sup>This is the capstone course and should be taken last.

The Medical Assisting Associate in Science (A.S.) degree may be obtained by completion of the required program, plus general education requirements, plus sufficient electives to meet a 60-unit total. See CRC graduation requirements.

### Enrollment Eligibility

To be eligible for enrollment in the program, the student must meet the following criteria:

- Completion of the following pre-requisite courses with a C or better:
  - AH 110 - Medical Language
  - BIOL 102 - Essentials of Human Anatomy and Physiology (BIOL 100 or 430 & 431 are acceptable)
  - CISC 302 - Computer Familiarization
  - ENGWR 101 - or eligibility for ENGWR 300 as determined by assessment testing
  - MEDA 100 - Introduction to Medical Assisting (taken within the previous 5 years)

### Enrollment Process

Eligible students are selected for the program according to the following steps:

- Only students who meet the pre-enrollment requirements will be considered for the program
- Selection will be based on a random selection process, should the number of qualified applicants exceed available spaces in the program
- Accepted applicants will be notified by the Program Director by July 1
- Students will be required to perform a background and drug clearance screening. Students will also be required to show proof of vaccination or immunity to the following: measles, rubella, rubeola, varicella, TdP, and possibly influenza. Placement in a clinical location will be contingent upon the results of this screening.

### Student Learning Outcomes
Upon completion of this program, the student will be able to:

- Enter the allied health workforce as a competent, entry-level Medical Assistant trained in the cognitive, affective and psychomotor domains of the occupation (PSLO #1).
- Declare eligibility for the AAMA national certification examination with the goal of obtaining the CMA (AAMA) credential (PSLO #2).

Career Information

Administrative Medical Assistant; Clinical Medical Assistant

Certificates of Achievement

Medical Assisting, Administrative Certificate

This curriculum is designed to prepare the individual with front office skills for employment as an Administrative Medical Assistant in a physician’s office, hospital, clinic, laboratory, pharmaceutical company, or health insurance company.

Catalog Date: June 1, 2020

Certificate Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>AH 110</td>
<td>Medical Language for Health-Care Providers</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 100</td>
<td>Introduction to Concepts of Human Anatomy and Physiology</td>
<td>3 - 4¹</td>
</tr>
<tr>
<td>or BIOL 102</td>
<td>Essentials of Human Anatomy and Physiology (4)</td>
<td></td>
</tr>
<tr>
<td>BUS 100</td>
<td>English for the Professional</td>
<td>3</td>
</tr>
<tr>
<td>CISC 302</td>
<td>Computer Familiarization</td>
<td>2</td>
</tr>
<tr>
<td>MEDA 100</td>
<td>Introduction to Medical Assisting</td>
<td>1.5</td>
</tr>
<tr>
<td>MEDA 110</td>
<td>Medical Insurance Procedures</td>
<td>1.5</td>
</tr>
<tr>
<td>MEDA 124</td>
<td>Administrative Medical Assisting</td>
<td>3</td>
</tr>
<tr>
<td>AH 120</td>
<td>Human Disease</td>
<td>3</td>
</tr>
<tr>
<td>Total Units:</td>
<td></td>
<td>20 - 21</td>
</tr>
</tbody>
</table>

¹BIOL 430/431 combo is also acceptable

Enrollment Eligibility

To be eligible for enrollment in the program, the student must meet the following criteria:

- Completion of the following pre-requisite courses with a C or better:
  - AH 110 - Medical Language
  - BIOL 102 - Essentials of Human Anatomy and Physiology (BIOL 100 or 430 & 431 are acceptable)
  - CISC 302 - Computer Familiarization
  - BUS 100 - English for the Professional
  - MEDA 100 - Introduction to Medical Assisting (within the last 5 years)

Enrollment Process

Eligible students are selected for the program according to the following steps:
Only students who meet the pre-enrollment requirements will be considered for the program. Selection will be based on a random selection process, should the number of qualified applicants exceed available spaces in the program. Accepted applicants will be notified by the Program Director by July 1.

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- Perform the entry-level skills of an administrative medical assistant (SLO #1)

Career Information

Administrative Medical Assistant; entry-level Insurance Biller; Hospital Unit Secretary

Medical Assisting, Medical Insurance Billing Certificate

The CRC Medical Insurance Billing certificate program is designed to prepare students for entry-level positions in insurance billing in an ambulatory medical office setting. The curriculum is designed to give students the desired skills for employment in a physician’s office or other ambulatory clinic.

Catalog Date: June 1, 2020

Certificate Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>AH 110</td>
<td>Medical Language for Health-Care Providers</td>
<td>3</td>
</tr>
<tr>
<td>AH 120</td>
<td>Human Disease</td>
<td>3</td>
</tr>
<tr>
<td>AH 124</td>
<td>Pharmacology for the Health Care Professional</td>
<td>2</td>
</tr>
<tr>
<td>BIOL 100</td>
<td>Introduction to Concepts of Human Anatomy and Physiology</td>
<td>3</td>
</tr>
<tr>
<td>HIT 120</td>
<td>Basic ICD-CM Coding</td>
<td>2</td>
</tr>
<tr>
<td>MEDA 110</td>
<td>Medical Insurance Procedures</td>
<td>1.5</td>
</tr>
<tr>
<td>Total Units:</td>
<td></td>
<td>16.5</td>
</tr>
</tbody>
</table>

1[(BIOL 102) or (BIOL 430 and BIOL 431) are also acceptable]

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- Attain entry-level skills in insurance billing.
- Utilize insurance and billing knowledge to obtain entry-level employment in an ambulatory setting.

Career Information

The CRC Medical Insurance Billing Certificate is designed to prepare students for entry-level employment in an ambulatory setting in the insurance and/or billing department. Students will obtain the necessary knowledge for insurance authorizations, billing and reconciliations.

Medical Assisting Certificate
The Cosumnes River College Medical Assisting program is accredited by the Commission on Accreditation of Allied Health Education Programs (www.caahep.org) upon the recommendation of the Medical Assisting Education Review Board (MAERB).

The CRC Medical Assisting program is designed to prepare competent entry-level medical assistants in the cognitive (knowledge), psychomotor (skills), and affective (behavior) learning domains. Upon completion of the Certificate in Medical Assisting, students may take the CMA (AAMA) certification exam administered by American Association of Medical Assistants.

Highlights include:
* According to the Occupational Outlook Handbook published by the Department of Labor's Bureau of Statistics, "Medical Assisting employment is projected to grow much faster than average, ranking medical assistants among the fastest growing occupations over the 2008–18 decade. Job opportunities should be excellent, particularly for those with formal training or experience, and certification."

* Eligibility to become members of AAMA and CSMA

* Accredited preparation for national board exams; CRC students have exceeded national averages in the top 5 percent consistently for the past 20 years

* Provides multiple skills for the entry-level health care professional

Catalog Date: June 1, 2020

Certificate Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>MEDA 124</td>
<td>Administrative Medical Assisting</td>
<td>3</td>
</tr>
<tr>
<td>MEDA 105</td>
<td>General Medical Assisting</td>
<td>3</td>
</tr>
<tr>
<td>FCS 324</td>
<td>Human Development: A Life Span (3)</td>
<td>3(^1)</td>
</tr>
<tr>
<td>or PSYC 371</td>
<td>Life Span Developmental Psychology (3)</td>
<td></td>
</tr>
<tr>
<td>COMM 325</td>
<td>Intercultural Communication (3)</td>
<td>3(^2)</td>
</tr>
<tr>
<td>or ANTH 313</td>
<td>Introduction to Cultural Anthropology: Medical Focus (3)</td>
<td></td>
</tr>
<tr>
<td>PSYC 300</td>
<td>General Principles (3)</td>
<td>3(^3)</td>
</tr>
<tr>
<td>AH 120</td>
<td>Human Disease</td>
<td>3</td>
</tr>
<tr>
<td>AH 124</td>
<td>Pharmacology for the Health Care Professional</td>
<td>2</td>
</tr>
<tr>
<td>MEDA 230</td>
<td>Clinical Procedures</td>
<td>5</td>
</tr>
<tr>
<td>MEDA 140</td>
<td>Medical Assisting Practicum</td>
<td>3(^4)</td>
</tr>
<tr>
<td>Total Units:</td>
<td></td>
<td>28</td>
</tr>
</tbody>
</table>

\(^1\)Course may be taken either fall or spring semester

\(^2\)may be taken either fall or spring semester

\(^3\)may be taken either fall or spring semester

\(^4\)This is the capstone course and should be taken last.

Enrollment Eligibility

To be eligible for enrollment in the program, the student must meet the following criteria:

- Completion of the following pre-requisite courses with a C or better:
  - AH 110 - Medical Language
  - BIOL 102 - Essentials of Human Anatomy and Physiology (BIOL 100 or 430 & 431 are acceptable)
  - CISC 302 - Computer Familiarization
This course provides an introduction to the field of Medical Assisting. Students will learn the typical duties of an administrative and clinical MA, including career ladders and types of facilities that employ medical assistants. Students will also be introduced to the desired qualities and characteristics of a successful medical assistant. Additionally, the CRC Medical Assisting Program entrance requirements will be discussed.

Upon completion of this course, the student will be able to:

- EVALUATE THE VARIETY OF CAREER POSSIBILITIES OPEN TO MEDICAL ASSISTANTS (SLO #1)
- differentiate between the duties of an administrative and clinical medical assistant.
- research the typical career paths of administrative and clinical medical assistants.
- APPRAISE THE EDUCATIONAL AND PROFESSIONAL QUALIFICATIONS FOR MEDICAL ASSISTANTS (SLO #2)
- evaluate the desired personal qualifications of a medical assistant.
- analyze the AAMA educational standards and guidelines for medical assistant education
- compare and contrast the available formats of medical assisting education.
• choose appropriate verbal and nonverbal communication behaviors in a medical environment.

MEDA 105 General Medical Assisting

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Enrollment Limitation: Student must be accepted into the current cohort of the CRC Medical Assisting program to be eligible for enrollment in this course.
Catalog Date: June 1, 2020

This course will cover the topics outlined in the American Association of Medical Assistants (AAMA) General category of knowledge of an entry-level medical assistant, as required for certification. Areas covered will include gross Anatomy, applied Medical Terminology, and Law and Ethics as they pertain to Medical Assisting.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• APPLY MEDICAL LANGUAGE IN THE CLINICAL SETTING (SLO #1)
  • Demonstrate correct spelling, pronunciation and usage of medical terms and abbreviations in communicating with patients and other health care workers.
  • Interpret and abstract information from patient medical records and other clinical documents.

• IDENTIFY BASIC ANATOMICAL STRUCTURES (SLO #2)
  • Locate correct anatomical landmarks as utilized in various medical procedures.
  • Relate patient symptoms to specific body systems and/or structures involved.

• RECOGNIZE AND ADHERE TO THE LEGAL SCOPE OF PRACTICE AND ETHICAL STANDARDS OF A MEDICAL ASSISTANT (SLO #3)
  • Distinguish between allowed and non-allowed duties of a Medical Assistant in California.
  • Interpret written orders to determine legality of performing requested activity.
  • Appraise clinical situations to determine appropriate ethical response.

MEDA 110 Medical Insurance Procedures

Units: 1.5
Hours: 27 hours LEC
Prerequisite: None.
Corequisite: AH 110
Catalog Date: June 1, 2020

This course will introduce students to the basics of medical office insurance billing. Students will learn the terminology of health insurance, the differences between the various forms of health insurance, as well as the process for patient billing in a medical office setting.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• PREPARE ACCURATE CLAIM FORMS FOR THE MOST COMMON INSURANCE COMPANIES (SLO #1)
  • Distinguish between a clean, pending, rejected, incomplete and invalid claim.
  • Categorize the six levels of review and appeals in the Medicare program, and the three levels of review in the TRICARE program.
  • Analyze a patient's medical record in order to accurately abstract data necessary for completing various health and disability claim forms.
  • Examine the process of a physician-based insurance claim starting from obtaining patient information through payment receipt.
MEDA 124 Administrative Medical Assisting
This course is designed to introduce the medical assisting student to the administrative responsibilities encountered in an ambulatory clinic. Typical administrative topics covered include patient reception, scheduling, telephone procedures, documentation and reporting, records management including HIPAA regulations, screening/processing mail, equipment and supply inventory, practice finances, coding and bookkeeping principles.

Student Learning Outcomes
Upon completion of this course, the student will be able to:

- PERFORM THE DUTIES OF AN ENTRY-LEVEL ADMINISTRATIVE MEDICAL ASSISTANT (SLO #1)
- Demonstrate the correct method and/or technique when performing administrative skills such as answering phones, filing, scheduling, composing written correspondence, coding and performing various practice financial procedures.
- ASSESS THE IMPORTANCE OF THEORY AS IT RELates TO THE PERFORMED SKILL (SLO #2)
- Distinguish among various guidelines for processing incoming and/or outgoing mail and patient information.
- Determine the best method for transmitting health information applying HIPAA regulations.
- Discuss the importance of complete and accurate records management in a medical facility.
- Identify mandatory reporting documentation within a medical office

MEDA 140 Medical Assisting Practicum
This course consists of supervised experience in a health care setting performing the tasks and responsibilities of a medical assistant. Those duties include, but are not limited to, administering injections, performing electrocardiograms, obtaining patient history and chief complaints, scheduling appointments, answering telephones, basic clerical functions and other duties as requested by site physician and/or supervisor. Students will be required to show proof of Healthcare Provider CPR from American Heart Association, as well as immunity to Varicella, Measles, Mumps, Rubella and TB prior to beginning the clinical rotation. Students will also have supplementary requirements such as liability insurance, background check and drug screening. This course is for students who have completed all of the CRC Medical Assisting Program requirements.

Student Learning Outcomes
Upon completion of this course, the student will be able to:

- PERFORM THE DUTIES OF AN ENTRY-LEVEL MEDICAL ASSISTANT IN AN AMBULATORY SETTING WITH MINIMAL SUPERVISION - SLO #1
- Demonstrate the correct method and/or technique when performing clinical skills such as injections, EKGS, spirometry, vitals, instrument identification, care and usage, and other skills as outlined in the MA scope of practice.
- Demonstrate the correct method and/or technique when performing administrative skills such as answering phones, filing, scheduling, insurance verification, billing and coding.
- COMMUNICATE EFFECTIVELY WITH PATIENTS ACCORDING TO THEIR INDIVIDUAL NEEDS - SLO #2
Evaluate and respect a patient's individual need based on various factors including age, socioeconomic status, culture, and medical history.

EXHIBIT PROFESSIONALISM THROUGH VARIOUS MEANS SUCH AS BEHAVIOR, ADAPTABILITY, INITIATIVE AND QUALITY OF WORK - SLO #3

MEDA 145 Medical Assisting Certification Review

**Units:** 2

**Hours:** 36 hours LEC

**Prerequisite:**

**Enrollment Limitation:**

- Students must meet the Certifying Agencies examination eligibility requirements to enroll in this course:
  * Graduate from a CAHHEP or ABHES accredited MA program; OR
  * Currently employed as an MA by a licensed MD/DO in the United States; OR
  * At least two years employment within the previous five years as an MA, either in private sector or military enlisted; OR
  * Current MA instructor at an accredited institution in the United States

**Catalog Date:**

June 1, 2020

This course is designed to prepare students for the Medical Assisting certification examinations offered by the three Certifying Agencies approved by the California Medical Board - the American Association of Medical Assistants (AAMA), the American Medical Technologists (AMT), or the California Certifying Board of Medical Assistants (CCBMA). This course is available to students who meet the current exam eligibility requirements for at least one of the Certifying Agencies. Students will be required to provide documentation of eligibility.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- **ACHIEVE A CONSISTENT PASSING SCORE ON PRACTICE CERTIFICATION EXAMS (SLO #1)**
- Identify and discuss primary elements of Administrative Medical Assisting duties.
- Identify and discuss primary elements of Clinical Medical Assisting duties.
- Identify and discuss primary elements of other aspects of Medical Assisting such as communication, the disease process, medicolegal and bioethical issues, and professionalism.
- **EMPLOY SUCCESSFUL TEST-TAKING STRATEGIES (SLO #2)**
- Identify and discuss techniques for preparing for an examination.
- Analyze exam question wording to determine the best response
- **ASSESS THE ROLE OF THE MEDICAL ASSISTING PRECEPTOR IN THE CLINICAL SETTING (SLO #3)**
- Identify the California state requirements for participating as an MA Preceptor
- Relate the responsibilities involved when performing the function of an MA Preceptor

MEDA 230 Clinical Procedures

**Units:** 5

**Hours:** 36 hours LEC; 162 hours LAB

**Prerequisite:**

MEDA 124 with a grade of "C" or better

**Corequisite:**

AH 120 and 124

**Enrollment Limitation:**

Student must be accepted into the CRC Medical Assisting program to enroll in this course.

**Catalog Date:**

June 1, 2020

This course will instruct the student in the clinical procedures performed by entry-level Medical Assistants according to AAMA standards and the Medical Assisting Scope of Practice.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- **PERFORM BASIC CLINICAL PROCEDURES (SLO #1)**
- collect accurate vital signs on a patient including temperature, pulse rate, respiration rate and blood pressure on adults and children. Measure accurate height and weight on adults. Measure accurate height, weight and head circumference on infants
evaluate various instruments used in the clinical setting according to their classification and usage. Correctly assemble minor surgical trays, prepare instruments/equipment for autoclave sterilization and be able to differentiate when to use chemical vs. steam sterilization.

- prepare patient for and perform audiometry, spirometry, ear irrigation, oxygen and aerosol treatments, including proper documentation.

- evaluate basic nutritional needs and recognize the need for a therapeutic diet given specific diagnostic information.

**PERFORM ADVANCED CLINICAL PROCEDURES (SLO #2)**

- prepare necessary supplies for bandaging, splinting or dressing various injuries and/or wounds. This includes preparing the patient for the procedure and the removal of sutures.

- perform electrocardiography using the single and multi-channel ECG equipment.

- instruct patients on the preparation for diagnostic radiology.

- collect specimens for diagnostic evaluation per CLIA regulations including urinalysis, hemoccult, step culture, HCG testing and finger punctures for hematocrits.

- select the appropriate syringe, needle and injection site for intramuscular, subcutaneous and intradermal injections.

**UTILIZE UNIVERSAL PRECAUTIONS AND SAFETY PRACTICES IN A CLINICAL SETTING (SLO #3)**

- distinguish when Universal Precautions will be required and correctly utilize personal protective equipment.

- adhere to the principles of infection control including aseptic technique.

**DISPLAY CRITICAL THINKING AND EFFECTIVE COMMUNICATION SKILLS AS THEY RELATE TO OBTAINING PATIENT INFORMATION OR IMPARTING PATIENT EDUCATION (SLO #4)**

- perform patient interviewing techniques in order to gather clinical information necessary for treatment.

- research and organize gathered information to be used for patient education purposes, including community resources and general health topics.

- obtain patient clinical history and document information in both paper and electronic format.

---

**MEDA 295 Independent Studies in Medical Assisting**

**Units:** 1 - 3  
**Hours:** 54 - 162 hours LAB  
**Prerequisite:** None.  
**Catalog Date:** June 1, 2020

An independent studies project involves an individual student or small group of students in study, research, or activities beyond the scope of regularly offered courses. See the current catalog section of “Special Studies” for full details of Independent Studies.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- SLO #1: Actively engage in intellectual inquiry beyond that required in order to pass a course of study (College Wide Learning Outcome – Area 4).

- Discuss and outline a proposal of study (that can be accomplished within one semester term) with a supervising instructor qualified within the discipline.

- Design an independent study (to be completed individually or by collaboration of a small group) to foster special knowledge, skills, and experience that are not available in any one regularly scheduled course.

- Use information resources to gather discipline-specific information.

- SLO #2: Utilize modes of analysis and critical thinking to apply theoretical perspectives and/or concepts in the major discipline of study to significant problems and/or educational activities (College Wide Learning Outcome – Area 3).

- Analyze and apply the knowledge, skills and experience that are involved in the independent study to theoretical perspectives and/or concepts in the major discipline of study.

- Explain the importance of the major discipline of study in the broader picture of society.

- SLO #3: Communicate a complex understanding of content matter of the major discipline of study (College Wide Outcome – Area 3).
• Demonstrate competence in the skills essential to mastery of the major discipline of study that are necessary to accomplish the independent study.

• SLO #4: Identify personal goals and pursue these goals effectively (College Wide Outcome – Area 4).

• Utilize skills from the “academic tool kit” including time management, study skills, etc., to accomplish the independent study within one semester term.

MEDA 298 Work Experience in Medical Assisting

| Units:  | 1 - 4 |
| Hours:  | 60 - 300 hours LAB |
| Prerequisite: | None. |
| Enrollment Limitation: | Students must be in a paid or unpaid internship, volunteer position or job related to career goals in Medical Assisting. |
| General Education: | AA/AS Area III(b) |
| Catalog Date: | June 1, 2020 |

This course provides students with opportunities to develop marketable skills in preparation for employment in their major field of study or advancement within their career. It is designed for students interested in work experience and/or internships in associate degree level or certificate occupational programs. Course content includes understanding the application of education to the workforce; completion of required forms which document the student's progress and hours spent at the work site; and developing workplace skills and competencies. Appropriate level learning objectives are established by the student and the employer. During the semester, the student is required to participate in a weekly orientation and 75 hours of related paid work experience, or 60 hours of unpaid work experience for one unit. An additional 75 or 60 hours of related work experience is required for each additional unit. Work Experience may be taken for a total of 16 units when there are new or expanded learning objectives. Only one Work Experience course may be taken per semester.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• DEMONSTRATE AN UNDERSTANDING AND APPLICATION OF PROFESSIONAL WORKPLACE BEHAVIOR IN A FIELD OF STUDY RELATED ONE’S CAREER.(SLO 1)

• Understand the effects time, stress, and organizational management have on performance.

• Demonstrate an understanding of consistently practicing ethics and confidentiality in a workplace.

• Examine the career/life planning process and relate its relevancy to the student.

• Demonstrate an understanding of basic communication tools and their appropriate use.

• Demonstrate an understanding of workplace etiquette.

• DESCRIBE THE CAREER/LIFE PLANNING PROCESS AND RELATE ITS RELEVANCY TO ONE’S CAREER.(SLO 2)

• Link personal goals to long term achievement.

• Display an understanding of creating a professional first impression.

• Understand how networking is a powerful job search tool.

• Understand necessary elements of a résumé.

• Understand the importance of interview preparation.

• Identify how continual learning increases career success.

• DEMONSTRATE APPLICATION OF INDUSTRY KNOWLEDGE AND THEORETICAL CONCEPTS AS WRITTEN IN LEARNING OBJECTIVES IN PARTNERSHIP WITH THE EMPLOYER WORK SITE SUPERVISOR.(SLO 3)
Music | Cosumnes River College

The CRC music program includes vocal and instrumental components as well as courses on music, history theory and electronic music. The two-year program in music is designed to provide students with a foundation in music theory and history, in addition to allowing a choice of instrumental, keyboard, or vocal performance areas in which they may specialize.

Dean

 (916) 691-7170
 BedfordB@crc.losrios.edu

Associate Degrees for Transfer

A.A.-T. in Music

Completion of this degree provides a foundation in music. Program offerings include course work in music theory and aural skills, applied instrumental and vocal instruction, and ensemble performance.

The Associate in Arts in Music for Transfer Degree (AA-T) is designed to provide a seamless transfer pathway for students interested in pursuing at least one Music degree option in the California State University (CSU) system. The degree is comprised of lower division coursework typically required by CSU institutions. Students must complete the core curriculum and electives to meet a total of 60 transferable units, which includes the CSU General Education Breadth or the Intersegmental General Education Transfer Curriculum (IGETC) pattern. Upon successful completion of the degree requirements, students will be guaranteed admission to the CSU system with junior status and will not have to repeat lower division coursework. Students are encouraged to meet with a counselor to develop their educational plans as degree options and general education requirements vary for each university.

Catalog Date: June 1, 2020

Degree Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUFHL 400</td>
<td>Music Theory and Musicianship I</td>
<td>4</td>
</tr>
<tr>
<td>MUFHL 404</td>
<td>Music Theory II</td>
<td>3</td>
</tr>
<tr>
<td>MUFHL 405</td>
<td>Musicianship II</td>
<td>1</td>
</tr>
<tr>
<td>MUFHL 412</td>
<td>Music Theory III</td>
<td>3</td>
</tr>
<tr>
<td>MUFHL 413</td>
<td>Musicianship III</td>
<td>1</td>
</tr>
<tr>
<td>MUFHL 414</td>
<td>Music Theory IV</td>
<td>3</td>
</tr>
<tr>
<td>MUFHL 415</td>
<td>Musicianship IV</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>A minimum of 4 units from the following:</td>
<td>4</td>
</tr>
</tbody>
</table>

Students must complete four semesters of applied music.

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUIVI 410</td>
<td>Applied Music (1)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>A minimum of 4 units from the following:</td>
<td>4</td>
</tr>
</tbody>
</table>
All music majors must successfully complete four semesters of a large performing ensemble. Students seeking both the AA-T and AA degree in music should take MUP 330: Concert Band, MUP 310: Orchestra, MUP 357: College Chorus, or MUP 360: Chamber Singers. Please see the Music Counselor or Music Department Chair for more information.

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUP 335</td>
<td>Concert Band (1)</td>
<td></td>
</tr>
<tr>
<td>MUP 312</td>
<td>Orchestra (1)</td>
<td></td>
</tr>
<tr>
<td>MUP 358</td>
<td>College Chorus Chorale (1)</td>
<td></td>
</tr>
<tr>
<td>MUP 362</td>
<td>Chamber Singers Chorale (1)</td>
<td></td>
</tr>
</tbody>
</table>

Total Units: 24

The Associate in Arts in Music for Transfer (AA-T) degree may be obtained by completion of 60 transferable, semester units with a minimum 2.0 GPA, including (a) the major or area of emphasis described in the Required Program, and (b) either the Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education-Breadth Requirements.

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- Analyze and compare musical compositions, scores and performances.
- Understand, identify and recognize the elements of music (melody, rhythm, harmony, form)
- Perform music at a level appropriate to the area of specialization.
- Acquire and demonstrate aural awareness and ensemble skills.
- Establish an historical, cultural, geographical and chronological context of music. Differentiate different eras and styles of music.
- Compose music for the purpose of understanding the elements of music within the context of the Baroque, Classical, Romantic and early Twentieth Century.

Career Information

Individuals with four-year degrees in music may teach in the K-12 educational field as well as perform in professional music ensembles, direct religious and community music groups, instruct in private music studios, compose for media and publishing, music therapy, and administrative staff for music organizations. Advanced degrees in music may lead to careers as educators at the college or university level, performers, music directors, and music editors and journalists. NOTE TO TRANSFER STUDENTS: The Associate Degree for Transfer program is designed for students who plan to transfer to a campus of the California State University (CSU). Other than the required core, the courses you choose to complete this degree will depend to some extent on the selected CSU for transfer. In addition, some CSU-GE Breadth or IGETC requirements can also be completed using courses required for this associate degree for transfer major (known as “double-counting”). Meeting with a counselor to determine the most appropriate course choices will facilitate efficient completion of your transfer requirements. For students wishing to transfer to other universities (UC System, private, or out-of-state), the Associate Degree for Transfer may not provide adequate preparation for upper-division transfer admissions; it is critical that you meet with a CRC counselor to select and plan the courses for the major, as programs vary widely in terms of the required preparation.

Associate Degrees

A.A. in Music, General

Completion of this degree provides a foundation in music. Program offerings include course work in music theory and aural skills, applied instrumental and vocal instruction, ensemble performance, music history and piano.

Highlights include:
* Various avenues for vocal performance — college chorus, choir, chamber singers, contemporary gospel choir
* Various avenues for instrumental performance—college orchestra, jazz ensemble, concert band

Note to Transfer Students:
If you are interested in transferring to a four-year college or university to pursue a bachelor's degree in this major, it is critical that you meet with a CRC counselor to select and plan the courses for your major. Schools vary widely in terms of the required preparation. The courses that CRC requires for an Associate's degree in this major may be different from the requirements needed for the Bachelor's degree.

Catalog Date: June 1, 2020
## Degree Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUFHL 310</td>
<td>Survey of Music History and Literature (Greek Antiquity to 1750)</td>
<td>3</td>
</tr>
<tr>
<td>MUFHL 311</td>
<td>Survey of Music History and Literature (1750 to the present)</td>
<td>3</td>
</tr>
<tr>
<td>MUFHL 400</td>
<td>Music Theory and Musicianship I</td>
<td>4</td>
</tr>
<tr>
<td>MUFHL 404</td>
<td>Music Theory II</td>
<td>3</td>
</tr>
<tr>
<td>MUFHL 412</td>
<td>Music Theory III</td>
<td>3</td>
</tr>
<tr>
<td>MUFHL 414</td>
<td>Music Theory IV</td>
<td>3</td>
</tr>
<tr>
<td>MUIVI 340</td>
<td>Beginning Piano</td>
<td>2</td>
</tr>
<tr>
<td>MUIVI 341</td>
<td>Piano II</td>
<td>2</td>
</tr>
<tr>
<td>MUFHL 405</td>
<td>Musicianship II</td>
<td>1</td>
</tr>
<tr>
<td>MUFHL 413</td>
<td>Musicianship III</td>
<td>1</td>
</tr>
<tr>
<td>MUFHL 415</td>
<td>Musicianship IV</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td><strong>A minimum of 8 units from the following:</strong></td>
<td><strong>8</strong></td>
</tr>
<tr>
<td>MUIVI 370</td>
<td>Beginning Guitar (2)</td>
<td></td>
</tr>
<tr>
<td>MUIVI 371</td>
<td>Intermediate Guitar (2)</td>
<td></td>
</tr>
<tr>
<td>MUIVI 350</td>
<td>Intermediate Piano (2)</td>
<td></td>
</tr>
<tr>
<td>MUIVI 351</td>
<td>Piano IV (2)</td>
<td></td>
</tr>
<tr>
<td>MUIVI 310</td>
<td>Voice Class I (2)</td>
<td></td>
</tr>
<tr>
<td>MUIVI 311</td>
<td>Voice Class II (2)</td>
<td></td>
</tr>
<tr>
<td>MUIVI 320</td>
<td>Voice Class III (2)</td>
<td></td>
</tr>
<tr>
<td>MUIVI 321</td>
<td>Voice Class IV (2)</td>
<td></td>
</tr>
<tr>
<td>MUIVI 410</td>
<td>Applied Music (1)</td>
<td></td>
</tr>
<tr>
<td>MUIVI 495</td>
<td>Independent Studies in Music Instrumental/Voice Instruction (1 - 3)</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Subtotal Units:</strong></td>
<td><strong>34</strong></td>
</tr>
</tbody>
</table>

### Instrumental Majors

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>A minimum of 8 units from the following:</strong></td>
<td><strong>8</strong></td>
</tr>
<tr>
<td>MUP 310</td>
<td>Orchestra (2)</td>
<td></td>
</tr>
<tr>
<td>MUP 320</td>
<td>Jazz Band (2)</td>
<td></td>
</tr>
<tr>
<td>MUP 330</td>
<td>Concert Band (2)</td>
<td></td>
</tr>
<tr>
<td>Instrumental Majors Units:</td>
<td></td>
<td><strong>8</strong></td>
</tr>
<tr>
<td>Total Units:</td>
<td></td>
<td><strong>42</strong></td>
</tr>
</tbody>
</table>
### Keyboard Majors

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>A minimum of 8 units from the following:</td>
<td>8²</td>
</tr>
<tr>
<td>MUP 320</td>
<td>Jazz Band (2)</td>
<td></td>
</tr>
<tr>
<td>MUP 330</td>
<td>Concert Band (2)</td>
<td></td>
</tr>
<tr>
<td>MUP 350</td>
<td>Concert Choir I (2)</td>
<td></td>
</tr>
<tr>
<td>MUP 357</td>
<td>College Chorus (2)</td>
<td></td>
</tr>
<tr>
<td>MUP 310</td>
<td>Orchestra (2)</td>
<td></td>
</tr>
<tr>
<td>MUP 360</td>
<td>Chamber Singers (2)</td>
<td></td>
</tr>
</tbody>
</table>

| Keyboard Majors Units: | 8 |
| Total Units:          | 42 |

### Voice Majors

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>A minimum of 8 units from the following:</td>
<td>8³</td>
</tr>
<tr>
<td>MUP 357</td>
<td>College Chorus (2)</td>
<td></td>
</tr>
<tr>
<td>MUP 360</td>
<td>Chamber Singers (2)</td>
<td></td>
</tr>
</tbody>
</table>

| Voice Majors Units: | 8 |
| Total Units:        | 42 |

¹NOTE: All music majors are required to enroll in at least one music performance course each semester they are enrolled.

²NOTE: All music majors are required to enroll in at least one music performance class each semester they are enrolled.

³NOTE: All music majors are required to enroll in at least one music performance course each semester they are enrolled.

The Music, General Associate in Arts (A.A.) degree may be obtained by completion of the required program, plus general education requirements, plus sufficient electives to meet a 60-unit total. See CRC graduation requirements.

### Enrollment Eligibility

To be eligible for enrollment in the program, the student must meet the following criteria:

- Music literacy at the college level.
- Performance skills at the college level.

### Enrollment Process

Eligible students are selected for the program according to the following steps:

- Enroll in applied music or equivalent courses. Enroll in performing ensemble.
- Pass music literacy test (given on first class session of MUFHL 400) or pass MUFHL 321, Basic Musicianship with a grade of C or better.

### Student Learning Outcomes

Upon completion of this program, the student will be able to:
Analyze and compare musical compositions, scores and performances.
Understand, identify and recognize the elements of music (melody, rhythm, harmony, form)
Perform music at a level appropriate to the area of specialization.
Acquire and demonstrate aural awareness and ensemble skills.
Establish an historical, geographical and chronological context of music. Differentiate different eras and styles of music.
Compose music for the purpose of understanding the elements of music within the context of the Baroque, Classical, Romantic and early Twentieth Century.
Develop and demonstrate basic piano proficiency (for non-pianist majors)

Career Information
Music Education; Public and Private Teaching; Vocal Performance; Instrumental Performance; Music Store Employment & Management; Church Music Direction; Composer Some career options may require more than two years of college study. Classes beyond the associate degree may be required to fulfill some career options or for preparation for transfer to a university program.

Certificates of Achievement
Entrepreneurial Arts: Independent Music Instructor Certificate
This certificate provides real world tools for the aspiring music teacher to earn a living as a thriving and successful independent music instructor.

Catalog Date: June 1, 2020

Certificate Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUSM 370</td>
<td>Music for Children</td>
<td>3</td>
</tr>
<tr>
<td>MUIVI 410</td>
<td>Applied Music</td>
<td>1</td>
</tr>
<tr>
<td>MUIVI 321</td>
<td>Voice Class IV (2)</td>
<td>2</td>
</tr>
<tr>
<td>or MUIVI 351</td>
<td>Piano IV (2)</td>
<td></td>
</tr>
<tr>
<td>or MUIVI 371</td>
<td>Intermediate Guitar (2)</td>
<td></td>
</tr>
<tr>
<td>MUP 310</td>
<td>Orchestra (2)</td>
<td></td>
</tr>
<tr>
<td>or MUP 321</td>
<td>Advanced Jazz Band (1 - 2)</td>
<td></td>
</tr>
<tr>
<td>or MUP 330</td>
<td>Concert Band (2)</td>
<td></td>
</tr>
<tr>
<td>or MUP 357</td>
<td>College Chorus (2)</td>
<td></td>
</tr>
<tr>
<td>or MUP 360</td>
<td>Chamber Singers (2)</td>
<td></td>
</tr>
<tr>
<td>MUFHL 300</td>
<td>Introduction to Music</td>
<td>3</td>
</tr>
<tr>
<td>BUS 215</td>
<td>Entrepreneurial Opportunity and Business Planning</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>A minimum of 3 units from the following:</td>
<td>3</td>
</tr>
<tr>
<td>MUFHL 404</td>
<td>Music Theory II (3)</td>
<td></td>
</tr>
<tr>
<td>or MUFHL 412</td>
<td>Music Theory III (3)</td>
<td></td>
</tr>
<tr>
<td>or MUFHL 414</td>
<td>Music Theory IV (3)</td>
<td></td>
</tr>
<tr>
<td>or MUFHL 400</td>
<td>Music Theory and Musicianship I (4)</td>
<td></td>
</tr>
<tr>
<td>MUSM 498</td>
<td>Work Experience in Music Specializations</td>
<td>1 - 4</td>
</tr>
</tbody>
</table>
Student Learning Outcomes

Upon completion of this program, the student will be able to:

- PSLO #1 STUDENT WILL ACQUIRE PHYSICAL SKILLS/DEXTERITY WITHIN A DISCIPLINE.
- Certificate graduates will develop increased artistry and technical mastery with which to attract a more diverse teaching clientele.
- PSLO #2 STUDENT WILL BE PROFICIENT IN NEW TECHNOLOGIES FOR THE PURPOSES OF RESEARCH, COMPOSITION, LISTENING, PERFORMANCE, RECORDING, ARCHIVING, AND CROSS-DISCIPLINE COLLABORATION.
- Certificate graduates will acquire a knowledge of partner organizations on the local, state, and federal levels.
- Certificate graduates will develop a mastery of using social media for recruitment and retainment purposes.
- Certificate graduates will develop the necessary independent contractor business skills to help their careers as an independent music teacher.

Career Information

Career opportunities include the following: independent private music instructor, charter school music instructor, after school program music instructor, children's day care and/or pre school music instructor, private tutor, music school proprietor.

Entrepreneurial Arts: Music Composition Certificate

The Entrepreneurial Arts: Music Composition Certificate prepares students for all aspects of a thriving music career, from performance to music creation to business skills. We give you the tools to grow and survive as an independent contractor in a gig economy.

Catalog Date: June 1, 2020

Certificate Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUP 310</td>
<td>Orchestra (2)</td>
<td>2</td>
</tr>
<tr>
<td>or MUP 320</td>
<td>Jazz Band (2)</td>
<td></td>
</tr>
<tr>
<td>or MUP 330</td>
<td>Concert Band (2)</td>
<td></td>
</tr>
<tr>
<td>or MUP 353</td>
<td>Contemporary Gospel Choir (2)</td>
<td></td>
</tr>
<tr>
<td>or MUP 357</td>
<td>College Chorus (2)</td>
<td></td>
</tr>
<tr>
<td>or MUP 360</td>
<td>Chamber Singers (2)</td>
<td></td>
</tr>
<tr>
<td>MUSM 346</td>
<td>Audio and Music Production I</td>
<td>3</td>
</tr>
<tr>
<td>MUSM 347</td>
<td>Audio and Music Production II</td>
<td>3</td>
</tr>
<tr>
<td>MUSM 110</td>
<td>The Business of Music (3)</td>
<td>3</td>
</tr>
<tr>
<td>or BUS 215</td>
<td>Entrepreneurial Opportunity and Business Planning (3)</td>
<td></td>
</tr>
<tr>
<td>MUP 423</td>
<td>Composition Ensemble Workshop (2)</td>
<td>2 - 3</td>
</tr>
<tr>
<td>or MUFHL 416</td>
<td>Studies in Contemporary Composition Techniques, Performance, and Literature (3)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>A minimum of 3 units from the following:</td>
<td>3</td>
</tr>
<tr>
<td>MUFHL 404</td>
<td>Music Theory II (3)</td>
<td></td>
</tr>
<tr>
<td>COURSE CODE</td>
<td>COURSE TITLE</td>
<td>UNITS</td>
</tr>
<tr>
<td>--------------</td>
<td>---------------------------------------------------</td>
<td>-------</td>
</tr>
<tr>
<td>or MUFHL 400</td>
<td>Music Theory and Musicianship I (4)</td>
<td></td>
</tr>
<tr>
<td>MUFHL 412</td>
<td>Music Theory III (3)</td>
<td></td>
</tr>
<tr>
<td>or MUFHL 414</td>
<td>Music Theory IV (3)</td>
<td></td>
</tr>
<tr>
<td>Total Units:</td>
<td></td>
<td>16 - 17</td>
</tr>
</tbody>
</table>

Two units from the following:

**Enrollment Eligibility**

To be eligible for enrollment in the program, the student must meet the following criteria:

- Meet with an CRC counselor and declare intention of enrolling in the program.
- Contact Music Department Chair to schedule a program entrance audition with appropriate CRC faculty. (If applicable) contact CRC ensemble director to schedule ensemble audition.
- If applicable, contact CRC ensemble director to schedule ensemble audition.
- Be enrolled in a CRC performance ensemble in each semester until the completion of the program.

**Student Learning Outcomes**

Upon completion of this program, the student will be able to:

- PSLO #1 STUDENT WILL ACQUIRE PHYSICAL SKILLS/DEXTERITY WITHIN A DISCIPLINE.
- Demonstrate an ability to perform original compositions on a chosen instrument
- Demonstrate an ability to create music compositions in a style of one's choice, be it classical, jazz, or assorted popular idioms
- PSLO #2 STUDENT WILL ESTABLISH AN HISTORICAL, GEOGRAPHICAL, AND CHRONOLOGICAL CONTEXT OF MUSIC.
- Demonstrate a knowledge of evolving music industry economic models and means of gaining employment through them
- PSLO #3 STUDENT WILL LEARN AND USE CRITICAL LISTENING SKILLS TO DISCUSS AND CRITIQUE MUSICAL WORKS AND PERFORMANCES THROUGH SELF ANALYSIS, ENSEMBLE PARTICIPATION, AND PERFORMANCE EVALUATION.
- Demonstrate a working knowledge of musical literacy and musicianship skills
- PSLO #4 STUDENT WILL BE PROFICIENT IN NEW TECHNOLOGIES FOR THE PURPOSES OR RESEARCH, COMPOSITION, LISTENING, PERFORMANCE, RECORDING, ARCHIVING, AND CROSS-DISCIPLINE COLLABORATION.
- Create a marketing plan that includes promotion tools such as radio, television, and new media, such as YouTube, social networking, and viral campaigns
- Demonstrate an understanding of the various aspects of project management as it pertains to an independent musician, be it rehearsal preparation, concert preparation and promotion, non profit fundraising, and contracts

**Career Information**

Career opportunities include multiple aspects of the music industry including live performance in classical and/or commercial styles, composition, performance of original compositions, concert promotion, music marketing, music publishing and distribution, music licensing, project management, studio teaching, and other assorted freelance gigging opportunities. This program will be of interest for individuals looking to proceed to professional practice or to further their academic study.

**Music - Fundamentals, History, and Literature (MUFHL)**

MUFHL 300 Introduction to Music
A brief study of the development of music from the middle ages to music of today, emphasizing the relation of music to the social, cultural, economic and political factors which produced it. Learn to listen to and understand the music of many historic periods and cultures through the features they share: sound sources, time frame, rhythm and meter, pitch, and structure. Concert attendance is required. Designed for the student with no previous musical study and for those who are particularly interested in the humanities or the arts.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO #1 BUILD A VOCABULARY OF MUSIC TERMINOLOGY (P-SLO 4, P-SLO 5)
  - Choose correct musical terms and identify and compare their differences in the categories of melody, rhythm, meter, harmony, tempo and dynamics.
  - Classify musical instruments into their correct categories using the Hornbostel-Sachs scheme of musical instrument classification.
  - Differentiate different performance mediums.

- SLO #2 DEVELOP AURAL AWARENESS (PSLO 2)
  - Differentiate between major and minor tonalities. Distinguish diatonic and chromatic pitches in tonal music.
  - Separate listening examples into the harmonic classifications of monophony, heterophony, polyphony and homophony.
  - Choose and identify instruments names from listening examples. Choose and identify instrument families from listening examples.
  - Compare and differentiate musical examples from the same and different periods of art music.
  - Distinguish different musical forms including renaissance dance suite movements, opera, oratorio, da-capo aria, recitative, rondo, sonata, concerto, fugue, sonata-allegro and sonata cycle.

- SLO #3 DEVELOP AN UNDERSTANDING OF THE CHARACTERISTICS OF ART MUSIC IN EACH OF THE MAJOR ERAS. (P-SLO 2, P-SLO 3, P-SLO 4, P-SLO 5)
  - Examine the music of each era and analyze their similarities and differences.
  - Compare and differentiate musical examples from each musical era.
  - Investigate the social, religious and political influences of each era on its music.
  - Investigate the relationship between the music of an era and the art, literature, architecture and science of that era.

MUFHL 308 Introduction to Music: Rock & Roll

This course examines social, political, cultural and economic issues as they relate to the history of rock and roll music. Musical examples will develop listening skills and the ability to critique the music orally and in written form. This course is designed for students with no previous musical study.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- ACQUIRE AURAL AWARENESS AND SKILLS (SLO #1; PSLO #2).
  - Compare and contrast styles and sub-genres of Rock music from the late 1940’s to the present.
Identify, differentiate and categorize instrumental and vocal stylistic characteristics and techniques of various Rock musicians.

Recognize and describe studio production styles and characteristics.

ESTABLISH AN HISTORICAL, GEOGRAPHICAL, AND CHRONOLOGICAL CONTEXT OF ROCK MUSIC (SLO #2; PSLO #3).

Identify the historical, geographical, and social contexts reflected in the Rock music styles and sub-genres over time.

Analyze and discuss issues of ethnicity, ethnocentrism, racism, ageism, class differences, and gender, as they relate to Rock music styles and sub-genres.

LEARN AND USE CRITICAL LISTENING SKILLS TO DISCUSS AND CRITIQUE MUSICAL WORKS AND PERFORMANCES (SLO #3; PSLO #4).

Describe and evaluate live and recorded musical performances.

Identify and discern differences in the uses of melodic material, rhythm, structure, and musical aesthetics in Rock music styles and sub-genres.

ACQUIRE ANALYTICAL SKILLS AND A CONCEPTUAL FRAMEWORK FOR THE FUTURE (SLO #4; PSLO #5).

Identify and analyze components of a personal aesthetic appreciation for music in one's own life.

Design, organize and compose a term project.

MUFHL 310 Survey of Music History and Literature (Greek Antiquity to 1750)

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Transferable: CSU; UC
General Education: AA/AS Area I; CSU Area C1; IGETC Area 3A
Catalog Date: June 1, 2020

A detailed study of the development of music from antiquity to 1750, emphasizing the relation of music to the social, cultural, economic and political factors which produced it. Required for music majors and designed for those particularly interested in the humanities or the arts.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO #1 BUILD A VOCABULARY OF MUSIC TERMINOLOGY (P-SLO 4, P-SLO 5)
  - Choose correct musical terms and identify and compare their differences in the categories of melody, rhythm, meter, harmony, tempo and dynamics.
  - Classify musical instruments into their correct categories using the Hornbostel-Sachs scheme of musical instrument classification.
  - Categorize musical instruments into their family groups.
  - Differentiate different performance mediums.

- SLO #2 DEVELOP AURAL AWARENESS (PSLO 2)
  - Differentiate between major and minor tonalities. Distinguish diatonic and chromatic pitches in tonal music.
  - Separate listening examples into the harmonic classifications of monophony, heterophony, polyphony and homophony.
  - Choose and identify instruments names from listening examples. Choose and identify instrument families from listening examples.
  - Compare and differentiate musical examples from the same and different periods of art music.
  - Distinguish different musical forms including renaissance dance suite movements, opera, oratorio, da-capo aria, recitative, rondo, sonata, concerto and fugue.
  - Critique and discuss musical performances.

- SLO #3 DEVELOP AN UNDERSTANDING OF THE CHARACTERISTICS OF ART MUSIC IN THE MIDDLE AGES, RENAISSANCE AND BAROQUE ERAS. (P-SLO 2, P-SLO 3, P-SLO 4, P-SLO 5)
Examine the music of each era and analyze their similarities and differences.

Compare and differentiate musical examples from each musical era.

Investigate the social, religious and political influences of each era on its music.

Investigate the relationship between the music of an era and the art, literature, architecture and science of that era.

MUFHL 311 Survey of Music History and Literature (1750 to the present)

<table>
<thead>
<tr>
<th>Units</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hours</td>
<td>54 hours LEC</td>
</tr>
<tr>
<td>Prerequisite</td>
<td>None.</td>
</tr>
<tr>
<td>Transferable</td>
<td>CSU; UC</td>
</tr>
<tr>
<td>General Education</td>
<td>AA/AS Area I; CSU Area Ct; IGETC Area 3A</td>
</tr>
<tr>
<td>Catalog Date</td>
<td>June 1, 2020</td>
</tr>
</tbody>
</table>

A detailed study of the development of music from the beginning of the classical period to music of today, emphasizing the relation of music to the social, cultural, economic and political factors which produced it. Required for music majors and designed for those particularly interested in the humanities or the arts.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- **SLO #1 BUILD A VOCABULARY OF MUSIC TERMINOLOGY (P-SLO 4, P-SLO 5)**
  - Differentiate different performance mediums and genres.
  - Compare and investigate the different forms developed from 1750 to the present including the sonata-cycle, sonata-allegro form, rondo, minuet and trio, scherzo and trio, tone poem, symphonic poem, small piano forms, impressionist forms, serial music, neo-classical, neo-romantic, minimalist and post minimalist.

- **SLO #2 DEVELOP AURAL AWARENESS (PSLO 2)**
  - Compare and differentiate musical examples from the same and different periods of art music.
  - Distinguish different musical forms including sonata-cycle, sonata-allegro form, rondo, minuet and trio, scherzo and trio, tone poem, symphonic poem, small piano forms, impressionist forms, serial music, neo-classical, neo-romantic, minimalist and post minimalist.
  - Critique and discuss musical performances.

- **SLO #3 DEVELOP AN UNDERSTANDING OF THE CHARACTERISTICS OF ART MUSIC IN THE MIDDLE AGES, RENAISSANCE AND BAROQUE ERAS. (P-SLO 2, P-SLO 3, P-SLO 4, P-SLO 5)**
  - Examine the music of each era and analyze their similarities and differences.
  - Compare and differentiate musical examples from each musical era.
  - Investigate the social, religious and political influences of each era on its music.
  - Investigate the relationship between the music of an era and the art, literature, architecture and science of that era.

MUFHL 315 Jazz History

<table>
<thead>
<tr>
<th>Units</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hours</td>
<td>54 hours LEC</td>
</tr>
<tr>
<td>Prerequisite</td>
<td>None.</td>
</tr>
<tr>
<td>Transferable</td>
<td>CSU; UC</td>
</tr>
<tr>
<td>General Education</td>
<td>AA/AS Area I; CSU Area Ct; IGETC Area 3A</td>
</tr>
<tr>
<td>Catalog Date</td>
<td>June 1, 2020</td>
</tr>
</tbody>
</table>

This course is an historical, comprehensive, and comparative listeners survey of the traditions of Jazz music from around the world and in the United States, in which concepts of ethnicity, ethnocentrism, racism, ageism, class differences, and gender issues will be addressed. Guided listening presentations will show how African and early African-American musical traditions have led to the development of various improvisational forms and styles, including Ragtime, Swing, Bebop, Free Jazz, Fusion, and Acid Jazz. Jazz style of the Americas, Asia, Africa, India, and Europe will be covered.
Upon completion of this course, the student will be able to:

- **ACQUIRE AURAL AWARENESS AND SKILLS (SLO #1; PSLO #2).**
  - Compare and contrast styles and sub-genres of Jazz music from the 1890's to the present.
  - Identify, differentiate and categorize instrumental and vocal stylistic characteristics and techniques of various Jazz musicians.

- **ESTABLISH AN HISTORICAL, GEOGRAPHICAL, AND CHRONOLOGICAL CONTEXT OF JAZZ MUSIC (SLO #2; PSLO #3).**
  - Identify the historical, geographical, and social contexts reflected in the Jazz music styles and sub-genres over time throughout the world.
  - Analyze and discuss issues of ethnicity, ethnocentrism, racism, ageism, class differences, and gender, as they relate to Jazz music styles and sub-genres.

- **LEARN AND USE CRITICAL LISTENING SKILLS TO DISCUSS AND CRITIQUE MUSICAL WORKS AND PERFORMANCES (SLO #3; PSLO #4).**
  - Describe and evaluate live and recorded musical performances.
  - Identify and discern differences in the uses of melodic material, rhythm, structure, and musical aesthetics in Jazz music styles and sub-genres.

- **ACQUIRE ANALYTICAL SKILLS AND A CONCEPTUAL FRAMEWORK FOR THE FUTURE (SLO #4; PSLO #5).**
  - Identify and analyze components of a personal aesthetic appreciation for music in one's own life.
  - Formulate, organize and compose a term project.

---

**MUFHL 321 Basic Musicianship**

| Units: | 3 |
| Hours: | 54 hours LEC |
| Prerequisites: | None. |
| Transferable: | CSU; UC (No credit for MUFHL 321 if taken after MUFHL 400.) |
| General Education: | CSU Area C1; IGETC Area 3A |
| C-ID: | C-ID MUS 110 |
| Catalog Date: | June 1, 2020 |

This course is designed as an starting point for students with limited musical experience or for those wishing a basic course prior to enrollment in MUFHL 400. The course concentrates on learning to read and understand (visually, aurally, and kinesthetically) rhythmic, melodic, and harmonic notation, texture and form through keyboard and/or other instruments including voice as a window to music literacy and creativity.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- **SLO #1. STUDENTS WILL DEVELOP A VOCABULARY TO UNDERSTAND BASIC MUSICAL TERMS. (P-SLO 5)**
  - Identify and be able to define basic terminology for music to include descriptions of musical sound and structure and components of printed music.

- **SLO #2. STUDENTS WILL LEARN HOW TO READ MUSIC. (P-SLO 2, P-SLO 5)**
  - Analyze, arrange and perform musical notation to include time, notes, rests, simple and compound meters, time signatures, syncopation, anacrusis, barring of tuplets, staffs and clefs.

- **SLO #3. STUDENTS WILL UNDERSTAND AND BE ABLE TO UTILIZE BASIC MUSIC THEORY. (P-SLO 2, P-SLO 4, P-SLO 5)**
  - Analyze and demonstrate knowledge of pitch relationships. Understand and compose major and minor scales in bass and treble clef using accidentals. Compose major and minor scales using key signatures. Construct the circle of fifths in both major and minor tonalities. Identify and write melodic and harmonic intervals. Identify and construct augmented, major, minor and diminished triads. Diagram and compose musical rhythms.

- **SLO #4. STUDENTS WILL BE ABLE TO PERFORM USING A MUSICAL INSTRUMENT. (P-SLO 1, P-SLO 2, P-SLO 4, P-SLO 5)**
  - Students will acquire and demonstrate skill on the recorder, voice or keyboard by performing. Students will understand and use the piano keyboard layout. Students will vocally perform music rhythms in simple and compound meters.
MUFHL 330 World Music

This course is a comprehensive, comparative listeners' survey of the folk ethnic, dance, and ceremonial music traditions around the world and in the United States, in which concepts of ethnicity, ethnocentrism, racism, ageism, class differences, and gender issues will be addressed. Guided listening presentations will show how traditional forms and styles have led to the urban, professional music popular in many countries today known as "World Beat." Music of the Americas, Africa, Asia, Australasia and Europe will be covered.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- ACQUIRE AURAL AWARENESS AND ENSEMBLE SKILLS (SLO #1; PSLO #2).
- Compare and contrast traditions of music throughout the world.
- Identify, differentiate and categorize stylistic characteristics and musical instruments of various world music traditions.
- ESTABLISH AN HISTORICAL, GEOGRAPHICAL, AND CHRONOLOGICAL CONTEXT OF MUSIC (SLO #2; PSLO #3).
- Identify the historical, geographical, and social contexts reflected in the music of world cultures.
- Discuss issues of ethnicity, ethnocentrism, racism, ageism, class differences, and gender, as they relate to music cultures throughout the world.
- LEARN AND USE CRITICAL LISTENING SKILLS TO DISCUSS AND CRITIQUE MUSICAL WORKS AND PERFORMANCES (SLO #3; PSLO #4).
- Describe and evaluate live and recorded musical performances.
- Identify and discern differences in the uses of melodic material, rhythm, structure, and musical aesthetics in world music cultures.
- ACQUIRE ANALYTICAL SKILLS AND A CONCEPTUAL FRAMEWORK FOR THE FUTURE (SLO #4; PSLO #5).
- Identify and analyze components of a personal aesthetic appreciation for music in one's own life.
- Formulate, organize and compose a term project.

MUFHL 400 Music Theory and Musicianship I

This course is the study of scales, intervals, triads, diatonic harmonies, part writing, rhythms, sight singing, ear training, dictation, history and performance. Analysis and composition will be taught. Reading music is a requirement for this course. This course is required for music majors.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- DEVELOP A FRAMEWORK FOR HEARING, UNDERSTANDING AND IDENTIFYING THE CONSTRUCTION OF INTERVALS AND SCALES. (SLO #1) (PSLO # 2)
- Identify, write and analyze intervals, chromatic scales, major scales and all forms of the minor scales. (P-SLO2)
- TRANPOSE A GIVEN MELODY TO ANY SPECIFIED KEY. (SLO #1) (PSLO # 2)
Based on the Student Learning Outcomes:

- Formulate a vocabulary to analyze basic harmonic structures and compose melodies to them.
- Critique and understand the relationship between triads and keys using Roman numerals, proper names, and popular chord symbols. Assess and understand the structure of tonality and the relationship between primary and secondary triads. Understand and compose melodies to basic opening and closing progressions.
- Identify and compose using simple and compound meters.
- Analyze and formulate triads, dominant seventh chords in homophonic music and four-part harmony.
- Analyze and voice triads and dominant seventh chords into four parts using open and closed structure, using proper doubling and figured bass symbols. Understand the historical development of the use of figured bass at the beginning of the common practice period (1600-1900) and its common use in Baroque Era cultures.
- Identify phrases and periods in notated music. Understand how these are used in different styles and diverse cultures.
- Write and analyze four-part harmony realizing figured bass symbols.
- Analyze four part harmony in root position and all inversions using Roman numerals and contemporary chord symbols. Students will write four part harmony using correct voice leading techniques in root position and all inversions.
- Understand melodic contour and musical cadences.
- Analyze and compose half, authentic, deceptive, plagal, and phrygian.
- Analyze and compose perfect and imperfect cadences.
- Analyze and compose suspensions.
- Critique music of different styles, genres, cultures, and periods of music.
- Demonstrate the ability to hear music with understanding, recognizing patterns and musical function.
- Aurally identify all intervals up to the octave: ascending, descending, and harmonic.
- Aurally identify qualities, inversions, and soprano notes of triads and aurally identifying dominant 7th chords.
- Take dictation of melodies featuring leaps within the primary triads.
- Take dictation of rhythms with divided beats in a variety of meter signatures and tempi.
- Demonstrate the ability to "audiate" a musical score.
- Perform rhythms with divided beats in a variety of meters and tempi.
- Sight sing melodies featuring leaps within the primary triads.

**MUFHL 401 Music Theory and Musicianship II**

**Units:** 4

**Hours:** 54 hours LEC; 54 hours LAB

**Prerequisite:** MUFHL 400 with a grade of "C" or better

**Corequisite:** MUIVI 341

**Transferable:** CSU; UC

**Catalog Date:** June 1, 2020

With an emphasis on the study of scales, intervals, triads, diatonic harmonies, part writing, rhythms, sight singing, ear training, dictation, history, and performance, this course includes analysis and composition. This course is required for music majors. Students may wish to challenge the prerequisite on the basis of equivalent experience.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- be thoroughly familiar with major, minor, modal, chromatic and whole tone scales; recognize them when played or sung and be able to sing them.
- understand the components of melody, be able to write a variety of types for various instruments involving motive, theme, phrase member, period, double period, song forms and various modifications.
understand voice ranges and instrumental ranges, non-transposing and transposing instruments and write for various instrumental and vocal combinations.

write in four part choral style primarily in root position but also in first and second inversions.

understand major-minor dominant seventh chords; leading tone seventh chords; modulation; non-dominant seventh chords; secondary dominants; chord symbols used in American popular song, blues, boogie and jazz.

MUFHL 402 Music Theory I

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Corequisite: MUFHL 403
Enrollment Limitation: Basic piano proficiency is required for this course. Proficiency may be demonstrated by audition or concurrent enrollment in MUIVI 340.
Transferable: CSU; UC
C-ID: C-ID MUS 120
Catalog Date: June 1, 2020

This course, through guided composition and analysis, incorporates the following concepts: rhythm and meter; basic properties of sound; intervals; diatonic scales and triads; diatonic chords; basic cadential formulas and phrase structure; dominant seventh; figured bass symbols; and non-harmonic tones. Students will understand the relationship and use of music theory in relationship to cultural and historical periods including its relationship in different musical styles and cultures. Development of skills in handwritten notation and computer notation is expected. The ability to read music is required for this course. Basic piano proficiency is required and may be passed by exam or concurrent enrollment in MUIVI 340 (Beginning Piano). This course is required for the AA and AA-T degrees in music.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- DEVELOP A FRAMEWORK FOR HEARING, UNDERSTANDING AND IDENTIFYING THE CONSTRUCTION OF INTERVALS AND SCALES. (SLO #1) (PSLO # 2)
- Identify, write and analyze intervals, chromatic scales, major scales and all forms of the minor scales. (P-SLO2)
- TRANSPOSE A GIVEN MELODY TO ANY SPECIFIED KEY. (SLO #1) (PSLO # 2)
- FORMULATE A VOCABULARY TO ANALYZE BASIC HARMONIC STRUCTURES AND COMPOSE MELODIES TO THEM. (SLO #2) (P-SLO #4,5)
- Critique and understand the relationship between triads and keys using roman numerals, proper names and popular chord symbols. Assess and understand the structure of tonality and the relationship between primary and secondary triads. Understand and compose melodies to basic opening and closing progressions.
- identify and compose using simple and compound meters.
- ANALYZE AND FORMULATE TRIADS, DOMINANT SEVENTH CHORDS IN HOMOPHONIC MUSIC AND FOUR PART HARMONY. (SLO #3) (P-SLO #4,5)
  - Analyze and voice triads and dominant seventh chords into four parts using open and closed structure, using proper doubling and figured bass symbols. Understand the historical development of the use of figured bass at the beginning of the common practice period (1600-1900) and its common use in Baroque Era cultures.
  - Identify phrases and periods in notated music. Understand how these are used in different styles and diverse cultures.
- WRITE AND ANALYZE FOUR PART HARMONY REALIZING FIGURED BASS SYMBOLS. (SLO #4) (P-SLO #4, 5)
  - Analyze four part harmony in root position and all inversions using roman numerals and contemporary chord symbols. Students will write four part harmony using correct voice leading techniques in root position and all inversions.
  - UNDERSTAND MELODIC COUNTERPART AND MUSICAL CADENCES. (SLO #2) (PSLO # 2, 3, 4 & 5)
- Compose melodies using a contour technique adding harmony after the melody has been written.
- Analyze and compose half, authentic, deceptive, plagal and phrygian.
  - Analyze and compose perfect and imperfect cadences
  - Analyze and compose suspensions.
- CRITIQUE MUSIC OF DIFFERENT STYLES, GENRES, CULTURES AND PERIODS OF MUSIC. (PSLO # 2, 3, 4 & 5)
MUFHL 403 Musicianship I

This course applies and develops the rhythmic, melodic, and harmonic materials of Music Theory I through ear training, sight singing, analysis, and dictation.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- **DEMONSTRATE THE ABILITY TO HEAR MUSIC WITH UNDERSTANDING, RECOGNIZING PATTERNS AND MUSICAL FUNCTION (P-SLO 1, P-SLO 2, P-SLO 5).**
  - Aurally identify all intervals up to the octave: ascending, descending, and harmonic.
  - Aurally identify qualities, inversions, and soprano notes of triads and aurally identifying dominant 7th chords.
  - Take dictation of melodies featuring leaps within the primary triads.
  - Take dictation of rhythms with divided beats in a variety of meter signatures and tempi.
- **DEMONSTRATE THE ABILITY TO "AUDIATE" A MUSICAL SCORE (P-SLO 1, P-SLO 2, P-SLO 5).**
  - Perform rhythms with divided beats in a variety of meters and tempi.
  - Sight sing melodies featuring leaps within the primary triads.

MUFHL 404 Music Theory II

This course incorporates the concepts from Music Theory I. In addition, through guided composition and analysis, the course will include: an introduction to two-part counterpoint; voice leading involving four-part chorale writing; diatonic harmony; and an introduction to secondary/applied chords and modulation. Basic piano proficiency is required and may be passed by exam or concurrent enrollment in MUIVI 341. The course is required for the AA and AA-T degrees in Music.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- **UNDERSTAND FOUR PART HARMONY IN ALL INVERSIONS USING SEVENTH CHORDS AND DIATONIC NON-HARMONIC TONES. (SLO #1) (PSLO #2, 3, 4 & 5)**
  - Analyze four part writing identifying inversions, proper resolution of active tones in seventh chords concentrating on the dominant seventh and diatonic non-harmonic tones.
  - Compose in four part writing using all inversions, correct voice leading including seventh chords, their active tones and diatonic non-harmonic tones.
- **UNDERSTAND MELODIC COUNTOUR AND MUSICAL CADENCES. (SLO #2) (PSLO # 2, 3, 4 & 5)**
  - Compose melodies using a contour technique adding harmony after the melody has been written.
  - Analyze and compose half, authentic, deceptive, plagal and Phrygian cadences.
  - Analyze and compose perfect and imperfect cadences.
Analyze and compose suspensions.

UNDERSTAND HARMONIC PROGRESSION AND THE TECHNIQUE OF HARMONIZATION. (SLO #3) (PSLO #2, 3, 4 & 5)

Analyze root movement, progressions and retrogressions.

Explain the difference between structural and embellishing harmony.

Compose phrases using given harmonic progressions.

Create harmonic progressions and compose melodies.

Compose and identify cadences to fit melodic lines.

Compose and identify structural harmony to fit a melodic line; then add embellishing harmony to that work.

MUFHL 405 Musicianship II

Units: 1
Hours: 54 hours LAB
Prerequisite: MUFHL 402 and 403 with grades of "C" or better
Advisory: MUFHL 404 and MUIVI 341; Skills developed concurrently in Music Theory II (MUFHL 404) and Piano II (MUIVI 341) are advised for success in Musicianship II (MUFHL 405).
Transferable: CSU; UC
C-ID: C-ID MUS 135
Catalog Date: June 1, 2020

This course applies and develops the rhythmic, melodic, and harmonic materials of Music Theory II through ear training, sight singing, analysis, and dictation.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- DEMONSTRATE THE ABILITY TO HEAR MUSIC WITH UNDERSTANDING, RECOGNIZING PATTERNS AND MUSICAL FUNCTION (P-SLO 1, P-SLO 2, P-SLO 5).
- Take dictation of melodies in major and minor keys featuring leaps from I, IV, V and V7 chords.
- Take dictation of rhythms with subdivided beats in simple and compound meters.
- Take harmonic dictation of common diatonic progressions with inversions, writing outer voices and Roman Numerals.
- DEMONSTRATE THE ABILITY TO "AUDIATE" A MUSICAL SCORE (P-SLO 1, P-SLO 2, P-SLO 5).
- Sight read and perform rhythms with subdivided beats in simple and compound meters.
- Sight sing melodies in major and minor keys featuring leaps from the I, IV, V and V7 chords.

MUFHL 410 Music Theory and Musicianship III

Units: 4
Hours: 54 hours LEC; 54 hours LAB
Prerequisite: MUFHL 401 with a grade of "C" or better
Corequisite: MUIVI 350 or 351
Transferable: CSU; UC
Catalog Date: June 1, 2020

This is the third course of a four course cycle. This course focuses on the study of scales, intervals, triads, seventh chords, diatonic harmonies, part writing, phrase structures, cadences, non-harmonic tones, harmonic progressions, harmonization, rhythms, sight singing, ear training, dictation, history and performance. Analysis and composition skills will be taught. Required for music majors. Students may wish to challenge the prerequisite on the basis of equivalent experience. This course is required for music majors.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- UNDERSTAND FOUR PART HARMONY IN ALL INVERSIONS USING SEVENTH CHORDS, SECONDARY DOMINANTS, DIATONIC AND NON-DIATONIC NON-HARMONIC TONES. (SLO #1) (PSLO #2, 3, 4 & 5)
- Analyze four-part writing identifying inversions, proper resolution of active tones in dominant and non-dominant seventh chords.
- Compose in four-part writing using all inversions, correct voice leading including seventh chords, secondary dominants, their active tones and both diatonic and non-diatonic tones.
- Compose using altered non-harmonic tones and secondary dominants.
- UNDERSTAND MODULATION TO CLOSELY RELATED KEYS. (SLO #2) (PSLO #2, 3, 4 & 5)
  - Analyze modulation to closely related keys using common chord, chromatic and phrase modulation.
  - Compose modulations to closely related keys using common chord, chromatic and phrase modulation.
- UNDERSTAND THE USE OF BORROWED CHORDS. (SLO #3) (PSLO #2, 3, 4 & 5)
  - Identify and construct borrowed chords.
  - Analyze compositions containing borrowed chords.
  - Harmonize melodies using borrowed chords.
- GAIN A CONCEPTUAL AND AURAL FRAMEWORK FOR THE RECOGNITION AND PERFORMANCE OF MELODIC AND HARMONIC INTERVALS. (SLO #5) (P-SLO 1,2)
  - Analyze and sing Major, Minor, Diminished, and Augmented melodic intervals.
  - Analyze Major, Minor, Diminished, and Augmented harmonic intervals.
- GAIN PROFICIENCY USING THE SOLFEGE SINGING SYSTEM (SLO #6) (P-SLO 1,2)
  - Sing prepared and sight-read melodies using the Solfege system in major and minor modes.
  - Sing prepared and sight read duets using the Solfege system in major and minor modes.
- DEVELOP SINGING SKILLS. (SLO #7) (P-SLO 1,2)
  - Prepare and sight sing melodies, duets, and multi-part music with their fellow students.
  - Sing transposed melodies.
- DEVELOP AURAL SKILLS (SLO #8) (P-SLO 1,2)
  - Analyze and successfully dictate rhythms.
  - Analyze and successfully dictate melodies.
  - Analyze and successfully dictate harmonic progressions.
- GAIN PROFICIENCY IN SINGING MELODIES WHILE PERFORMING AN INDEPENDENT PART ON THE KEYBOARD. (SLO #9) (P-SLO 1)
  - Sing a vocal line while playing an independent piano part on a piano or keyboard.

MUFHL 411 Music Theory and Musicianship IV

<table>
<thead>
<tr>
<th>Units:</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hours:</td>
<td>54 LEC, 54 LAB</td>
</tr>
<tr>
<td>Prerequisite:</td>
<td>MUFHL 410 with a grade of &quot;C&quot; or better</td>
</tr>
<tr>
<td>Advisory:</td>
<td>Concurrent enrollment in MUIVI 351</td>
</tr>
<tr>
<td>Transferable:</td>
<td>CSU; UC</td>
</tr>
<tr>
<td>Catalog Date:</td>
<td>June 1, 2020</td>
</tr>
</tbody>
</table>

This is the fourth course of a four course cycle. This course focuses on techniques used in the 19th century to the beginning of the 20th century and includes techniques used in the baroque through impressionist eras. Major topics include borrowed chords; augmented sixth chords; Neapolitan sixth chords; altered dominants; altered diminished seventh chords; chromatic mediants; modulation to foreign keys; and ninth, eleventh and thirteenth chords. Analysis and composition skills will be taught. Musicianship skills will be taught including sight singing and ear training of advanced rhythms, melodies and harmonic progressions. This course is required for music majors.

Student Learning Outcomes

Upon completion of this course, the student will be able to:
MUFHL 412 Music Theory III

Units: 3
Hours: 54 hours LEC
Prerequisite: MUFHL 404 with a grade of "C" or better
Transferable: CSU; UC
C-ID: C-ID MUS 140
Catalog Date: June 1, 2020

This course incorporates the concepts from Music Theory II. In addition, through writing and analysis, the course will include: introduction to chromatic harmony; secondary/applied chords; modulation; borrowed chords; introduction to Neapolitan and augmented-sixth chords. This course is required for the AA and AA-T degree in music.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- **UNDERSTAND SECONDARY/APPLIED CHORDS (DOMINANT AND FULLY DIMINISHED) SEVENTH CHORDS IN ROOT POSITION AND INVERSION, BORROWED/MIXTURE CHORDS (SECONDARY AND DOUBLE) IN ROOT POSITION AND INVERSION. (SLO #1) (PSLO #2, 3, 4 & 5)
  - Analyze secondary/applied chords and seventh chords, borrowed/mixture chords (secondary and double) in root position and inversion.
  - Compose secondary/applied chords and seventh chords, borrowed/mixture chords (secondary and double) in root position and inversion.

- **UNDERSTAND SECONDARY APPLIED SEVENTH CHORDS, BORROWED MIXTURE CHORDS, DIATONIC AND MODULATING SEQUENCES. (SLO #1) (PSLO #2, 3, 4 & 5)
  - Harmonize a given melody using secondary applied seventh chords, borrowed mixture chords, diatonic and modulating sequences.
  - Conduct harmonic analysis of music using secondary applied seventh chords, borrowed mixture chords, diatonic and modulating sequences.

- **UNDERSTAND BINARY AND TERNARY FORMS. (SLO #1) (PSLO #2, 3, 4 & 5)
  - Conduct formal analysis of music which uses binary and ternary forms.
MUFHL 413 Musicianship III

Units: 1  
Hours: 54 hours LAB  
Prerequisite: MUFHL 404 and 405 with grades of "C" or better  
Advisory: MUFHL 412; Skills developed concurrently in Music Theory III (MUFHL 412) and in piano study are advised for success in Musicianship III (MUFHL 413).  
Transferable: CSU; UC  
C-ID: C-ID MUS 145  
Catalog Date: June 1, 2020

This course applies and develops the rhythmic, melodic, and harmonic materials of Music Theory III through ear training, sight singing, analysis, and dictation.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- DEMONSTRATE THE ABILITY TO HEAR MUSIC WITH UNDERSTANDING, RECOGNIZING PATTERNS AND MUSICAL FUNCTION (P-SLO 1, P-SLO 2, P-SLO 5).
- Take dictation of rhythms with triplets/duplets and syncopation in simple and compound meter signatures.
- Take dictation of melodies in major and minor keys with triplets/duplets, syncopation, chromatic alterations, and modulation to closely-related keys.
- Aurally identify and transcribing 4-part harmonic progressions utilizing secondary/applied chords.
- DEMONSTRATE THE ABILITY TO "AUDIATE" A MUSICAL SCORE (P-SLO-1, P-SLO 2, P-SLO 5).
- Sight read and perform rhythms with triplets/duplets and syncopation in simple and compound meters.
- Prepare and sight sing melodies with triplets/duplets, syncopation, chromatic alterations, and modulation to closely-related keys.

MUFHL 414 Music Theory IV

Units: 3  
Hours: 54 hours LEC  
Prerequisite: MUFHL 412 with a grade of "C" or better  
Transferable: CSU; UC  
C-ID: C-ID MUS 150  
Catalog Date: June 1, 2020

This course incorporates the concepts from Music Theory III. In addition, through writing and analysis, the course will include: post-Romantic techniques such as borrowed chords and modal mixture, chromatic mediants, Neapolitan and augmented-sixth chords, 9th, 11th and 13th chords, altered chords and dominants; and 20th century techniques such as: Impressionism, tone rows, set theory, pandiatomicism and polytonalism, meter and rhythm.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- UNDERSTAND BORROWED CHORDS AND MODAL MIXTURE IN ROOT POSITION AND INVERSION. (SLO #1) (PSLO #2, 3, 4 & 5)
- Analyze borrowed/mixture chords (secondary and double) in root position and inversion.
- Compose borrowed/mixture chords (secondary and double) in root position and inversion.
- UNDERSTAND CHROMATIC MEDIANTS. (SLO #1) (PSLO #2, 3, 4 & 5)
- Analyze chromatic mediants in root position and inversion.
- Compose chromatic mediants in root position and inversion.
- UNDERSTAND NEAPOLITAN AND AUGMENTED SIXTH CHORDS IN ROOT POSITION AND INVERSION. (SLO #1) (PSLO #2, 3, 4 & 5)
- Analyze neapolitan and augmented sixth chords in root position and inversion.
- Compose neapolitan and augmented sixth chords in root position and inversion.
- UNDERSTAND 9TH, 11TH, AND 13TH CHORDS IN ROOT POSITION AND INVERSION. (SLO #1) (PSLO #2, 3, 4 & 5)
Analyze 9th, 11th, and 13th chords in root position and inversion. 9th, 11th, and 13th chords

Compose 9th, 11th, and 13th chords in root position and inversion. 9th, 11th, and 13th chords

UNDERSTAND ALTERED CHORDS AND DOMINANTS IN ROOT POSITION AND INVERSION. (SLO #1) (PSLO #2,3,4 & 5)

Analyze altered chords and dominants in root position and inversion. 9th, 11th, and 13th chords

Compose altered chords and dominants in root position and inversion. 9th, 11th, and 13th chords

UNDERSTAND ENHARMONIC REINTERPRETATION AND MODULATION. (SLO #1) (PSLO #2,3,4 & 5)

Analyze enharmonic reinterpretation and modulation

Compose enharmonic reinterpretation and modulation

UNDERSTAND 20TH CENTURY TECHNIQUES SUCH AS: IMPRESSIONISM, TONE ROWS, SET THEORY, PANDIATONICISM AND POLYTONALISM, ADVANCED APPROACHES TO METER AND RHYTHM (SLO #1) (PSLO #2,3,4 & 5)

Analyze 20th century techniques such as: Impressionism, tone rows, set theory, pandiatomicism and polytonalism, advanced approaches to meter and rhythm

Compose 20th century techniques such as: Impressionism, tone rows, set theory, pandiatomicism and polytonalism, advanced approaches to meter and rhythm

**MUFHL 415 Musicianship IV**

- **Units:** 1
- **Hours:** 54 hours LAB
- **Prerequisite:** MUFHL 412 with a grade of "C" or better
- **Advisory:** MUFHL 414; Skills developed concurrently in Music Theory IV (MUFHL 414) together with continued piano study are advised for success in Musicianship IV. (Piano study may be obtained by enrollment in a CRC piano class, or by individual instruction.)
- **Transferable:** CSU; UC
- **C-ID:** C-ID MUS 155
- **Catalog Date:** June 1, 2020

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- DEMONSTRATE THE ABILITY TO HEAR MUSIC WITH UNDERSTANDING, RECOGNIZING PATTERNS AND MUSICAL FUNCTION (P-SLO 1, P-SLO 2, P-SLO 5).
- Aurally identify and sing the diatonic modes (Ionian, Dorian, Phrygian, Lydian, Mixolydian, Aeolian, and Locrian).
- Take dictation of chromatic, modulating (especially to distantly-related keys), modal, and post-tonal melodies.
- Take dictation of rhythms featuring irregular beat divisions and polyrhythms and/or in asymmetrical or mixed meters.
- Aurally identify and transcribe harmonic progressions utilizing secondary/applied chords, mode mixture, non-dominant 7th chords, Neapolitan and augmented 6th chords, extended and altered chords, and modulation to distantly-related keys.
- DEMONSTRATE THE ABILITY TO "AUDIATE" A MUSICAL SCORE (P-SLO 1, P-SLO 2, P-SLO 5).
- Sight read and perform rhythms featuring irregular beat divisions and polyrhythms and/or in asymmetrical or mixed meters.
- Prepare and sight sing chromatic, modulating (especially to distantly-related keys), modal, and post-tonal melodies.

**MUFHL 416 Studies in Contemporary Composition**

Techniques, Performance, and Literature
This course focuses on the creation, performance, and literature of 20th and 21st Century concert music. Students will both create original works and analyze existing compositions as we research trends in art and music. This class will focus primarily on music as it developed and evolved from the European classical tradition and took new shape in the Americas. Topics may include: European classical music heritage, American classical and art music, jazz, film music, European avant garde, world music, and minimalism.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- DEVELOP A CLEAR UNDERSTANDING OF THE EUROPEAN CLASSICAL TRADITION. (SLO #1) (PSLO #3, 4 & 5)
- Discuss and analyze representative concert music composers
- DEVELOP A CLEAR UNDERSTANDING OF THE 20TH CENTURY TRENDS IN CONCERT MUSIC. (SLO #1) (PSLO #3, 4 & 5)
- Analyze and assess scores by representative 20th Century composers that contain unique and forward thinking harmonic components.
- Analyze and assess scores by representative 20th Century composers that contain unique and forward thinking rhythmic components.
- UNDERSTAND THE INFLUENCE OF POPULAR MUSIC ON 20TH CENTURY CONCERT MUSIC. (SLO #1) (PSLO #3, 4 & 5)
- Research and discuss jazz, ragtime, and tin pan alley composers
- UNDERSTAND POST-MODERN TRENDS IN ART AND MUSIC, PARTICULARLY AS THEY RELATE TO MINIMALISM IN MUSIC. (SLO #1) (PSLO #3, 4 & 5)
- Analyze and discuss musical scores and biographical elements of representative minimalist composers and artists
- UNDERSTAND COMMON 20TH CENTURY TECHNIQUES AS THEY APPEAR IN COMPOSITIONS. (SLO #1) (PSLO #3, 4 & 5)
- Create and perform original musical compositions that integrate key elements of 20th Century concert music.

MUFHL 420 Beginning Jazz Theory

This course introduces the elements of jazz theory including harmonic, melodic and formal analysis in the jazz idiom.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- apply chord symbol notation in written form.
- apply melodic and harmonic techniques to an instrument.
- analyze melodic, harmonic and formal elements of jazz compositions.
- synthesize melodic, harmonic and formal elements of jazz into original compositions arrangements.
- recognize common techniques used in the jazz idiom through ear-training exercises.

MUFHL 421 Advanced Jazz Theory

This course introduces the elements of jazz theory including harmonic, melodic and formal analysis in the jazz idiom.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- apply chord symbol notation in written form.
- apply melodic and harmonic techniques to an instrument.
- analyze melodic, harmonic and formal elements of jazz compositions.
- synthesize melodic, harmonic and formal elements of jazz into original compositions arrangements.
- recognize common techniques used in the jazz idiom through ear-training exercises.
This course provides a continuation of jazz concepts presented in MUFHL 420. The emphasis will be advanced elements of jazz theory including harmonic, melodic and formal analysis in the jazz idiom.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- apply reharmonization concepts to jazz compositions.
- apply melodic and harmonic techniques to an instrument.
- analyze advanced melodic, harmonic and formal elements of jazz compositions.
- synthesize melodic, harmonic and formal elements of jazz into original compositions arrangements.
- recognize common techniques used in the jazz idiom through ear-training exercises.

MUFHL 495 Independent Studies in Music Fundamentals/History and Literature

An independent studies project involves an individual student or small group of students in study, research, or activities beyond the scope of regularly offered courses. See the current catalog section of “Special Studies” for full details of Independent Studies.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO #1: Actively engage in intellectual inquiry beyond that required in order to pass a course of study (College Wide Learning Outcome – Area 4).
- Discuss and outline a proposal of study (that can be accomplished within one semester term) with a supervising instructor qualified within the discipline.
- Design an independent study (to be completed individually or by collaboration of a small group) to foster special knowledge, skills, and experience that are not available in any one regularly scheduled course.
- Use information resources to gather discipline-specific information.
- SLO #2: Utilize modes of analysis and critical thinking to apply theoretical perspectives and/or concepts in the major discipline of study to significant problems and/or educational activities (College Wide Learning Outcome – Area 3).
- Analyze and apply the knowledge, skills and experience that are involved in the independent study to theoretical perspectives and/or concepts in the major discipline of study.
- Explain the importance of the major discipline of study in the broader picture of society.
- SLO #3: Communicate a complex understanding of content matter of the major discipline of study (College Wide Outcome – Area 3).
- Demonstrate competence in the skills essential to mastery of the major discipline of study that are necessary to accomplish the independent study.
- SLO #4: Identify personal goals and pursue these goals effectively (College Wide Outcome – Area 4).
- Utilize skills from the “academic tool kit” including time management, study skills, etc., to accomplish the independent study within one semester term.
Music - Instrumental/Voice Instruction (MUIVI)

MUIVI 310 Voice Class I

Units: 2
Hours: 36 hours LEC; 18 hours LAB
Course Family: Traditional Voice Fundamentals
Prerequisite: None
Transferable: CSU; UC
General Education: CSU Area C1
Catalog Date: June 1, 2020

Students will experience basic training in the correct use of the singing voice, vocal techniques, and repertoire. This course is strongly recommended for vocal majors, but open to all students desiring to begin the study of voice.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- INCORPORATE PROPER VOCAL TECHNIQUE TO THE INDIVIDUAL SINGING VOICE (SLO #1).
- Identify and express vocal technique to the singing voice in such elements, but not limited to, as posture, breathing, tone production, diction, stage development, memorization and interpretation.
- Name and recall the parts of the body utilized in singing.
- TRANSLATE AND PARAPHRASE FOREIGN LANGUAGE TEXTS TO ENGLISH (SLO #2).
- ANALYZE AND DIAGNOSE PERSONAL WEAKNESSES IN VOCAL TECHNIQUE (SLO #3).
- Conduct a self-evaluation to analyze and diagnose areas for improvement while identifying proper vocal technique.
- ASSESS AND EVALUATE INDIVIDUAL MUSICAL PERFORMANCE AND THAT OF STUDENT PEERS (SLO #4).
- Recognize and model constructive feedback pertaining to vocal technique in the singing voice and towards the overall musical performance of peers and one's self.

MUIVI 311 Voice Class II

Units: 2
Hours: 36 hours LEC; 18 hours LAB
Course Family: Traditional Voice Fundamentals
Prerequisite: MUIVI 310 with a grade of "C" or better
Transferable: CSU; UC
General Education: CSU Area C1
Catalog Date: June 1, 2020

Students will experience basic training in the correct use of the singing voice, vocal techniques, and repertoire. This course is strongly recommended for vocal majors, but open to all students desiring to begin the study of voice.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- INCORPORATE PROPER VOCAL TECHNIQUE TO THE INDIVIDUAL SINGING VOICE, BUILDING UPON INDIVIDUAL TECHNIQUE FROM MUIVI 310 (SLO #1).
- Identify and express vocal technique to the singing voice in such elements, but not limited to, as posture, breathing, tone production, diction, stage development, memorization and interpretation.
- Name and recall the parts of the body utilized in singing.
- TRANSLATE AND PARAPHRASE FOREIGN LANGUAGE TEXTS TO ENGLISH (SLO #2).
- ANALYZE AND DIAGNOSE PERSONAL WEAKNESSES IN VOCAL TECHNIQUE (SLO #3).
- Perform musical selections to a live audience (in class, or in optional public performances).
- Conduct a self-evaluation to analyze and diagnose areas for improvement while identifying proper vocal technique.
- ASSESS AND EVALUATE INDIVIDUAL MUSICAL PERFORMANCE AND THAT OF STUDENT PEERS (SLO #4).
Recognize and model constructive feedback pertaining to vocal technique in the singing voice and towards the overall musical performance of peers and one's self.

MUIVI 320 Voice Class III

<table>
<thead>
<tr>
<th>Units:</th>
<th>2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hours:</td>
<td>36 hours LEC; 18 hours LAB</td>
</tr>
<tr>
<td>Course Family:</td>
<td>Traditional Voice Technique and Repertoire (<a href="http://crc.losrios.edu/course-families#id_100050">http://crc.losrios.edu/course-families#id_100050</a>)</td>
</tr>
<tr>
<td>Prerequisite:</td>
<td>MUIVI 311 with a grade of &quot;C&quot; or better;</td>
</tr>
<tr>
<td>Transferable:</td>
<td>CSU; UC</td>
</tr>
<tr>
<td>Catalog Date:</td>
<td>June 1, 2020</td>
</tr>
</tbody>
</table>

This course provides opportunity for vocal exercise and intellectual analysis in the development of efficient singing technique and skill in performing vocal literature. Performance in class and in recital is essential. The course is strongly recommended for vocal majors. Students may wish to challenge the prerequisite on the basis of equivalent experience.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- INCORPORATE PROPER VOCAL TECHNIQUE TO THE INDIVIDUAL SINGING VOICE, BUILDING UPON INDIVIDUAL TECHNIQUE FROM MUIVI 311 (SLO #1).
- Identify and express vocal technique to the singing voice in such elements, but not limited to, as posture, breathing, tone production, diction, stage development, memorization and interpretation.
- Name and recall the parts of the body utilized in singing.
- TRANSLATE AND PARAPHRASE FOREIGN LANGUAGE TEXTS TO ENGLISH (SLO #2).
- ANALYZE AND DIAGNOSE PERSONAL WEAKNESSES IN VOCAL TECHNIQUE (SLO #3).
- Conduct a self-evaluation to analyze and diagnose areas for improvement while identifying proper vocal technique.
- ASSESS AND EVALUATE INDIVIDUAL MUSICAL PERFORMANCE AND THAT OF STUDENT PEERS (SLO #4).
- Recognize and model constructive feedback pertaining to vocal technique in the singing voice and towards the overall musical performance of peers and one's self.
- PERFORM MUSICAL SELECTIONS EFFECTIVELY TO A LIVE AUDIENCE (SLO #5).
- Prepare and perform musical selections per an assigned art song repertoire.

MUIVI 321 Voice Class IV

<table>
<thead>
<tr>
<th>Units:</th>
<th>2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hours:</td>
<td>36 hours LEC; 18 hours LAB</td>
</tr>
<tr>
<td>Course Family:</td>
<td>Traditional Voice Technique and Repertoire (<a href="http://crc.losrios.edu/course-families#id_100050">http://crc.losrios.edu/course-families#id_100050</a>)</td>
</tr>
<tr>
<td>Prerequisite:</td>
<td>MUIVI 320 with a grade of &quot;C&quot; or better</td>
</tr>
<tr>
<td>Transferable:</td>
<td>CSU; UC</td>
</tr>
<tr>
<td>Catalog Date:</td>
<td>June 1, 2020</td>
</tr>
</tbody>
</table>

This course provides opportunity for vocal exercise and intellectual analysis in the development of efficient singing technique and skill in performing vocal literature. Performance in class and in recital is essential. The course is strongly recommended for vocal majors. Students may wish to challenge the prerequisite on the basis of equivalent experience.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- INCORPORATE PROPER VOCAL TECHNIQUE TO THE INDIVIDUAL SINGING VOICE, BUILDING UPON SKILLS IN MUIVI 320 (SLO #1).
- Identify and express vocal technique to the singing voice in such elements, but not limited to, as posture, breathing, tone production, diction, stage development, memorization and interpretation.
- Name and recall the parts of the body utilized in singing.
- TRANSLATE AND PARAPHRASE FOREIGN LANGUAGE TEXTS TO ENGLISH (SLO #2).
ANALYZE AND DIAGNOSE PERSONAL WEAKNESSES IN VOCAL TECHNIQUE (SLO #3).

Conduct a self-evaluation to analyze and diagnose areas for improvement while identifying proper vocal technique.

ASSESS AND EVALUATE INDIVIDUAL MUSICAL PERFORMANCE AND THAT OF STUDENT PEERS (SLO #4).

Recognize and model constructive feedback pertaining to vocal technique in the singing voice and towards the overall musical performance of peers and one’s self.

PERFORM MUSICAL SELECTIONS EFFECTIVELY TO A LIVE AUDIENCE (SLO #5).

Prepare and perform musical selections per an assigned art song repertoire.

MUIVI 340 Beginning Piano

Units: 2
Hours: 36 hours LEC; 18 hours LAB
Prerequisite: None.
Transferable: CSU; UC
General Education: CSU Area C1
Catalog Date: June 1, 2020

Course is based on conceptual learning which is transferable to all areas of music study. Group activities include ear training, repertoire, sight reading and transposition, technique, improvisation, and written work. Goals are literacy and creativity in music through keyboard application. Recommended for all music majors, pre-school and elementary teachers, and required for non-keyboard music majors.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- develop literacy and creativity in music through keyboard study.

MUIVI 341 Piano II

Units: 2
Hours: 36 hours LEC; 18 hours LAB
Course Family: Traditional Piano Fundamentals
Prerequisite: MUIVI 340 with a grade of "C" or better; or have beginning training in playing piano, determined by the professor per an evaluation for the level of proficiency.
Transferable: CSU; UC
General Education: CSU Area C1
Catalog Date: June 1, 2020

This is the second in a series of four consecutive group piano classes - successful completion of MUIVI 340 with a "C" or better or a comparable experience is required for enrollment. Students will learn ensemble and solo works, acquire basic rhythmic skills, and will develop fundamental keyboard and music theory skills beyond the major and minor five-note patterns. This course is designed for both music majors planning to transfer as well as for students who are studying primarily for personal enjoyment. Specific skills students will develop include sight reading, improvising, listening skills, primary root position triads, hand-over-hand major and minor arpeggios, intervals, fingering, notation, time signatures, dynamics, basic harmonization, major key signatures, and various methods of tone production.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- READ AND ANALYZE MUSIC PROFICIENTLY IN TREBLE AND BASS CLEFS. (SLO #1) (P-SLO #5, 6)
- Evaluate and play two octaves scales in C, G, D, F, and Bb (hands separate and together). Identify intervals visually and aurally.
- Perform and analyze root position triads and the basic I-IV-I-V7-I harmonic progression in C, G, D, A, and E.
- ANALYZE AND PERFORM BASIC PIANO PIECES CONSISTING OF INDEPENDENT PARTS IN BOTH HANDS (SLO #2) (P-SLO #2)
- Practice and perform basic piano pieces in front of peers.
- DEMONSTRATE BASIC SIGHT-READING SKILLS. (SLO #3) (P-SLO #1, 4)
- Perform sight-reading exercises in groups and as a whole.
- REHEARSE AND PERFORM DUETS AND ENSEMBLE PIECES. (SLO #4) (P-SLO #2)
MUIVI 350 Intermediate Piano

This is the third in a series of four consecutive group piano classes - successful completion of MUIVI 341 with a 'C' or better (or a comparable experience) is required for enrollment. Students will learn ensemble and solo works, develop more complex rhythmic skills, and will develop fundamental keyboard and music theory skills beyond the major and minor five-note patterns. This course is designed for both music majors planning to transfer as well as for students who are studying primarily for personal enjoyment. Specific skills students will develop include sight reading, improvising, listening skills, primary root position triads, hand-over-hand major and minor arpeggios, intervals, fingering, notation, time signatures, dynamics, basic harmonization, major key signatures, and various methods of tone production.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- READ AND ANALYZE MUSIC PROFICIENTLY IN TREBLE AND BASS CLEFS. (SLO #1) (P-SLO #5, 6)
- Evaluate and play three octaves scales in all major scales (hands together). Identify intervals visually and aurally.
- Perform and analyze root position triads and the basic I-IV-I-7-I harmonic progression in all major scales.
- ANALYZE AND PERFORM EARLY INTERMEDIATE PIANO PIECES CONSISTING OF INDEPENDENT PARTS IN BOTH HANDS (SLO #2) (P-SLO #2)
- Practice and perform early intermediate piano pieces in front of peers.
- DEMONSTRATE EARLY INTERMEDIATE SIGHT-READING SKILLS. (SLO-#3) (P-SLO #1, 4)
- Perform sight-reading exercises in groups and as a whole.
- DEMONSTRATE MASTERY OF EARLY INTERMEDIATE DUET AND ENSEMBLE PIECES. (SLO #4) (P-SLO #2)
- Rehearse and successfully perform early intermediate duet and ensemble pieces

MUIVI 351 Piano IV

This is the fourth in a series of four consecutive group piano classes - successful completion of MUIVI 350 with a 'C' or better (or a comparable experience) is required for enrollment. Students will learn ensemble and solo works, develop more complex rhythmic skills, and will develop fundamental keyboard and music theory skills comparable to advanced level repertoire. This course is designed for both music majors planning to transfer as well as for students who are studying primarily for personal enjoyment. Specific skills students will develop include sight reading, improvising, listening skills, primary root position triads, hand-over-hand major and minor arpeggios, intervals, fingering, notation, time signatures, dynamics, basic harmonization, major key signatures, and various methods of tone production.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- PERFORM AND ANALYZE ADVANCED LEVEL PIANO MUSIC PROFICIENTLY IN TREBLE AND BASS CLEFS. (SLO #1) (P-SLO #5, 6)
- Evaluate and play four octaves scales in all major keys and minor keys (hands separate and together). Identify intervals visually and aurally.
- Perform and analyze root position triads and the basic I-IV-I-7-I harmonic progression in all major and minor keys.
ANALYZE AND PERFORM ADVANCED LEVEL PIANO PIECES CONSISTING OF COMPLEX INDEPENDENT PARTS IN BOTH HANDS (SLO #2) (P-SLO #2)

- Practice and perform advanced piano pieces in front of peers.
- DEMONSTRATE ADVANCED LEVEL SIGHT-READING SKILLS. (SLO-#3) (P-SLO #1, 4)
- Perform sight-reading exercises in groups and as a whole.
- REHEARSE AND PERFORM DUETS AND ENSEMBLE PIECES. (SLO #4) (P-SLO #2)

MUIVI 370 Beginning Guitar

Units: 2  
Hours: 36 hours LEC; 18 hours LAB  
Prerequisite: None.  
Transferable: CSU; UC  
General Education: CSU Area C1  
Catalog Date: June 1, 2020

Beginning instruction on the guitar with emphasis on the fundamentals of music as well as basic guitar chord technique and accompaniment figurations.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- enable the student to become acquainted with music through the medium of the guitar.
- develop dexterity skills necessary to create chords through strumming and arpeggiation.
- develop reading skills of melodic lines through conventional notation and tablature.
- allow the student an opportunity for creative expression both formally (writing) and informally.

MUIVI 371 Intermediate Guitar

Units: 2  
Hours: 36 hours LEC; 18 hours LAB  
Prerequisite: MUIVI 370 with a grade of "C" or better  
Transferable: CSU; UC  
General Education: CSU Area C1  
Catalog Date: June 1, 2020

A continuation of MUIVI 370 with emphasis on increased skills in chording, arpeggiation, accompaniment, improvisation, melodic reading, and development of personal style. Students may wish to challenge the prerequisite on the basis of equivalent experience.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- continue to develop dexterity skills through strummed chords and finger picking.
- improve reading skills of conventional notation and tablature.
- develop improvisational techniques based on dexterity and reading skills.

MUIVI 385 Jazz Styles and Improvisation

Units: 2  
Hours: 27 hours LEC; 27 hours LAB  
Prerequisite: None.  
Advisory: Ability to play a melodic instrument or ability to sing; ability to read music.  
Transferable: CSU; UC  
Catalog Date: June 1, 2020
This course is the study of instrumental and vocal application of jazz improvisation.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- notate, perform, identify and apply the blues scale, the bebop scale, the diatonic modes, the pentatonic scale, triads, 7th, 9th, 11th and 13th chords, upper and lower neighbor non-harmonic tones and II-V-I in all keys.

MUIVI 386 Jazz Styles and Improvisation

Units: 2
Hours: 27 hours LEC; 27 hours LAB
Prerequisite: MUIVI 385 with a grade of "C" or better
Transferable: CSU; UC
Catalog Date: June 1, 2020

This course is the study of advanced instrumental and vocal applications of jazz improvisation.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- notate, perform, identify and apply the Lydian dominant scale, the Coltrane pentatonic scale, the diminished scale, the whole tone scale, the diminished whole tone scale, the Locrian #2 scale, tonal triads and sevenths and minor II-V-I in all keys.

- identify and apply fourths, sidestepping, tritone substitution and horizontal vs. vertical techniques in a jazz improvisation.

MUIVI 410 Applied Music

Units: 1
Hours: 18 hours LEC
Prerequisite: None.
Corequisite: MUIHL 402, 404, 412, or 414; Select one large performing ensemble from the following: MUP 310, MUP 312, MUP 330, MUP 335, MUP 357, MUP 358, MUP 360, or MUP 362.
Enrollment Limitation: Audition required.
Transferable: CSU; UC
C-ID: C-ID MUS 160
Catalog Date: June 1, 2020

This course consists of individualized study of the appropriate techniques and repertoire for the specific instrument or voice being studied. The emphasis is on the progressive development of skills needed for solo performance. The course involves instrumental or vocal study requiring a minimum of one-half hour per week of individual study through one-on-one instruction for a minimum of 18 weeks. The course also meets one hour per week on campus for instruction and performance. This course may be repeated to meet the major requirement for transfer to CSU, Sacramento, or to other universities with a similar transfer requirement.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- STUDENTS WILL WORK TOWARDS AND DEVELOP A LEVEL OF TECHNICAL PROFICIENCY ON THEIR INSTRUMENT (OR VOICE) WHICH ALLOWS THEM TO STUDY AND PERFORM CONCERT LEVEL MUSIC AT A PRE-PROFESSIONAL LEVEL (SLO #1) (P-SLO #1, 2, 3, 4, 5)

- Develop improved musical skills that prepare the student for applied music requirements at transfer institutions.

- Demonstrate and adapt acquired skills for successful musical performances.

- Analyze and interpolate the musical skills needed for successful performances of music spanning a multiplicity of styles and genres.

MUIVI 495 Independent Studies in Music

Instrumental/Voice Instruction
An independent studies project involves an individual student or small group of students in study, research, or activities beyond the scope of regularly offered courses. See the current catalog section of “Special Studies” for full details of Independent Studies. This independent study course is designed to provide instrumental training not offered in other CRC music classes. Components of the course may include private or group instruction, solo and ensemble work, accompanying experience, and programmed learning in music fundamentals and music technology. The course may also be designed for students interested in developing tutorial and/or instrumental skills.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO #1: Actively engage in intellectual inquiry beyond that required in order to pass a course of study (College Wide Learning Outcome – Area 4).
- Discuss and outline a proposal of study (that can be accomplished within one semester term) with a supervising instructor qualified within the discipline.
- Design an independent study (to be completed individually or by collaboration of a small group) to foster special knowledge, skills, and experience that are not available in any one regularly scheduled course.
- Use information resources to gather discipline-specific information.
- SLO #2: Utilize modes of analysis and critical thinking to apply theoretical perspectives and/or concepts in the major discipline of study to significant problems and/or educational activities (College Wide Learning Outcome – Area 3).
- Analyze and apply the knowledge, skills and experience that are involved in the independent study to theoretical perspectives and/or concepts in the major discipline of study.
- Explain the importance of the major discipline of study in the broader picture of society.
- SLO #3: Communicate a complex understanding of content matter of the major discipline of study (College Wide Outcome – Area 3).
- Demonstrate competence in the skills essential to mastery of the major discipline of study that are necessary to accomplish the independent study.
- SLO #4: Identify personal goals and pursue these goals effectively (College Wide Outcome – Area 4).
- Utilize skills from the “academic tool kit” including time management, study skills, etc., to accomplish the independent study within one semester term.

Music - Performance (MUP)

MUP 310 Orchestra

| Units: | 2 |
| Hours: | 18 hours LEC; 54 hours LAB |
| Prerequisite: | Students should be able to read music and perform on an orchestral instrument (violin, viola, cello, bass, piccolo, flute, clarinet, double reed, trumpet, French horn, trombone, or percussion) for music that is composed for string orchestra and symphony orchestra, which will be determined by the instructor based upon an audition process. |
| Enrollment Limitation: | Students will be admitted to this course by audition only. Audition times and dates will be announced by the department. |
| Transferable: | CSU; UC |
| General Education: | CSU Area C1 |
| C-ID: | C-ID MUS 180 |
| Catalog Date: | June 1, 2020 |

This course covers the study and performance of orchestral music. It is open to all students who read music and perform on an orchestral instrument (violin, viola, cello, bass, piccolo, flute, clarinet, double reed, trumpet, french horn, trombone, or percussion.) This course includes public performances and field trips, and meets requirements for music majors and minors. Students study and perform music literature composed for string orchestra and symphony orchestra. This course may be repeated to meet the major requirement for transfer to CSU, Sacramento, or to other universities with a similar transfer requirement. Students may be required to provide their own instruments.
Student Learning Outcomes

Upon completion of this course, the student will be able to:

- **SLO 1 PERFORM ORCHESTRAL MUSIC (P-SLO 1, P-SLO 2, P-SLO 3, P-SLO 4)**
  - Perform with artistic expression in public performances.
  - Perform representative works from standard orchestral literature of both contemporary and historical periods.
  - Apply proper basic instrumental technique (posture, bowing, support, embouchure, tone, projection, stage deportment, ensemble performance.)
  - Examine new literature and produce music utilizing proper sight reading techniques.
  - Create proper balance within the section and across the ensemble by evaluating dynamic levels in both groups. Discriminate melodic versus harmonic role and modify dynamics for proper balance.
  - Identify proper intonation within the section and across the ensemble and match pitch accordingly.
  - Identify the correct tempo in use and match the ensemble to produce a more precise and artistic performance.
  - Criticize and appraise performances.

This course includes public performance and meets the performance requirement for all music majors and minors. Students study and perform music literature composed for orchestra. The literature and performances will differ in content as students repeat the course and continue to develop musical skills for performance. Four semesters of a large performance class are required for the AA degree and transfer for all music majors.

MUP 312 Orchestra

**Units:** 1  
**Hours:** 9 hours LEC, 27 hours LAB  
**Prerequisite:** None.  
**Enrollment Limitation:** Students will be admitted to this course by audition only. Audition times and dates will be announced by the department.  
**Transferable:** CSU; UC  
**C-ID:** C-ID MUS 180  
**Catalog Date:** June 1, 2020

This course covers the study and performance of orchestral music. It is open to all students who read music and perform on an orchestral instrument (violin, viola, cello, bass, piccolo, flute, clarinet, double reed, trumpet, french horn, trombone, or percussion.) This course includes public performances and field trips, and meets requirements for music majors and minors. Students study and perform music literature composed for string orchestra and symphony orchestra. This course may be repeated to meet the major requirement for transfer to CSU, Sacramento, or to other universities with a similar transfer requirement. Students may be required to provide their own instruments.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- **SLO 1 PERFORM ORCHESTRAL MUSIC (P-SLO 1, P-SLO 2, P-SLO 3, P-SLO 4)**
  - Perform with artistic expression in public performances.
  - Perform representative works from standard orchestral literature of both contemporary and historical periods.
  - Apply proper basic instrumental technique (posture, bowing, support, embouchure, tone, projection, stage deportment, ensemble performance.)
  - Examine new literature and produce music utilizing proper sight reading techniques.
  - Create proper balance within the section and across the ensemble by evaluating dynamic levels in both groups. Discriminate melodic versus harmonic role and modify dynamics for proper balance.
  - Identify proper intonation within the section and across the ensemble and match pitch accordingly.
  - Identify the correct tempo in use and match the ensemble to produce a more precise and artistic performance.
  - Criticize and appraise performances.
- This course includes public performance and meets the performance requirement for all music majors and minors. Students study and perform music literature composed for orchestra. The literature and performances will differ in content as students repeat the course and continue to develop musical skills for performance. Four semesters of a large performance class are required for the AA degree and transfer for all music majors.

**MUP 320 Jazz Band**

<table>
<thead>
<tr>
<th>Units:</th>
<th>2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hours:</td>
<td>18 hours LEC; 54 hours LAB</td>
</tr>
<tr>
<td>Prerequisite:</td>
<td>None.</td>
</tr>
<tr>
<td>Transferable:</td>
<td>CSU; UC</td>
</tr>
<tr>
<td>General Education:</td>
<td>CSU Area C1</td>
</tr>
<tr>
<td>Catalog Date:</td>
<td>June 1, 2020</td>
</tr>
</tbody>
</table>

This course includes the study and performance of jazz including stage routines and special arrangements. Public performances are required. This course may be repeated to meet the major requirement for transfer to CSU, Long Beach, or to other universities with a similar transfer requirement.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- **ACQUIRE PHYSICAL SKILLS/DEXTERITY ON JAZZ INSTRUMENTS (SLO #1; PSLO #1).**
  - sight-read, interpret and perform a variety of jazz styles in an ensemble setting, with repeating students expanding their range and flexibility with respect to technique, phrasing, articulation, and rhythm.
  - prepare and perform jazz band repertoire from recordings and sheet music, with repeating students broadening the scope of their experience to include new repertoire of increased difficulty and greater ability to infer genre-specific aesthetics.
  - develop ability to perform independently at a level of quality and consistence.
  - integrate artistic expression and technical proficiency into public performances.
  - formulate and implement practice strategies specific to a jazz instrument.
  - apply knowledge of jazz routines to construct improvised solos.

- **ACQUIRE AURAL AWARENESS AND ENSEMBLE SKILLS (SLO#2; PSLO #2).**
  - apply ensemble experience to jazz environments, and for repeating students, explore leadership roles within an ensemble.
  - demonstrate the interpersonal skills necessary to participate cooperatively within a jazz ensemble.

- **ESTABLISH AN HISTORICAL, GEOGRAPHICAL AND CHRONOLOGICAL CONTEXT OF JAZZ MUSIC (SLO#3; PSLO#3).**
  - demonstrate the ability to analyze, distinguish and perform jazz ensemble music of various historical eras and stylistic trends, with repeating students augmenting their command of various performance practices within the jazz lineage.

- **LEARN AND USE CRITICAL LISTENING SKILLS TO DISCUSS AND CRITIQUE MUSICAL WORKS AND PERFORMANCES (SLO#4; PSLO#4).**
  - analyze and evaluate jazz improvisations.
  - evaluate technical skills and discern stylistic characteristics through individual preparation, ensemble practice and performance.
  - evaluate and critique other performers and performance ensembles.

**MUP 321 Advanced Jazz Band**

<table>
<thead>
<tr>
<th>Units:</th>
<th>1 - 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hours:</td>
<td>54 - 108 hours LAB</td>
</tr>
<tr>
<td>Prerequisite:</td>
<td>MUP 320 with a grade of &quot;C&quot; or better</td>
</tr>
<tr>
<td>Transferable:</td>
<td>CSU; UC</td>
</tr>
<tr>
<td>Catalog Date:</td>
<td>June 1, 2020</td>
</tr>
</tbody>
</table>

This course is for the continuing study and performance of Jazz Band repertoire. Additional topics include rehearsal technique and improvisation. Public performance and field trips are required. Performance participation will be by audition. This course may be taken a maximum of four times to meet the major requirement for transfer to CSU, Long Beach, or to other universities with a similar transfer requirement.
Upon completion of this course, the student will be able to:

- ACQUIRE PHYSICAL SKILLS/DEXTERITY ON JAZZ INSTRUMENTS (SLO #1; PSLO #1).
- sight-read, interpret and perform a variety of jazz styles in an ensemble setting, with repeating students expanding their range and flexibility with respect to technique, phrasing, articulation, and rhythm.
- prepare and perform jazz band repertoire from recordings and sheet music, with repeating students broadening the scope of their experience to include new repertoire of increased difficulty and greater ability to infer genre-specific aesthetics.
- develop ability to perform independently at an advanced level of quality and consistence.
- integrate artistic expression and technical proficiency into public performances.
- formulate and implement practice strategies specific to a jazz instrument.
- apply knowledge of jazz routines to construct improvised solos at an advanced level.
- ACQUIRE AURAL AWARENESS AND ENSEMBLE SKILLS (SLO#2; PSLO #2).
- apply ensemble experience to jazz environments, and for repeating students, explore leadership roles within an ensemble.
- demonstrate the interpersonal skills necessary to participate cooperatively within a jazz ensemble and to assume the role of section leader.
- ESTABLISH AN HISTORICAL, GEOGRAPHICAL AND CHRONOLOGICAL CONTEXT OF JAZZ MUSIC (SLO#3; PSLO#3).
- demonstrate the ability to analyze, distinguish and perform jazz ensemble music of various historical eras and stylistic trends, with repeating students augmenting their command of various performance practices within the jazz lineage.
- LEARN AND USE CRITICAL LISTENING SKILLS TO DISCUSS AND CRITIQUE MUSICAL WORKS AND PERFORMANCES (SLO#4; PSLO#4).
- analyze and evaluate jazz improvisations at an advanced level.
- evaluate technical skills and discern stylistic characteristics through individual preparation, ensemble practice and performance.
- evaluate and critique other performers and performance ensembles.

MUP 330 Concert Band

- **Units:** 2
- **Hours:** 18 hours LEC; 54 hours LAB
- **Prerequisite:**
  - Student should be able to read music and perform on a concert band instrument (piccolo, flute, clarinet, double reed, saxophone, trumpet, French horn, trombone, euphonium, baritone, tuba, string bass or percussion), for music that is composed for a concert band, which will be determined by the instructor based upon an audition process.
- **Enrollment Limitation:**
  - Students will be admitted to this course by audition only. Audition times and dates will be announced by the department.
- **Transferable:**
  - CSU; UC
- **C-ID:** C-ID MUS 180
- **Catalog Date:** June 1, 2020

This course covers the study and performance of concert band music. It is open to students who read music and perform on a concert band instrument (piccolo, flute, clarinet, double reed, saxophone, trumpet, French horn, trombone, euphonium, baritone, tuba, string bass or percussion). This course includes public performances and field trips, and meets requirements for music majors and minors. Students study and perform music literature composed for concert band. This course may be repeated to meet the major requirement for transfer to CSU, Sacramento, or to other universities with a similar transfer requirement. Students may be required to provide their own instruments.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO 1 PERFORM CONCERT BAND MUSIC (P-SLO 1, P-SLO 2, P-SLO 3, P-SLO 4)
- Perform with artistic expression in public performances.
- Perform representative works from standard concert band literature.
- Apply proper basic instrumental technique (posture, support, embouchure, tone, projection, stage deportment, ensemble performance.)
- Examine new literature and produce music utilizing proper sight reading techniques.
- Create proper balance within the section and across the ensemble by evaluating dynamic levels in both groups. Discriminate melodic versus harmonic role and modify dynamics for proper balance.
- Identify proper intonation within the section and across the ensemble and match pitch accordingly.
- Identify the correct tempo in use and match the ensemble to produce a more precise and artistic performance.
- Criticize and appraise performances.

MUP 335 Concert Band

Units: 1
Hours: 9 hours LEC; 27 hours LAB
Prerequisite: None.
Enrollment Limitation: Audition will be required for admission to this course. Audition times and dates will be announced by the department.
Transferable: CSU; UC
C-ID: C-ID MUS 180
Catalog Date: June 1, 2020

This course covers the study and performance of concert band music. It is open to students who read music and perform on a concert band instrument (piccolo, flute, clarinet, double reed, saxophone, trumpet, French horn, trombone, euphonium, baritone, tuba, string bass or percussion). This course includes public performances and field trips, and meets requirements for music majors and minors. Students study and perform music literature composed for concert band. This course may be repeated to meet the major requirement for transfer to CSU, Sacramento, or to other universities with a similar transfer requirement. Students may be required to provide their own instruments.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO 1 PERFORM CONCERT BAND MUSIC (P-SLO 1, P-SLO 2, P-SLO 3, P-SLO 4)
- Perform with artistic expression in public performances.
- Perform representative works from standard concert band literature.
- Apply proper basic instrumental technique (posture, support, embouchure, tone, projection, stage deportment, ensemble performance.)
- Examine new literature and produce music utilizing proper sight reading techniques.
- Create proper balance within the section and across the ensemble by evaluating dynamic levels in both groups. Discriminate melodic versus harmonic role and modify dynamics for proper balance.
- Identify proper intonation within the section and across the ensemble and match pitch accordingly.
- Identify the correct tempo in use and match the ensemble to produce a more precise and artistic performance.
- Criticize and appraise performances.

MUP 350 Concert Choir I

Units: 2
Hours: 18 hours LEC; 54 hours LAB
Prerequisite: None.
Advisory: MUP 357, or placement through the assessment process.
Transferable: CSU; UC
General Education: CSU Area C1
C-ID: C-ID MUS 180
Catalog Date: June 1, 2020

This course covers the study and performance of standard vocal literature from the 16th century to the modern period. Students are urged to enter during their freshman year. Public performances are required. This course may be taken a maximum of four times to meet the major requirement for transfer to CSU, Sacramento, or to other universities with a similar transfer requirement.

Student Learning Outcomes
Upon completion of this course, the student will be able to:

- SLO 1: PERFORM AND UNDERSTAND CHORAL MUSIC THROUGH THE AGES.
- perform with artistic expression in public performances.
- perform representative works of art from standard choral literature.
- demonstrate proper basic vocal technique (posture, breathing, diction, resonance, and stage deportment) and ensemble singing.

MUP 353 Contemporary Gospel Choir

**Units**: 2  
**Hours**: 18 hours LEC; 54 hours LAB  
**Prerequisite**: None.  
**Transferable**: CSU; UC  
**Catalog Date**: June 1, 2020

This course is designed for the college student who is interested in learning the history of gospel music, improving their general musicianship, enhancing their vocal technique, and performing chorale repertoire from different eras of gospel music. No previous musical experience is necessary. Multiple public performances of the repertoire rehearsed and learned, and a brief biographic paper on a gospel figure are required. This course may be repeated to meet the major requirement for transfer to CSU, Dominguez Hills, or to other universities with a similar transfer requirement.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- Establish an historical, geographical and chronological context of music (SLO #1; PSLO #3).
- Recognize and appreciate gospel music as legitimate, viable and exciting piece of a larger body of music.
- Acquire aural awareness and ensemble skills (SLO #2; PSLO #2).
- Develop stage presence as a performer in a choral setting.
- Acquire physical skills/dexterity within a discipline (SLO #3; PSLO #1).
- Identify the elements of gospel style and sound in order to distinguish between traditional and contemporary performances.
- Discuss and critique musical works and performances through self analysis, ensemble participation and performance evaluation (SLO #4; PSLO #4).
- Participate in educational outreach initiatives through off-campus performances.
- Acquire analytical skills and a conceptual framework for the future (SLO #5; PSLO #5).

MUP 357 College Chorus

**Units**: 2  
**Hours**: 18 hours LEC; 54 hours LAB  
**Prerequisite**: None.  
**Enrollment Limitation**: Voice placement or audition required.  
**Transferable**: CSU; UC  
**General Education**: AA/AS Area I; CSU Area C1  
**C-ID**: C-ID MUS 180  
**Catalog Date**: June 1, 2020

This course is designed for the college student who is interested in a musical experience. Singers study and perform standard choral literature. Ability to match pitch, maintain rhythmic integrity and produce a good tone will be assessed by voice placement or audition in the initial rehearsals. This course may be repeated to meet the major requirement for transfer to CSU, Sacramento, or to other universities with a similar transfer requirement.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO 1: PERFORM AND UNDERSTAND CHORAL MUSIC THROUGH THE AGES.
MUP 358 College Chorus Chorale

Units: 1
Hours: 9 hours LEC; 27 hours LAB
Prerequisite: None.
Enrollment Limitation: Voice placement or audition required.
Transferable: CSU; UC
General Education: AA/AS Area I
C-ID: C-ID MUS 180
Catalog Date: June 1, 2020

This course is designed for the college student who is interested in a musical experience. Singers study and perform standard choral literature. Ability to match pitch, maintain rhythmic integrity and produce a good tone will be assessed by voice placement or by audition during the initial rehearsals. This course may be repeated to meet the major requirement for transfer to CSU, Sacramento, or to other universities with a similar transfer requirement.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- PERFORM AND UNDERSTAND CHORAL MUSIC THROUGH THE AGES. (SLO 1, P-SLO 3)
- Perform with artistic expression in public performances. (P-SLO 1, 2, 3, 4)
- Perform representative works of art from standard choral literature. (SLO-1, P-SLO 1, 2, 3, 4)
- Demonstrate proper basic vocal technique (posture, breathing, diction, resonance, and stage deportment) and ensemble singing. (P-SL0 1, 2, 4)

MUP 360 Chamber Singers

Units: 2
Hours: 18 hours LEC; 72 hours LAB
Prerequisite: None.
Enrollment Limitation: Audition required.
Advisory: MUP 350 or 357; Students are strongly advised to document previous choral experience.
Transferable: CSU; UC
General Education: AA/AS Area I; CSU Area C1
C-ID: C-ID MUS 180
Catalog Date: June 1, 2020

Singers study and perform standard choral literature, especially written for chamber ensemble. Prospective members should have considerable previous choral experience. Public performances are required. Singers will perform outside of class, including evening concerts, participation in collegiate choral festivals, and on short tours. Ability to match pitch, maintain rhythmic integrity and produce a good tone will be assessed by voice placement or by audition in the initial rehearsals. This course may be repeated to meet the major requirement for transfer to CSU, Sacramento, or to other universities with a similar transfer requirement.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO 1: PERFORM AND UNDERSTAND CHORAL MUSIC THROUGH THE AGES, ESPECIALLY MUSIC WRITTEN FOR CHAMBER ENSEMBLE.
- perform artistically in public settings.
- sing repertoire of other languages and cultures.
apply appropriate stylistic characteristics to the repertoire being sung in regards to the historical period or the culture of the music.

- Analyze and evaluate all vocal performances with regards to basic choral technique.

## MUP 362 Chamber Singers Chorale

| Units: | 1 |
| Hours: | 9 hours LEC; 27 hours LAB |
| Prerequisite: | None. |
| Enrollment Limitation: | Audition required. |
| Advisory: | MUP 350, 357, or 358; Students are strongly advised to document previous choral experience. |
| Transferable: | CSU; UC |
| General Education: | AA/AS Area I |
| C-ID: | C-ID MUS 180 |
| Catalog Date: | June 1, 2020 |

Singers study and perform standard choral literature, especially written for chamber ensemble. Prospective members should have considerable previous choral experience. Public performances are required. Singers will perform outside of class, including evening concerts, participation in collegiate choral festivals, choral exchanges, and on short tours. Ability to match pitch, maintain rhythmic integrity and produce a good tone will be assessed by audition during the initial rehearsals. This course may be repeated to meet the major requirement for transfer to CSU, Sacramento, or to other universities with a similar transfer requirement.

## Student Learning Outcomes

Upon completion of this course, the student will be able to:

- PERFORM AND UNDERSTAND CHORAL MUSIC THROUGH THE AGES, ESPECIALLY MUSIC WRITTEN FOR CHAMBER ENSEMBLE. (SLO 1, P-SLO 1, 2, 3, 4)
- Perform artistically in public settings. (P-SLO1, 2, 3, 4)
- Sing repertoire of other languages and cultures. (P-SLO 1, 2, 3, 4)
- Apply appropriate stylistic characteristics to the repertoire being sung in regards to the historical period or the culture of the music. (P-SLO 1, 2, 3, 4)
- Analyze and evaluate all vocal performances with regards to basic choral technique. (P-SLO 2, 4)

## MUP 422 Special Ensemble Participation

| Units: | 0.5 - 2 |
| Prerequisite: | None. |
| Transferable: | CSU; UC |
| Catalog Date: | June 1, 2020 |

This course is open to all students who sing, or play a musical instrument. Instrumentation of groups will vary, including jazz combo, piano quintet, guitar ensemble, and related music as well as choral groups.

## MUP 423 Composition Ensemble Workshop

| Units: | 2 |
| Hours: | 36 hours LEC; 18 hours LAB |
| Prerequisite: | None. |
| Transferable: | CSU |
| Catalog Date: | June 1, 2020 |

This course provides students with an opportunity to create original works in a variety of genres and styles, while learning about important musical trends and composers in the 20th and 21st Century world of classical, jazz, film, commercial, and pop music worlds.

## Student Learning Outcomes

Upon completion of this course, the student will be able to:

- DEVELOP A CLEAR UNDERSTANDING OF THE EUROPEAN CLASSICAL TRADITION. (SLO #1)
Discuss and analyze representative concert music composers

UNDERSTAND COMMON 20TH CENTURY TECHNIQUES AS THEY APPEAR IN COMPOSITIONS. (SLO #2)

Create and perform original musical compositions that integrate key elements of 20th Century concert music.

DEVELOP A CLEAR UNDERSTANDING OF 20TH CENTURY TRENDS IN CONCERT MUSIC. (SLO #3)

Analyze and assess scores by representative 20th Century composers that contain unique and forward thinking harmonic components.

DEVELOP A NUANCED ARTISTIC SENSIBILITY AND USE ADVANCED CRITICAL THINKING SKILLS WHILE CREATING NEW MUSICAL COMPOSITIONS THAT WILL BE PUBLICLY PERFORMED. (SLO #4)

Create music compositions that have a compelling musical structure and content.

Create music compositions that are emotionally and intellectually intriguing.

Create music compositions that use advanced techniques with respect to melody, harmony, rhythm, texture, timbre, and gesture.

Create and successfully perform music compositions that develop a unique artistic voice.

REHEARSE AND PERFORM ORIGINAL AND RECENTLY COMPOSED MUSIC (SLO #5)

Perform with artistic expression in public performances.

Create music compositions that are emotionally and intellectually intriguing.

Criticize and appraise performances.

Create and perform successful music compositions that develop a unique artistic voice.

MUP 424 Commercial Music Ensemble

Units: 2
Hours: 18 hours LEC; 54 hours LAB
Prerequisite: None.
Enrollment Limitation: audition/demonstrated instrumental or vocal skill
Advisory: Ability to play at least one instrument or vocalize in a popular style.
Transferable: CSU
Catalog Date: June 1, 2020

This course involves the rehearsal and performance of contemporary pop and commercial styles, including rock, jazz, rhythm and blues, soul, folk, urban styles, country, and world beat.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- interpret and perform a variety of commercial styles in an ensemble setting, with repeating students expanding their range and flexibility as ensemble players. SLO #1
- apply ensemble experience to real world environments, and for repeating students, explore leadership roles within an ensemble. SLO #2
- perform music learned from recordings and sheet music, with repeating students broadening their skills to include arranging. SLO #3
- analyze, organize and apply basic business and technical support systems to fit various music groups, with repeating students strengthening and refining these skills. SLO #4
- participate cooperatively as an ensemble musician. SLO #5

MUP 495 Independent Studies in Music Performance

Units: 1 - 3
Hours: 54 - 162 hours LAB
Prerequisite: None.
Transferable: CSU
Catalog Date: June 1, 2020
Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO #1: Actively engage in intellectual inquiry beyond that required in order to pass a course of study (College Wide Learning Outcome – Area 4).
- Discuss and outline a proposal of study (that can be accomplished within one semester term) with a supervising instructor qualified within the discipline.
- Design an independent study (to be completed individually or by collaboration of a small group) to foster special knowledge, skills, and experience that are not available in any one regularly scheduled course.
- Use information resources to gather discipline-specific information.
- SLO #2: Utilize modes of analysis and critical thinking to apply theoretical perspectives and/or concepts in the major discipline of study to significant problems and/or educational activities (College Wide Learning Outcome – Area 3).
- Analyze and apply the knowledge, skills and experience that are involved in the independent study to theoretical perspectives and/or concepts in the major discipline of study.
- Explain the importance of the major discipline of study in the broader picture of society.
- SLO #3: Communicate a complex understanding of content matter of the major discipline of study (College Wide Outcome – Area 3).
- Demonstrate competence in the skills essential to mastery of the major discipline of study that are necessary to accomplish the independent study.
- SLO #4: Identify personal goals and pursue these goals effectively (College Wide Outcome – Area 4).
- Utilize skills from the "academic tool kit" including time management, study skills, etc., to accomplish the independent study within one semester term.

Music - Specializations in Music (MUSM)

MUSM 110 The Business of Music

<table>
<thead>
<tr>
<th>Units:</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hours:</td>
<td>54 hours LEC</td>
</tr>
<tr>
<td>Prerequisite:</td>
<td>None.</td>
</tr>
<tr>
<td>Catalog Date:</td>
<td>June 1, 2020</td>
</tr>
</tbody>
</table>

This course gives an overview of the processes of the music industry. This includes record contracts as well as the duties and responsibilities of record producers, agents, managers, and performing artists.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- UTILIZE PROFICIENTLY NEW TECHNOLOGIES FOR THE PURPOSES OR RESEARCH, COMPOSITION, LISTENING, PERFORMANCE, RECORDING, ARCHIVING, AND CROSS-DISCIPLINE COLLABORATION IN THE FIELDS AND INDUSTRY OF MUSIC. (SLO #1) (PSLO #6)
- understand and utilize proper terminology to describe music industry practices, business operations, legalities, and current issues.
- utilize and understand current technologies to create opportunities that help offset the many financial challenges facing the music industry.
- examine career opportunities in music to evaluate advantageous and disadvantageous career paths.
- describe and summarize key elements of music industry agreements, contracts, procedures, and methods of doing business.
MUSM 334 Introduction to Musical Instrument Digital Interface (MIDI)

This course is an introduction to the rapidly evolving use of professional music software and MIDI electronic instruments. Various music hardware options, including keyboards, synthesizers, samplers, computers and drum machines, will be explored. Through a series of MIDI projects, students learn to use music sequencing, notation, and CAI (computer-assisted instruction) software.

Upon completion of this course, the student will be able to:

- demonstrate a knowledge of the history, concepts and terminology associated with MIDI technology.
- compare and contrast the strengths and weaknesses of various MIDI hardware and software options.
- design and produce a musical score using music notation software.
- input, edit, and output music using music sequencing software.
- assess and select appropriate CAI (computer-assisted instruction) software for personal and classroom use.

MUSM 346 Audio and Music Production I

This course covers introductory concepts and skill development in audio and music production. Students will work with consumer grade software applications designed to produce music digitally that are either free or come bundled with their laptops. Students will learn how to control this software with consumer grade hardware, such as control surfaces and digital audio interfaces. Students will develop skills in songwriting, music composition, and learn how to prepare written music for a recorded performance.

Upon completion of this course, the student will be able to:

- SLO 1: Demonstrate a basic understanding of the software and hardware used on a daily basis in a musician's life. (P-SLO 6)
- Create recordings with computers using digital audio workstation software and Analog/Digital peripheral interfaces.
- Evaluate the various software and hardware with which music is created and delivered in the digital realm.
- SLO 2: Analyze and utilize compositional forms to communicate music most effectively. (P-SLO 5, P-SLO 6)
- Create original compositions that are both prepared for musicians in a studio environment and recording using the aforementioned hardware and software.

MUSM 347 Audio and Music Production II
This course covers intermediate and advanced concepts and skill development in digital audio/music production. In Audio and Music Production II, students will build on knowledge acquired Digital Music I, through their continual practice and work with key, industry-standard professional software environments, such digital audio workstation and music notation software. Students will continue to hone their skills in songwriting and music composition for other media such as film, gaming, and video. Students will complete original creative musical projects, promote their own work on web sites they create for themselves, place their music on social media platforms, and monetize their creativity on the internet.

Student Learning Outcomes
Upon completion of this course, the student will be able to:

- SLO 1: Demonstrate a strong working knowledge of software and hardware used on a daily basis in a musician’s life. (P-SLO 6)
- Create professional grade recordings with computers using digital audio workstation software and Analog/Digital peripheral interfaces.
- Evaluate the various media forms in which music is created and delivered in the digital realm.
- SLO 2: Analyze and select the most advantageous professional grade software and hardware to complete musical projects in the digital realm. (P-SLO 5, P-SLO 6)
- Create original compositions for film, video, and/or gaming using professional grade software and hardware.
- Design websites and social media pages for the promotion and sale of their music.

MUSM 370 Music for Children

Experiences and materials for integrating music into pre-school, elementary, and recreational programs. Recommended for elementary and early childhood credential candidates, recreation leaders, and others who use music with children.

Student Learning Outcomes
Upon completion of this course, the student will be able to:

- Acquire physical skills/dexterity within a discipline (SLO #1, PSLO #1).
- Use music as a primary learning tool.
- Acquire analytical skills and a conceptual framework for the future (SLO #2; PSLO #5).
- Organize success-oriented elemental music activities.
- Plan music classes which integrate the arts into all phases of the curriculum.
- Utilize new technologies for the purposes of research, composition, listening, performance, recording, archiving and cross-discipline collaboration (SLO #3; PSLO #6).
- Teach young children basic music concepts of rhythm and melody, using singing, dancing, playing of instruments, creating and improvising music.
- Create and perform on rhythm-band instruments used in school.

MUSM 495 Independent Studies in Music Specializations

An independent studies project involves an individual student or small group of students in study, research, or activities beyond the scope of regularly offered courses. See the current catalog section of "Special Studies" for full details of Independent Studies.
Student Learning Outcomes

Upon completion of this course, the student will be able to:

- **SLO #1**: Actively engage in intellectual inquiry beyond that required in order to pass a course of study (College Wide Learning Outcome – Area 4).
- **SLO #2**: Discuss and outline a proposal of study (that can be accomplished within one semester term) with a supervising instructor qualified within the discipline.
- **SLO #3**: Design an independent study (to be completed individually or by collaboration of a small group) to foster special knowledge, skills, and experience that are not available in any one regularly scheduled course.
- **SLO #4**: Use information resources to gather discipline-specific information.
- **SLO #5**: Utilize modes of analysis and critical thinking to apply theoretical perspectives and/or concepts in the major discipline of study to significant problems and/or educational activities (College Wide Learning Outcome – Area 3).
- **SLO #6**: Analyze and apply the knowledge, skills and experience that are involved in the independent study to theoretical perspectives and/or concepts in the major discipline of study.
- **SLO #7**: Explain the importance of the major discipline of study in the broader picture of society.
- **SLO #8**: Communicate a complex understanding of content matter of the major discipline of study (College Wide Outcome – Area 3).
- **SLO #9**: Demonstrate competence in the skills essential to mastery of the major discipline of study that are necessary to accomplish the independent study.
- **SLO #10**: Identify personal goals and pursue these goals effectively (College Wide Outcome – Area 4).
- **SLO #11**: Utilize skills from the “academic tool kit” including time management, study skills, etc., to accomplish the independent study within one semester term.

---

**MUSM 498 Work Experience in Music Specializations**

**Units:** 1 - 4
**Hours:** 60 - 300 hours LAB
**Prerequisite:** None.
**Enrollment Limitation:** Students must be in a paid or unpaid internship, volunteer position or job related to career goals in the field of music.
**Transferable:** CSU
**General Education:** AA/AS Area III(b)
**Catalog Date:** June 1, 2020

This course provides students with opportunities to develop marketable skills in preparation for employment in their major field of study or advancement within their career. It is designed for students interested in work experience and/or internships in transfer level degree occupational programs. Course content includes understanding the application of education to the workforce; completion of required forms which document the student’s progress and hours spent at the work site; and developing workplace skills and competencies. Appropriate level learning objectives are established by the student and the employer. During the semester, the student is required to participate in a weekly orientation and 75 hours of related paid work experience, or 60 hours of unpaid work experience for one unit. An additional 75 or 60 hours of related work experience is required for each additional unit. Work Experience may be taken for a total of 16 units when there are new or expanded learning objectives. Only one Work Experience course may be taken per semester.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- **SLO 1**: DEMONSTRATE AN UNDERSTANDING AND APPLICATION OF PROFESSIONAL WORKPLACE BEHAVIOR IN A FIELD OF STUDY RELATED TO ONE’S CAREER.
- **SLO 2**: Understand the effects time, stress, and organizational management have on performance.
- **SLO 3**: Demonstrate an understanding of consistently practicing ethics and confidentiality in a workplace.
- **SLO 4**: Examine the career/life planning process and relate its relevancy to the student.
- **SLO 5**: Demonstrate an understanding of basic communication tools and their appropriate use.
- **SLO 6**: Demonstrate an understanding of workplace etiquette.
- **SLO 7**: Link personal goals to long term achievement.
- Display an understanding of creating a professional first impression.
- Understand how networking is a powerful job search tool.
- Understand necessary elements of a résumé.
- Understand the importance of interview preparation.
- Identify how continual learning increases career success.

SLO 3: DEMONSTRATE APPLICATION OF INDUSTRY KNOWLEDGE AND THEORETICAL CONCEPTS AS WRITTEN IN LEARNING OBJECTIVES IN PARTNERSHIP WITH THE EMPLOYER WORK SITE SUPERVISOR.
CRC's Department of Nutrition and Foods offers an Associate's Degree Program that is challenging, accessible, and rewarding. The program provides opportunities to master the knowledge and skills required for transfer to a didactic program in dietetics or a four-year degree in nutrition and foods.

Dean
Collin Pregliasco

(916) 691-7261
preglic@crc.losrios.edu

Associate Degrees for Transfer

A.S.-T. in Nutrition and Dietetics
The Associate in Science in Nutrition and Dietetics for Transfer degree provides students with a major that fulfills the general requirements of the California State University for transfer to baccalaureate degree programs in nutrition and dietetics. Students with this degree will receive priority admission with junior status to the California State University system. The Associate in Science in Nutrition and Dietetics for Transfer is comprised of lower division coursework typically required by CSU institutions. Students must complete the following Associate Degree for Transfer requirements (Pursuant to SB1440, §66746):

- 60 semester or 90 quarter CSU-transferable units
- the California State University-General Education-Breadth pattern (CSU GE-Breadth); OR the Intersegmental General Education Transfer Curriculum (IGETC) pattern
- a minimum of 18 semester or 27 quarter units in the major or area of emphasis as determined by the community college district
- obtain a minimum grade point average (GPA) of 2.0
- earn a grade of C or better in all courses required for the major or area of emphasis

Upon successful completion of the Associate in Science in Nutrition and Dietetics for Transfer degree requirements, students will be guaranteed admission to the CSU system with junior status and will not have to repeat lower division coursework.

Each California State University may have slightly different requirements for transfer so it is critical for students to work with their counselors to develop individual academic plans.

Catalog Date: June 1, 2020

Degree Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Core:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NUTRI 300</td>
<td>Nutrition</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 440</td>
<td>General Microbiology</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 400</td>
<td>General Chemistry I</td>
<td>5</td>
</tr>
<tr>
<td>PSYC 300</td>
<td>General Principles (3)</td>
<td>3</td>
</tr>
<tr>
<td><strong>List A:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>A minimum of 8 units from the following:</td>
<td>8¹</td>
</tr>
<tr>
<td>CHEM 420</td>
<td>Organic Chemistry I (5)</td>
<td></td>
</tr>
<tr>
<td>BIOL 431</td>
<td>Anatomy and Physiology (5)</td>
<td></td>
</tr>
<tr>
<td>COURSE CODE</td>
<td>COURSE TITLE</td>
<td>UNITS</td>
</tr>
<tr>
<td>-------------</td>
<td>-----------------------------------------------------------</td>
<td>-------</td>
</tr>
<tr>
<td>and BIOL 430</td>
<td>Anatomy and Physiology (5)</td>
<td></td>
</tr>
<tr>
<td>STAT 300</td>
<td>Introduction to Probability and Statistics (4)</td>
<td></td>
</tr>
<tr>
<td>or PSYC 330</td>
<td>Introductory Statistics for the Behavioral Sciences (3)</td>
<td></td>
</tr>
<tr>
<td>or ECON 310</td>
<td>Statistics for Business and Economics (3)</td>
<td></td>
</tr>
</tbody>
</table>

**List B:**

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 401</td>
<td>General Chemistry II</td>
<td>5</td>
</tr>
</tbody>
</table>

Total Units: 28

If BIOL 430 is selected, BIOL 431 must also be selected as the second course taken.

The Associate in Science in Nutrition and Dietetics for Transfer (AS-T) degree may be obtained by completion of 60 transferable, semester units with a minimum 2.0 GPA, including (a) the major or area of emphasis described in the Required Program, and (b) either the Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education-Breadth Requirements.

**Student Learning Outcomes**

Upon completion of this program, the student will be able to:

- PSLO 1: Explain the principles of nutrition and its effect on health
- PSLO 2: Demonstrate a fundamental understanding of health behaviors on nutritional and health status

**Career Information**

Upon successful completion of a baccalaureate degree in nutrition or dietetics include positions as dieticians, nutritionists and dietetic technicians in hospitals/nursing homes, school food services, other health related facilities, college food service, industry food service, restaurants, public health agencies, nutrition programs, WIC programs, Meals on Wheels, health clubs, weight management clinics, community wellness centers, food companies, contract food management companies, and food distribution companies.

**Associate Degrees**

**A.S. in Nutrition and Foods**

CRC's Department of Nutrition and Foods offers an Associate's Degree Program that is challenging, accessible, and rewarding. The program provides opportunities to master the knowledge and skills required for transfer to a didactic program in dietetics or a four-year degree in nutrition and foods.

Highlights include:

* Online nutrition courses

Note to Transfer Students:

If you are interested in transferring to a four-year college or university to pursue a Bachelor's degree in this major, it is critical that you meet with a CRC counselor to select and plan the courses for your major. Schools vary widely in terms of the required preparation. The courses that CRC requires for an Associate's degree in this major may be different from the requirements needed for the Bachelor's degree.

**Catalog Date:** June 1, 2020

**Degree Requirements**

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>First Year (Fall):</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CHEM 305</td>
<td>Introduction to Chemistry (5)</td>
<td>5</td>
</tr>
<tr>
<td>or CHEM 400</td>
<td>General Chemistry I (5)</td>
<td></td>
</tr>
<tr>
<td>NUTRI 300</td>
<td>Nutrition</td>
<td>3</td>
</tr>
<tr>
<td>COURSE CODE</td>
<td>COURSE TITLE</td>
<td>UNITS</td>
</tr>
<tr>
<td>------------</td>
<td>--------------------------------------------</td>
<td>-------</td>
</tr>
<tr>
<td>CAM 301</td>
<td>Food Theory and Preparation (4)</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 102</td>
<td>Essentials of Human Anatomy and Physiology (4)</td>
<td>4 - 5</td>
</tr>
<tr>
<td>or BIOL 430</td>
<td>Anatomy and Physiology (5)</td>
<td></td>
</tr>
</tbody>
</table>

**First Year (Spring):**

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>NUTRI 310</td>
<td>Cultural Foods of the World (3)</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 310</td>
<td>General Biology</td>
<td>4</td>
</tr>
</tbody>
</table>

**Second Year (Fall):**

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSYC 300</td>
<td>General Principles</td>
<td>3</td>
</tr>
<tr>
<td>NUTRI 322</td>
<td>Nutrition Issues Throughout Life</td>
<td>3</td>
</tr>
<tr>
<td>NUTRI 370</td>
<td>Food Service Management (3)</td>
<td>3</td>
</tr>
</tbody>
</table>

**Second Year (Spring):**

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>NUTRI 340</td>
<td>Nutrition and Metabolism</td>
<td>3</td>
</tr>
<tr>
<td>NUTRI 350</td>
<td>Community Nutrition</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Units: 38 - 39

* Chem 305, 400 are transferable to CSUS Didactic Program

2 BIOL 430 - transferable to CSUS Didactic Program

The Nutrition and Foods Associate in Science (A.S.) degree may be obtained by completion of the required program, plus general education requirements, plus sufficient electives to meet a 60-unit total. See CRC graduation requirements.

Enrollment Eligibility

To be eligible for enrollment in the program, the student must meet the following criteria:

- Have access to the Internet
- Have an e-mail account
- Be familiar with word processing, PowerPoint, retrieving and attaching electronic documents and using the world wide web
- Have self-discipline, motivation, and the ability to complete required assignments on schedule.

Enrollment Process

Eligible students are selected for the program according to the following steps:

- Admission to the college
- Contact CRC Nutrition and Foods Program Counselor regarding transferable courses.

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- PSLO 1: Demonstrate independent learning and effective communication skills
- PSLO 2: Explain the principles of nutrition and its effect on health
- PSLO 3: Demonstrate a fundamental understanding of health behaviors on nutritional and health status
- PSLO 4: Demonstrate a fundamental understanding of food service management function
- PSLO 5: Compare the effectiveness of various management styles
- PSLO 6: Interpret current nutrition research
Career Information

Hospitals/nursing homes, school food services, other health related facilities, college food service, industry, restaurant, public health agencies, nutrition program, WIC programs, Meals on Wheels, health clubs, weight management clinic, community wellness centers, food companies, contract food management companies, food distribution companies. Some career options may require more than two years of college study. Classes beyond the associate degree may be required to fulfill some career options or for preparation for transfer to a university program.

Certificates of Achievement

Nutrition and Foods, Community Nutrition Certificate

This certificate advances student's understanding of the interaction between nutrition and health. The focus is on community wellness through dietary choices, as they relate to nutrition needs of individuals throughout the lifecycle, cultural influences, community programs targeted at addressing nutrition-related issues and basic food preparation techniques. After completing the classes for this certificate, students may apply credits toward CRC’s Nutrition and Foods associate's degree program. Students earning this certificate are not qualified to practice medical nutrition therapy.

The Nutrition department offers courses both on-campus and online to accommodate varying students' needs.

Catalog Date: June 1, 2020

Certificate Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>NUTRI 300</td>
<td>Nutrition</td>
<td>3</td>
</tr>
<tr>
<td>CAM 301</td>
<td>Food Theory and Preparation</td>
<td>4</td>
</tr>
<tr>
<td>NUTRI 310</td>
<td>Cultural Foods of the World (3)</td>
<td>3</td>
</tr>
<tr>
<td>NUTRI 350</td>
<td>Community Nutrition</td>
<td>3</td>
</tr>
<tr>
<td>NUTRI 322</td>
<td>Nutrition Issues Throughout Life</td>
<td>3</td>
</tr>
<tr>
<td>Total Units:</td>
<td></td>
<td>16</td>
</tr>
</tbody>
</table>

Enrollment Eligibility

To be eligible for enrollment in the program, the student must meet the following criteria:

- Have access to the Internet
- Have an e-mail account
- Be familiar with word processing, PowerPoint, retrieving and attaching electronic documents and using the world wide web
- Have self-discipline, motivation, and the ability to complete required assignments on schedule

Enrollment Process

Eligible students are selected for the program according to the following steps:

- Admission to the college
- Contact CRC Nutrition and Foods Program Counselor regarding transferrable courses

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- PSLO 1: Demonstrate independent learning and effective communication skills
- PSLO 2: Explain the principles of nutrition and its effect on health
Career Information

Upon further academic study, students would be qualified for positions in hospitals/nursing homes, school food services, other health related facilities, college food service, industry, restaurant, public health agencies, nutrition program, WIC programs, Meals on Wheels, health clubs, weight management clinic, community wellness centers, food companies, contract food management companies, food distribution companies. These career options may require more than the certificate and two years of college study. Classes beyond the associate degree may be required to fulfill some career options or for preparation for transfer to a university program.

Plant-Based Nutrition and Sustainable Agriculture Certificate

The Plant-Based Nutrition and Sustainable Agriculture Certificate Program brings farm-to-fork into the classroom. It provides the science that supports the benefits of whole plant-based foods to the health of the individual as well as the environment. Students will gain knowledge in the function of plant-based foods towards the treatment and prevention of chronic diseases. The program addresses the environmental and social concerns with strategies and principles of sustainable agriculture. Students will master the theories and skills of plant-based food preparation bringing the food to the fork and into everyday food choices.

Contact the CRC Nutrition and Foods, Horticulture, and/or Ag Counselor regarding transferable courses.

Catalog Date: June 1, 2020

Certificate Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>NUTRI 303</td>
<td>Plant-Based Nutrition</td>
<td>3</td>
</tr>
<tr>
<td>NUTRI 331</td>
<td>Plant-Based Food Principles and Preparation</td>
<td>3</td>
</tr>
<tr>
<td>HORT 313</td>
<td>Sustainable Agriculture</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Total Units:</strong></td>
<td><strong>9</strong></td>
</tr>
</tbody>
</table>

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- PSLO 1: Demonstrate independent learning and effective communication skills.
- Demonstrate responsibility for personal action and choices.
- Communicate effectively both orally and in writing.
- PSLO 2: Explain the principles of nutrition and its effect on health.
- Relate the dietary causes of chronic diseases.
- Evaluate the role of plant-based foods on health and the environment.
- PSLO 3: Demonstrate a fundamental understanding of health behaviors on nutritional and health status.
- Schematize the effects of personal food choice on health, the environment and public policy.
- PSLO 4: Basic and advanced plant science/horticulture skills development and improvement.
- Demonstrate and apply the theories of sustainable and organic agriculture.
- Demonstrate a fundamental understanding of soils, soil development, soil building and preparation and sustainable soil management.
- Demonstrate a fundamental understanding of hydraulics and irrigation design, installation, and water management principles and practices.
- Create agriculture design concepts based on sound, sustainable soil management, water conservation, construction and maintenance, and integrated pest management best practices.
- PSLO 5: Effectively and accurately prepare and analyze raw ingredients and prepared foods.
Nutrition (NUTRI)

NUTRI 300 Nutrition

This course studies the basic science of human nutrition and its application to health and chronic diseases. It examines the sources and functions of micro- and macronutrients nutrients, including digestion, absorption, and transportation. Emphasis is placed on the health implications associated with dietary patterns, phytonutrient intake, consumption of whole foods, the impact of processing, and consequences of under and overconsumption. The course will also include topics such as nutrition as a world and consumer problem, weight loss, sports nutrition, food safety, and the diet-disease relationship, among others. An evaluation of personal dietary habits using current dietary guidelines and nutritional assessment methods will be completed to help students assess their own nutritional health.

Upon completion of this course, the student will be able to:

- SLO 1: Demonstrate independent learning and effective communication skills.
- SLO 2: Explain the principles of nutrition and their effects on health.
- SLO 3: Demonstrate fundamental understanding of health behaviors on nutrition and health status.
- PSLO 6: Implement proper sanitary and safety techniques.
- Demonstrate appropriate food handling and sanitary techniques.
- Utilize kitchen tools/equipment appropriately.

Career Information

In restaurants, food service facilities, farms, urban farms, sustainable/organic farms, school garden, health education. Some of these career options may require more than the certificate and two years of college study. Classes beyond the associate degree may be required to fulfill some career options or for preparation for transfer to a university program.

Nutrition (NUTRI)

NUTRI 300 Nutrition

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Transferable: CSU; UC
General Education: AA/AS Area III(b); CSU Area E1
C-ID: C-ID NUTR 110
Catalog Date: June 1, 2020

This course studies the basic science of human nutrition and its application to health and chronic diseases. It examines the sources and functions of micro- and macronutrients nutrients, including digestion, absorption, and transportation. Emphasis is placed on the health implications associated with dietary patterns, phytonutrient intake, consumption of whole foods, the impact of processing, and consequences of under and overconsumption. The course will also include topics such as nutrition as a world and consumer problem, weight loss, sports nutrition, food safety, and the diet-disease relationship, among others. An evaluation of personal dietary habits using current dietary guidelines and nutritional assessment methods will be completed to help students assess their own nutritional health.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO 1: Demonstrate independent learning and effective communication skills.
- Demonstrate independent learning by attending or logging in to class regularly.
- Utilize time management effectively and prioritize tasks to meet deadlines.
- Demonstrate effective communication (orally and/or in writing).
- SLO 2: Explain the principles of nutrition and their effects on health.
- Explain the science of nutrition and scientific research.
- Explain the process of digestion and absorption involved for each of the nutrients.
- Identify the disease(s) associated with nutrient deficiencies and toxicities.
- Compare and understand the nutrient, caloric, and food requirements at the various stages of the life cycle.
- Examine the role of food in the promotion of a healthy lifestyle.
- Examine the roles of food technology and environment issues related to food.
- SLO 3: Demonstrate fundamental understanding of health behaviors on nutrition and health status.
- Analyze and evaluate personal dietary intake and review food compositions.
- Examine the relationship of dietary intake to weight management, sports performance, chronic diseases, and global nutrition (hunger).
This course studies the science of plant-based nutrition and its application to health promotion, chronic disease reduction and the sustainability of the environment. It examines the sources and functions of micro- and macronutrients in plant foods and how the body digests, absorbs, transports and stores them. Emphasis is placed on the health implications associated with the standard American dietary intake, phytonutrient intake, whole foods/plant foods consumption, the impact of processing, and consequences of under and overconsumption. The course will also include topics on how plant-based nutrition significantly reduces the ecological footprint, how food choice can influence public policy, weight loss, food safety, and the diet-disease relationship, among others. An evaluation of personal dietary habits using current dietary guidelines and nutritional assessment methods will be completed to help students assess their own plant-based nutritional health.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO 1: Demonstrate independent learning and effective communication skills.
- Demonstrate responsibility for personal actions and choices.
- Communicate effectively both orally and in writing.
- SLO 2: Explain the principles of nutrition and its effect on health.
- Relate the dietary causes of chronic diseases.
- Evaluate the role of plant-based foods on individual health and the environment.
- SLO 3: Demonstrate a fundamental understanding of health behaviors on nutritional and health status.
- Schematize the effects of personal food choice on health, the environment and public policy.

This course compares various western and non-western culture food customs and patterns including their social, religious, economic and aesthetic significance. The nutritional status of various cultures as it relates to geographic agricultural and socioeconomic factors will be explored. Ethnocentrism, gender-related stereotypes, and racism as they relate to the availability, distribution, and preparation of food throughout the world will also be compared.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO 1: Demonstrate independent learning and effective communication skills.
- demonstrate independent learning by attending or logging in to class regularly
- utilize time management effectively and prioritizes tasks to meet deadline
- demonstrate effective oral and written communication
- SLO 2: Demonstrate fundamental understanding of health behaviors on nutritional and health status
- analyze ethnicity, ethnocentrism, and racism and their impact on American food habits
- analyze the impact of food-related stereotypes
• compare traditional food habits of other cultures with contemporary food habits of Americans
• explain the sociocultural and ethnic food consumption issues and trends
• explain the influence of socioeconomic, cultural, and psychological factors on food and nutrition behavior
• examine the significant aspects of various cultures, their contributions, and influences on American food preference and consumption
• describe the traditional food habits, common foods, meal patterns, special occasion foods, food taboos, and the role of food from various regions of the world
• analyze similarities and differences in the nutritional contributions from comparative ethnic foods
• list the common foods in each culture studied
• identify food patterns as related to religious practices, cultural customs, psychological and family structures, and health beliefs
• analyze the distribution and availability of food based on ethnocentrism, gender-related issues and racism
• demonstrate personal methods of cultural tolerance by examining various cultures

NUTRI 322 Nutrition Issues Throughout Life

Units: 3
Hours: 54 hours LEC
Prerequisite: NUTRI 300 with a grade of “C” or better
Advisory: LIBR 318
Transferable: CSU
General Education: AA/AS Area III(b)
Catalog Date: June 1, 2020

This course is a study of the nutritive needs of persons at various stages of the lifecycle with emphasis on special periods such as pregnancy, preschool, adolescence and aging. This course may be helpful for Kinesiology and Early Childhood Education students as well as those working with people in social agencies, such as nursing and gerontology, seeking an understanding of the nutritional changes and requirements through the different stages of life.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• SLO 1: Demonstrate independent learning and effective communication skills
  - Demonstrate independent learning by attending or logging in to class regularly.
  - Utilize time management effectively and prioritizes tasks to meet deadlines.
  - Demonstrate effective oral and in written communication.

• SLO 2: Explain the principles of nutrition and its effect on health
  - Analyze the effect of nutrition on the outcome of pregnancy for both the mother and the child.
  - Examine the nutrition needs of low and high-risk pregnancies.
  - Evaluate the nutrient needs of healthy persons at various stages of life.

• SLO 3: Demonstrate a fundamental understanding of health behaviors on nutritional and health status
  - Examine how nutrient needs can be satisfied under normal conditions at each stage of development.
  - Inspect the nutrition support programs and the role of the nutrition professional in promoting nutrition and health.
  - Distinguish the role of nutrition on growth and development as well as health in children, pregnancy, and elderly.

• SLO 4: Interpret current nutrition research
  - Formulate a nutritional care plan to promote health during pregnancy, lactation, infancy, childhood, adolescence, adulthood, and elderly years.
  - Analyze research articles and summarize findings in essays.
NUTRI 331 Plant-Based Food Principles and Preparation

This course provides a comprehensive study of plant-based food ingredients and the basic principles and techniques involved in plant-based food preparation. Students will examine the factors that influence taste and the changes that occur in foods during preparation. In the laboratory, basic cooking skills and theoretical applications will be emphasized. Additionally, importance is placed on the reasons for recipe procedures and the prevention and correction of cooking failures.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO 1: Demonstrate independent learning and effective communication skills.
- Demonstrate responsibility for personal actions and choices.
- Communicate effectively both orally and in writing.
- SLO 2: Effectively and accurately prepare and analyze raw ingredients and prepared foods.
- Evaluate food through sensory evaluation of texture, taste, color, presentation, smell.
- Identify optimal cooking procedures/heat transfer to maximize nutrient content as well as the quality of the ingredients and dish as a whole.
- Analyze quality defects in cooked products and specify possible errors in techniques or ingredient selection.
- SLO 3: Implement proper sanitary and safety techniques.
- Demonstrate appropriate food handling and sanitary techniques.
- Utilize kitchen tools/equipment appropriately.

NUTRI 340 Nutrition and Metabolism

This course examines the chemical structure and metabolism of carbohydrate, lipids, and proteins. Emphasis is placed on the biological roles of vitamins and minerals, metabolic pathways and its relation to overall health. In addition, this course will help the student integrate the understanding of metabolic knowledge to contemporary and controversial issues in nutrition.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO 1: Demonstrate independent learning and effective communication skills.
- demonstrate independent learning by attending or logging in to class regularly
- utilize time management effectively and prioritizes tasks to meet deadlines
- demonstrate effective oral and written communication
- SLO 2: Explain the principles of nutrition and its effect on health
- analyze the biological role of various nutrients in the body
- analyze and examine nutrition and metabolism at the physiological level
- relate the deficiency and toxicity conditions to the vitamin and minerals
• examine the role and the metabolic processes of the macronutrients
• evaluate the type of nutrients and how nutrients are used for energy during exercise and activity
• analyze the role of complementary and alternative nutrition and dietary supplements
• SLO 3: Interpret current nutrition research.
• examine the appropriate use and interpretation of the current dietary guidelines and recommendations
• integrate scientific knowledge and relate it to current nutrition issues
• compose a written essay on a current nutrition issue

NUTRI 350 Community Nutrition

This course studies the theory, concepts, and philosophy affecting nutrition education and services in the community. Students will be introduced to programs, policies, and institutions that influence nutrition services at local, state and national levels throughout the lifespan, with special emphasis on infants and children as well as the elderly. Students will learn about epidemiology and its application in nutrition research and explore examples of how a variety of teaching methods can improve the nutritional status in a community and with various population groups.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• SLO 1: Demonstrate independent learning and effective communication skills.
  • demonstrate independent learning by attending or logging in to class regularly
  • utilize time management effectively and prioritizes tasks to meet deadlines
  • demonstrate effective oral and written communication

• SLO 2: Demonstrate a fundamental understanding of health behaviors on nutritional and health status
  • examine the factors involved in nutrition-related deficiencies
  • appraise the public policy role in community nutrition and other health programs
  • demonstrate knowledge of educational material development
  • demonstrate knowledge of economic and public policy issues related to nutrition, food availability, and nutrition behaviors
  • identify educational needs of diverse populations
  • analyze general health assessment and application of health promotion and disease prevention

• SLO 3: Interpret current nutrition research
  • assess the nutrition-related problems which exist and the services available for helping to prevent or assist those problems in the community
  • examine materials and techniques for working in or with various community groups
  • demonstrate knowledge of a needs assessment
  • demonstrate knowledge of program planning, monitoring, and evaluation

NUTRI 370 Food Service Management
The course will study the organization, planning, and control of production for a quantity food service operation. This course also examines the process and importance of food service functions such as leadership, human resource management and employee inservice training, menu planning and pricing, scheduling of staff and production, portion and temperature control, recipe standardization and scaling, basic tenants of food and equipment safety and sanitation, and elements of culinary layout and design.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO 1: Demonstrate independent learning and effective communication skills.
  - demonstrate independent learning by attending or logging in to class regularly
  - utilize time management effectively and prioritize tasks to meet deadlines
  - demonstrate effective communication (orally and/or in writing)

- SLO 2: Demonstrate a fundamental understanding of food service management function.
  - analyze scheduling requirements for food production and staffing efficiently
  - calculate menu item costs and calculate selling prices
  - distinguish principles of good menu writing practice
  - explain methods of controlling portion size
  - discuss the factors affecting volume and sales mix forecasting
  - calculate standardize recipes and accurately scale recipes for specific operational needs
  - calculate quantities of food to order and to produce for specified operations
  - discuss factors involved in planning efficient facility layout and equipment purchases
  - SLO 3: Compare the effectiveness of various management styles
  - identify management styles

NUTRI 495 Independent Studies in Nutrition and Foods

An independent studies project involves an individual student or small group of students in study, research, or activities beyond the scope of regularly offered courses. See the current catalog section of "Special Studies" for full details of Independent Studies.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO #1: Actively engage in intellectual inquiry beyond that required in order to pass a course of study (College Wide Learning Outcome – Area 4).
  - Discuss and outline a proposal of study (that can be accomplished within one semester term) with a supervising instructor qualified within the discipline.
  - Design an independent study (to be completed individually or by collaboration of a small group) to foster special knowledge, skills, and experience that are not available in any one regularly scheduled course.
  - Use information resources to gather discipline-specific information.

- SLO #2: Utilize modes of analysis and critical thinking to apply theoretical perspectives and/or concepts in the major discipline of study to significant problems and/or educational activities (College Wide Learning Outcome – Area 3).
- Analyze and apply the knowledge, skills and experience that are involved in the independent study to theoretical perspectives and/or concepts in the major discipline of study.

- Explain the importance of the major discipline of study in the broader picture of society.

- SLO #3: Communicate a complex understanding of content matter of the major discipline of study (College Wide Outcome – Area 3).

- Demonstrate competence in the skills essential to mastery of the major discipline of study that are necessary to accomplish the independent study.

- SLO #4: Identify personal goals and pursue these goals effectively (College Wide Outcome – Area 4).

- Utilize skills from the “academic tool kit” including time management, study skills, etc., to accomplish the independent study within one semester term.
Pharmacy Technology  
| Cosumnes River College

The CRC Pharmacy Technology Program includes didactic, laboratory, and practicum components that are structured to facilitate the achievement of educational and career goals. Pharmacy technicians are skilled technical health workers who perform a wide variety of pharmacy related tasks under the direct supervision of a registered pharmacist. Successful completion of the program not only qualifies students for registration with the California State Board of Pharmacy but also prepares graduates for entry-level pharmacy technician positions. The program is accredited by the American Society of Health-System Pharmacists.

**Dean**  
Collin Pregliasco

**Department Chairs**  
Veneece Awad

- (916) 691-7261
- preglic@crc.losrios.edu

### Associate Degree

#### A.S. in Pharmacy Technology

The CRC Pharmacy Technology Program includes didactic, laboratory, and practicum components that are structured to facilitate the achievement of educational and career goals. Pharmacy technicians are skilled technical health workers who perform a wide variety of pharmacy related tasks under the direct supervision of a registered pharmacist. Successful completion of the program not only prepares graduates to participate in taking the Pharmacy Technician Certification Exam (PTCE) but also qualifies students for licensure and registration with the California State Board of Pharmacy and be employed as entry-level pharmacy technician. The program has obtained a 6 year Accreditation Status conferred by the American Society of Health System Pharmacists (ASHP) and the Accreditation Council of Pharmaceutical Education (ACPE).

**Catalog Date:** June 1, 2020

### Degree Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1st Semester (Fall):</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PHARM 300</td>
<td>Introduction to Pharmacy Practice</td>
<td>3</td>
</tr>
<tr>
<td><strong>2nd Semester (Spring):</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PHARM 315</td>
<td>Pharmaceutical Calculations</td>
<td>3</td>
</tr>
<tr>
<td>PHARM 320</td>
<td>Pharmacology of Therapeutic Agents</td>
<td>5</td>
</tr>
<tr>
<td><strong>3rd Semester (Fall):</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PHARM 350</td>
<td>Pharmaceutical Information Management</td>
<td>3</td>
</tr>
<tr>
<td>PHARM 360</td>
<td>Retail Operation of Pharmaceutical Practice</td>
<td>3</td>
</tr>
<tr>
<td>PHARM 380</td>
<td>Preparation of Pharmaceutical Products</td>
<td>3</td>
</tr>
<tr>
<td>PHARM 400</td>
<td>Pharmacy Technician Profession</td>
<td>1</td>
</tr>
<tr>
<td><strong>4th Semester (Spring):</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PHARM 410</td>
<td>Acute Care Practicum</td>
<td>4</td>
</tr>
<tr>
<td>COURSE CODE</td>
<td>COURSE TITLE</td>
<td>UNITS</td>
</tr>
<tr>
<td>-------------</td>
<td>----------------------------------</td>
<td>-------</td>
</tr>
<tr>
<td>PHARM 420</td>
<td>Retail Practicum</td>
<td>2</td>
</tr>
<tr>
<td>COMM 301</td>
<td>Introduction to Public Speaking</td>
<td>3^2</td>
</tr>
<tr>
<td>Total Units:</td>
<td></td>
<td>30</td>
</tr>
</tbody>
</table>

^1Course can be taken prior to admission into the Pharmacy Technology Program.

^2Course can be taken prior to admission into the Pharmacy Technology Program.

The Pharmacy Technology Associate in Science (A.S.) degree may be obtained by completion of the required program, plus general education requirements, plus sufficient electives to meet a 60-unit total. See CRC graduation requirements.

Enrollment Eligibility

To be eligible for enrollment in the program, the student must meet the following criteria:

- The American Society of Health System Pharmacists requires that all students in the program must have a high school diploma or G.E.D.

- Students may enter PHARM 300 and AH 120 without formal acceptance into the Pharmacy Technology Program, however in order to qualify for official acceptance into the Pharmacy Technology Program, and proceed forward to complete the hands-on laboratory training (PHARM 350, 360, 380) and externship training (PHARM 410, 420), students must complete the following prerequisite courses with a grade of a C or higher: AH 120 (corequisites BIOL 102 & AH 110), PHARM 300, PHARM 315 and PHARM 320.

- The American Society of Health System Pharmacists requires that all students must be successful in passing a Background Check prior to official acceptance into the Pharmacy Technology Training Program.

Enrollment Process

Eligible students are selected for the program according to the following steps:

- Students should complete all the prerequisite courses with a C grade or better to meet the minimum requirement for acceptance to the Pharmacy Technology Program.

- Qualified students should submit an Application Form electronically and a hard copy to the Pharmacy Technology Program Director after gaining instructor permission for enrollment in the Pharm 315 & 320 classes. Students will be formally notified by a Letter of Acceptance to the Pharmacy Technology Program. Applications will be made available in the Careers and Technology area office.

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- PSLO 1: Application of the federal, state, and local laws; regulations and professional standards to pharmacy practice.

- PSLO 2: Analysis of the role of the Pharmacy Technician in distributive pharmacy.

- PSLO 3: Demonstrate the comprehension of knowledge pertaining to human anatomy, physiology, and pharmacology.

- PSLO 4: Perform math function, dosage calculation and compounding techniques.

- PSLO 5: Demonstrate ethical and professional conduct in all job-related activities.

- PSLO 6: Design and relate messages for effective and appropriate oral and written communication.

Career Information

Businesses that will make up the potential market for CRC’s Pharmacy Technician graduates include hospitals; pharmacies/drug stores; grocery stores; department stores; state government; local government; and other general merchandise stores in the region. Retail pharmacies are expected to experience the largest growth in pharmacy technician jobs over the next ten years and will most likely benefit the most from a Pharmacy Technician degree program in the region.
PHARM 300 Introduction to Pharmacy Practice

This course introduces the concepts of direct pharmaceutical patient care and the technicians’ role in its delivery. Current direct patient care delivery system and medication distribution systems are emphasized. Topics include dosage calculations, the influence that medication laws, standards and regulations have on practice, and quality assurance in the pharmaceutical setting.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO 1: Understand the role of the Pharmacy Technician in collecting, organizing, evaluating, distributing and storing pharmaceutical goods or services for direct pharmaceutical therapy.
- Explain "direct patient care" and how it is delivered in the various care settings.
- Describe the various systems used to distribute medications.
- Explain the technician’s role in preventing and detecting medication errors.
- SLO 2: Understand the federal, state, and local laws; regulations and professional standards related to pharmacy practice.
- Describe how state laws and regulations determine the role and scope of practice for the pharmacy technician.
- Describe quality assurance methods in pharmacy.
- Describe the role of the Food and Drug Administration in regulating herbal and dietary supplements.
- SLO 3: Perform math operations, dosage calculations and compounding techniques.
- Explain the pharmacy technician activities associated with measuring, preparation and packaging of medications.

PHARM 315 Pharmaceutical Calculations

This course presents the mathematical concepts and practical experience required for students to pass the math portion of the Pharmacy Technician Certification Examination. Through lecture demonstrations and practice problem sets, students will learn the skills essential for calculating and preparing pharmaceutical dosages in both community and institutional pharmacy settings.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO 1: Understand and perform mathematical calculation methods necessary for daily operational duties in a community or institutional pharmacy.
  a) Determine and validate accurately the drug amount & percentage strength of active ingredient(s) for a given extemporaneous or sterile compounding prescription.
  b) Interpret a given prescription to calculate accurately the dosage amount needed, and conversion of metric system to common household measurement units in the daily processing of a prescription.
  c) Calculate price, profit and discount, and perform other financial calculations relating to insurance reimbursement and business operation of a pharmacy.
- SLO 2: Solve equations and inequalities which come from applied problems and critical thinking.
a) Interpret accurately from a given word problem (situational) and translate to a mathematical equation to obtain an unknown from the given known variables.

b) Understand the use of the principles of ratio, proportionality and dimensional analysis as a method to derive an answer for the unknown in a given problem.

SLO 3: Perform special calculations in compounding which involve admixtures of various concentrations and dilutions.

a) Perform alligation method of determining portions of stock preparations to compound a prescribed percentage strength of a pharmaceutical product not available commercially.

b) Determine accurately the least measurable quantity and aliquot measurements in compounding admixtures of a prescription solution or suspension.

PHARM 320 Pharmacology of Therapeutic Agents

This course studies the anatomy and physiology of the various human body systems. Students will learn the use and side effects of prescription medications, nonprescription medications, and alternative therapies commonly used to treat diseases affecting the nervous, musculoskeletal, immune, dermatological, hematologic cardiovascular, respiratory, reproductive, gastrointestinal, renal system as well as the eye, ear, nose and throat. This course covers brand and generic names of the therapeutic agents studied, standard pronunciation, dosage forms, routes of administration, medical abbreviation and the role of the Food and Drug Administration in herbal and dietary supplements. The laboratory activities are designed to provide hands-on experiences in pharmacy calculation and compounding medications related to the various body systems.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO 1: Demonstrate knowledge in federal, state, and local laws; regulations; and professional standards.
- Explain the role of the Food and Drug Administration.
- Describe how state laws and regulations determine the role and scope of practice for the pharmacy technician.
- Describe quality assurance methods in pharmacy.
- SLO 2: Demonstrate knowledge of human anatomy and physiology and pharmacology.
- State the definitions of medical terms commonly used in the range of patient care setting.
- Describe the basic anatomy of the nervous, skeletal, muscular immune, endocrine, dermatological, and hematologic system.
- Describe the application of pharmaceuticals in treating conditions of the various body systems.
- Determine the dosage forms of prescription and non-prescription medications commonly used to treat diseases of the various body systems.
- SLO 3: Perform math operations, dosage calculations and compounding techniques.
- Calculate the proper dose and strength for compounding medications.
- Demonstrate proper compounding techniques.
- Demonstrate proper preparation and labeling of repackaged medications.
- Accurately calculate expiration date for medications.
- Accurately measure out various forms of medication.
- Demonstrate proper use of lab equipments.
- Demonstrate accurate record keeping.
This course reviews how state laws and regulations determine the activities associated with the collection of patient-specific information by the pharmacy technician. Students learn to secure information from the medical chart, record, patient profile, patient, caregiver, database and health care professional. Technologies used for storing, accessing and recording pharmacy data and proper methods for receiving and authenticating prescription orders are emphasized. Students will also learn safety in medication use and monitoring program of medication therapy and the pharmacy technician’s role in the prevention and reporting of medication misadventures. The lab provides hands-on experience with pharmacy distribution software, technology, and prescription processing.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO 1: Analyze the role of the Pharmacy Technician in distributive pharmacy.
- Efficiently secure the prescribe medication or devices from inventory.
- Efficiently and accurately collect pertinent information for use by the pharmacist.
- Identify the need for a referral to pharmacist.
- Accurately create a new patient profile to an established procedure.
- SLO 2: Demonstrate knowledge in federal, state, and local laws; regulations; and professional standards.
- Demonstrate appropriate collection of patient information.
- Apply established laws and protocols to select the appropriate product.
- Apply established protocol to assemble appropriate patient information materials.
- Apply established policies and procedures for recording the preparation of pharmaceutical products.
- SLO 3: Design and relate messages for effective and appropriate oral and written communication.
- Communicate effectively orally and in writing.
- Effectively utilize credible resources.
- Demonstrate skills in the use of technology and internet.

This course reviews the process of pharmaceutical purchasing and acquisitions in the retail settings and in emergency situations. Students will learn inventory control including handling of receipts, storage, removal, and documentation. Other topics include: methods of distribution with emphasis on computer database maintenance and the state laws that govern these activities, billing, collection of payment, third-party payment, and the technician’s role in the assisting the PharmD in immunization administration. The lab will provide hands-on experience in a simulated retail environment.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO 1: Collect, organize, and evaluate pharmaceutical goods or services for direct patient care, medication use review, or pharmaceutical therapy.
- Process the correct medication, equipment, device, or supplies to the correct patient or patient’s representative.
- Monitor utilization of medications to assure that use is congruent with the prescription order for the patient.
PHARM 380 Preparation of Pharmaceutical Products

Units: 3
Hours: 27 hours LEC; 81 hours LAB
Prerequisite: PHARM 300 with a grade of "C" or better
Corequisite: PHARM 370
Transferable: CSU
Catalog Date: June 1, 2020

This course presents the methods of preparing non-compounded, compounded, non-sterile, and sterile products for distribution. Students will learn the state laws and regulations that determine the role of a pharmacy technician in measuring, preparing, packaging, and storing of medications. Medication preparation, profiling, calculation, measuring, safety, labeling and quality assurance procedures will be emphasized.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO 1: Understand the role of the Pharmacy Technician in distributive pharmacy.
- Secure the prescribed medications or devices from inventory.
- Complete dosage forms as specified by the prescription order.
- Apply safety policies and procedures in the preparation and packaging of all medications.
- Apply safety policies and procedures in the disposal of all hazardous and non-hazardous wastes generated during medication preparation.
- Apply established procedures to generate accurate and complete product labels.
- Apply manufacturer’s recommendation and/or pharmacy’s guidelines for storage of all medications prior to distribution.
- Compound non-sterile products.
- Compound sterile products.
- Compound cytotoxic and other hazardous medication products.
- SLO 2: Understand the federal, state, and local laws; regulations and professional standards related to pharmacy practice.
• Explain how state laws and regulations determine what activities associated with preparing medications for distribution can be delegated to the technicians.

• Apply established laws and protocols to select the appropriate product.

• Apply protocol to assemble appropriate patient information materials.

• Apply established policies and procedures for recording the preparation of bulk, unit dose, special doses of medications for immediate or in anticipation of future use.

• Apply established policies and procedures for recording the preparation of controlled substances.

• Assess the correctness of medications produced by other technicians.

• SLO 3: Perform math operations, dosage calculations and compounding techniques

• Clean laminar flow biological safety cabinets appropriately.

• Calibrate device, compounder or pump appropriately.

• Apply manufacturer’s guidelines in trouble-shooting, maintaining, and repairing electronic devices used by the pharmacy in the preparation and dispensing of medications.

PHARM 400 Pharmacy Technician Profession

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• SLO 1: Collect, organize, and evaluate pharmaceutical goods or services for direct patient care, medication use review, or pharmaceutical therapy.

• Discuss the responsibility of a Pharmacy Technician for improving direct patient care.

• Explain the concept of workflow management.

• SLO 2: Demonstrate ethical and professional conduct in all job-related activities.

• Define ethics and compare it with laws.

• Explain ethical codes that pertain to the work function of pharmacists.

• Discuss appropriate and professional appearance.

• Apply personal self-control and professional decorum.

• Explain the necessity and methods for technicians to stay current with advances in pharmacy practices.

• Devise an effective plan for minimizing stress and balancing professional and personal obligations.

• Explain the benefits and the principles of change management.

• Explain the benefits of obtaining technician certification.

• Explain the process by which pharmacy technicians can become certified.

• SLO 3: Design and relate messages for effective and appropriate oral and written communication.

• Use effective negotiation skills to resolve conflicts.

• Demonstrate consistent use of a systematic approach to problem solving and consensus building.

• Use effective interpersonal skills to manage working relationships.
PHARM 410 Acute Care Practicum

This course develops practical skills in the didactic and practicum phases of pharmacy technician training in the acute and home care environment. Acute care includes hospital and/or long-term care facilities. Home care includes exposure to infusion therapy. The clinical experience is performed under professional supervision. A preceptor (Licensed Pharmacist or Certified Pharmacy Technician) evaluates the student’s performance at the site. Students will directly interact with clients and other health care professionals. Students must have a TB clearance and any other immunization required by the clinical facility. Students must have an established Agency Agreement on file with the faculty with a sponsoring site prior to the beginning of the first day of class. Contact the Careers and Technology Main Office for information about the Agency Agreement.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO 1: Collect, organize, and evaluate pharmaceutical goods or services for direct patient care, medication use review, or pharmaceutical therapy.
- Collect pertinent patient information for use by the pharmacist.
- Receive and process prescription/medication orders.
- SLO 2: Analyze the role of the Pharmacy Technician in distributive pharmacy.
- Apply established policies and procedures for purchasing pharmaceuticals, devices, and supplies.
- Apply established policies and procedures for removing expired, discontinued, recalled items, and/or pharmaceuticals from inventory.
- Apply established policies and procedures for documenting repackaging items or pharmaceuticals.
- SLO 3: Demonstrate knowledge in federal, state, and local laws; regulations; and professional standards.
- Apply established policies/procedures for monitoring the practice site and/or service area for compliance with federal, state, local laws, regulations and professional standards.
- Apply the principles of quality assurance to all technician activities.
- SLO 4: Demonstrate knowledge of human anatomy and physiology and pharmacology.
- Monitor utilization of medications to assure that use is congruent with the prescription.
- Identify potential for adverse medical event and participate in the formulation of a strategy for prevention.
- SLO 5: Perform math calculations, dosage calculations and compounding techniques.
- Calibrate the weighing or counting device, compounder or pump accurately.
- Maintain, troubleshoot, and use electronic devices appropriately.
- Perform selected monitoring procedures (finger-stick, cholesterol screening, blood pressure, pulse).
- SLO 6: Demonstrate ethical and professional conduct in all job-related activities.
- Act ethically in the conduct of all job-related activities.
- Consistently maintain personal self-control and professional decorum.
- Observe legal and ethical guidelines for safeguarding the confidentiality of patient information.
- SLO 7: Design and relate messages for effective and appropriate oral and written communication.
- Organize all written or oral communication in a logical manner and pronounce technical terms correctly.
- Address all communication on the level appropriate for the audience.
- Demonstrate skills in the use of computer, word processing, computerized medication information databases, and internet.
PHARM 420 Retail Practicum

This course develops the practical skills for pharmacy technicians in a community/retail environment. The clinical experience is performed under professional supervision. A preceptor (Licensed Pharmacist or Certified Pharmacy Technician) evaluates the student's performance at the site. Students will directly interact with clients and other health care professionals. Students must have a TB clearance and any other immunization required by the clinical facility. Students must have an established Agency Agreement with a sponsoring site on file with the faculty prior to the beginning of the first day of class. Contact the Careers and Technology Main Office for information about the Agency Agreement.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- **SLO 1:** Collect, organize, and evaluate pharmaceutical goods or services for direct patient care, medication use review, or pharmaceutical therapy.
  - Collect pertinent patient information for use by the pharmacist.
  - Receive and process prescription/medication orders.
- **SLO 2:** Analyze the role of the Pharmacy Technician in distributive pharmacy.
  - Determine payment due for medication orders.
  - Demonstrate sensitivity to patient's concern regarding third party payment coverage and further actions to be taken.
  - Record the receipt of payment for pharmaceutical goods and services.
  - Apply established policies and procedures for purchasing pharmaceuticals, devices, and supplies.
  - Apply established policies and procedures for removing expired, discontinued, recalled items, and/or pharmaceuticals from inventory.
  - Apply established policies and procedures for documenting repackaging items or pharmaceuticals.
- **SLO 3:** Demonstrate knowledge in federal, state, and local laws; regulations; and professional standards.
  - Apply the principles of quality assurance to all technician activities.
  - **SLO 4:** Demonstrate knowledge of human anatomy and physiology and pharmacology.
  - Monitor utilization of medications to assure that use is congruent with the prescription.
  - Identify potential for adverse medical event and participate in the formulation of a strategy for prevention.
  - **SLO 5:** Perform math calculations, dosage calculations and compounding techniques
  - Calibrate the weighing or counting device, compounder or pump accurately.
  - Maintain, troubleshoot, and use electronic devices appropriately.
  - Perform selected monitoring procedures (finger-stick, cholesterol screening, blood pressure, pulse).
- **SLO 6:** Demonstrate ethical and professional conduct in all job-related activities
  - Act ethically in the conduct of all job-related activities
  - Consistently maintain personal self-control and professional decorum
  - Observe legal and ethical guidelines for safeguarding the confidentiality of patient information
- **SLO 7:** Design and relate messages for effective and appropriate oral and written communication.
  - Organize all written or oral communication in a logical manner and pronounce technical terms correctly.
  - Address all communication on the level appropriate for the audience.
  - Demonstrate skills in the use of computer, word processing, computerized medication information databases, and internet.
Philosophy | Cosumnes River College

Philosophy is the logical examination of fundamental issues regarding the nature and limits of human knowledge, ultimate reality, moral value and obligation, correct reasoning, beauty, and art. Students of philosophy learn to generate, understand, and evaluate arguments, express themselves clearly and carefully, and see things from multiple points of view.

Dean

 (916) 691-7142
 WilliaL3@crc.losrios.edu

Philosophy (PHIL)

PHIL 300 Introduction to Philosophy

Units: 3
Hours: 54 hours LEC
Prerequisites: None.
Transferable: CSU; UC
General Education: AA/AS Area II(b); CSU Area A3; CSU Area C2; IGETC Area 3B
C-ID: C-ID PHIL 100
Catalog Date: June 1, 2020

In this course, students will apply the critical thinking techniques of analysis, evaluation, and synthesis to areas of philosophical inquiry including meta-philosophy, epistemology, metaphysics, ethics, political philosophy, philosophy of religion, history of philosophy, and existentialism. Students will practice distinguishing fact from opinion, employing inductive and deductive reasoning, identifying logical errors and fallacies, and developing oral and written arguments to support their own philosophical perspectives or challenge the perspectives of others. The quality and quantity of the course's required writing will reflect the standards of a second semester composition course.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO #1: Identify important questions and conceptions within a range of traditional subfields of Philosophy (Epistemology, Metaphysics, Logic, Ethics, and Aesthetics), distinguish from among divergent interpretations those that are better supported and those that are less well supported, construct well supported interpretations of diverse viewpoints and reason well about written and oral discourse.

- Objective 1a: Evaluate information concerning central issues within a range of traditional subfields of Philosophy for quality, validity and bias to determine if it is objective and reliable.

- Objective 1b: Evaluate the relationship of language to logic and analyze, criticize and rationally justify points of view concerning central issues within a range of traditional subfields of Philosophy.

- SLO #2: Reason inductively and deductively, reach conclusions concerning central issues within a range of traditional subfields of Philosophy based on sound or cogent inferences drawn from unambiguous statements of knowledge or belief.

- Objective 2a: Distinguish fact from non-factual judgment, belief from knowledge and fallacious reasoning from correct (invalid or weak) reasoning in respect to central issues within a range of traditional subfields of Philosophy.

PHIL 304 Introduction to Asian Philosophy
This course provides an introduction to the philosophical traditions of Hinduism, Buddhism, Taoism and Confucianism focusing on metaphysics, epistemology, and ethics.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- Identify important questions and conceptions within a range of traditional subfields of Philosophy (Epistemology, Metaphysics, Logic, Ethics, and Aesthetics) as they are addressed within a range of classical Asian philosophical traditions (Hindu, Confucian, Taoist, Buddhist), distinguish from among divergent interpretations those that are better supported and those that are less well supported, construct well supported interpretations of diverse viewpoints and reason well about written and oral discourse (SLO1, PSLO1).

- Evaluate information concerning central issues within a range of traditional sub-fields of Philosophy as they are addressed within a range of classical Asian philosophical traditions for quality, validity and bias to determine if it is objective and reliable.

- Evaluate the relationship of language to logic and analyze, criticize and rationally justify points of view concerning central issues within a range of traditional sub-fields of Philosophy as they are addressed within a range of classical Asian philosophical traditions.

- Reason inductively and deductively, reach conclusions concerning central issues within a range of traditional sub-fields of Philosophy as they are addressed within a range of classical Asian philosophical traditions based on sound or cogent inferences drawn from unambiguous statements of knowledge or belief.

- Distinguish fact from non-factual judgment, belief from knowledge and fallacious reasoning from correct (invalid or weak) reasoning in respect to central issues within a range of traditional sub-fields of Philosophy as they are addressed within a range of classical Asian philosophical traditions.

- Distinguish between philosophy and religion, philosophical views and religious views.

- Demonstrate the ability to engage in ethical reasoning necessary to exercise responsibility as an ethical individual, professional, local, and global citizen (SLO2, PSLO3).

- Apply ethical reasoning skills to ethical issues addressed within a range of classical Asian philosophical traditions and work toward a personal resolution of ethical issues.

- Express an appreciation of ethical principles addressed within a range of classical Asian philosophical traditions as applied to personal and civic choices.

- Realize and apply the responsibility to use knowledge wisely.

PHIL 310 Introduction to Ethics

The application of theories developed by traditional and contemporary moral philosophy to the ethical problems, dilemmas, and issues of today.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO #1: identify important questions and conceptions within Ethics, distinguish from among divergent interpretations those that are better supported and those that are less well supported, construct well supported interpretations of diverse viewpoints and reason well about written and oral discourse.

- Objective 1a: evaluate information concerning central issues within Ethics for quality, validity and bias to determine if it is objective and reliable.
Objective 1b: evaluate the relationship of language to logic and analyze, criticize and rationally justify points of view concerning ethical issues.

SLO #2: reason inductively and deductively concerning ethical issues, reach conclusions about ethical issues based on sound or cogent inferences drawn from unambiguous statements of knowledge of belief.

Objective 2a: distinguish fact from non-factual judgment concerning ethical issues, belief from knowledge and fallacious reasoning from correct (invalid or weak) reasoning concerning ethical issues.

Objective 2b: apply ethical reasoning skills to ethical issues and work toward a personal resolution of ethical issues.

SLO #3 (PSLO #3): demonstrate the ability to engage unethical reasoning necessary to exercise responsibility as an ethical individual, professional, local, and global citizen.

Objective 3a: show an appreciation of ethical principles as applied to personal and civic choices.

PHIL 315 Contemporary Moral Issues

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Advisory: Eligibility for ENGWR 300.
Transferable: CSU
Catalog Date: June 1, 2020

This course investigates some of the moral issues our society presently faces. These issues may include abortion, euthanasia, genetic engineering, individual liberty and the collective good, sexuality/gender and society, war and terrorism, capital punishment, hunger/poverty and moral obligation, discrimination, and affirmative action.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO #1: Critically evaluate views concerning abortion, euthanasia, capital punishment, or other topics addressed in the course.
- SLO #2: Compare and contrast differing theories concerning abortion, euthanasia, capital punishment, or other topics addressed in the course.
- SLO #3: Analyze and evaluate arguments from primary sources concerning abortion, euthanasia, capital punishment, or other topics addressed in the course.
- Assess presuppositions underlying various views concerning abortion, euthanasia, capital punishment, or other topics addressed in the course.
- SLO #4: Formulate reasons to justify one's beliefs concerning abortion, euthanasia, capital punishment, or other topics addressed in the course.

PHIL 320 Logic and Critical Reasoning

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Transferable: CSU; UC
General Education: AA/AS Area II(b); CSU Area A3
Catalog Date: June 1, 2020

This course is an introduction to basic principles and frameworks of logic and critical thinking appropriately used in argument analysis: deduction, induction, fallacy recognition. Emphasis on developing analytical skills and applying principles of good reasoning to the arguments encountered in life. Argument topics from academic fields and textbooks, the electronic and print media, advertisements, politics and ethics may be considered. The quality and quantity of the course's required writing will reflect the standards of a second semester composition course.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO #1: Identify important questions and conceptions, distinguish from among divergent interpretations those that are better supported and those that are less well supported; construct well supported interpretations of diverse viewpoints; and reason well about written and oral discourse.
Evaluate information concerning central issues for quality, validity and bias to determine if it is objective and reliable.

Evaluate the relationship of language to logic and analyze, criticize and rationally justify points of view.

Reason inductively and deductively, reach conclusions based on sound or cogent inferences drawn from unambiguous statements of knowledge or belief.

Distinguish fact from non-factual judgment, belief from knowledge and fallacious reasoning from correct (invalid or weak) reasoning.

SLO #2: Access, synthesize and evaluate information using a variety of sources.

Utilize technological resources in order to explore and express information.

Determine the extent of information needed, evaluate the information and its sources critically, and ethically and legally apply gathered information to personal and community issues.

SLO #3: Demonstrate the ability to engage in ethical reasoning necessary to exercise responsibility as an ethical individual, professional, local, and global citizen.

Apply ethical reasoning skills to ethical issues and work toward a personal resolution of ethical issues.

Express an appreciation of ethical principles as applied to personal and civic choices.

Realize and apply the responsibility to use knowledge wisely.

PHIL 325 Symbolic Logic

<table>
<thead>
<tr>
<th>Units:</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hours:</td>
<td>54 hours LEC</td>
</tr>
<tr>
<td>Prerequisite:</td>
<td>None.</td>
</tr>
<tr>
<td>Transferable:</td>
<td>CSU; UC</td>
</tr>
<tr>
<td>General Education:</td>
<td>AA/AS Area II(b); CSU Area A3</td>
</tr>
<tr>
<td>Catalog Date:</td>
<td>June 1, 2020</td>
</tr>
</tbody>
</table>

This course introduces sentential and predicate logic by introducing logical symbolism, truth tables, methods of formal analysis and methods of formal proof including natural deduction. It is recommended for students in the sciences, computer programming, mathematics, linguistics, law, and philosophy.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- distinguish an argument from a description, explanation, or report.
- distinguish deductive from inductive arguments.
- recognize the logical form of an argument or argument type.
- symbolize arguments in the languages of propositional and predicate logic.
- evaluate the validity of arguments using truth tables.
- evaluate the consistency and equivalence of sets of sentences using truth tables.
- evaluate the validity of arguments using natural deduction.
- comprehend the distinction between semantic and syntactical methods of argument evaluation.

PHIL 330 History of Classical Philosophy

<table>
<thead>
<tr>
<th>Units:</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hours:</td>
<td>54 hours LEC</td>
</tr>
<tr>
<td>Prerequisite:</td>
<td>None.</td>
</tr>
<tr>
<td>Transferable:</td>
<td>CSU; UC</td>
</tr>
<tr>
<td>General Education:</td>
<td>AA/AS Area I; CSU Area C2; IGETC Area 3B</td>
</tr>
<tr>
<td>Catalog Date:</td>
<td>June 1, 2020</td>
</tr>
</tbody>
</table>

This course is a survey of the origin and development of Western (Anglo-European) Philosophy during the period of ancient Greece and Rome. This course may be required for the completion of a degree in philosophy and is especially recommended for all philosophy, history and humanities majors.
Student Learning Outcomes
Upon completion of this course, the student will be able to:

- SLO #1: Identify important questions and conceptions within the history of classical (or ancient) philosophy, distinguish from among divergent interpretations those that are better supported and those that are less well supported, construct well supported interpretations of diverse viewpoints and reason well about written and oral discourse.

- Objective 1a: Evaluate information concerning central issues within the history of classical philosophy for quality, validity and bias to determine if it is objective and reliable.

- Objective 1b: Evaluate the relationship of language to logic and analyze, criticize and rationally justify points of view concerning central issues within the history of classical philosophy in the context of reading ancient primary texts critically.

- SLO #2: Reason inductively and deductively, reach conclusions concerning central issues within the history of classical philosophy based on sound or cogent inferences drawn from unambiguous statements of knowledge or belief.

- Objective 2a: Distinguish fact from non-factual judgment, belief from knowledge and fallacious reasoning (invalid or weak) from correct reasoning in respect to central issues within the history of classical philosophy.

PHIL 331 History of Modern Philosophy

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Transferable: CSU; UC
General Education: AA/AS Area I; CSU Area C2; IGETC Area 3B
Catalog Date: June 1, 2020

This course is a survey of the development of Western (Anglo-European) Philosophy from the period of the Renaissance through the period of modern Europe and America. This course is especially recommended for all Philosophy, History and Humanities majors.

Student Learning Outcomes
Upon completion of this course, the student will be able to:

- SLO #1: Identify important questions and conceptions within the history of modern philosophy, distinguish from among divergent interpretations those that are better supported and those that are less well supported, construct well supported interpretations of diverse viewpoints and reason well about written and oral discourse.

- Objective 1a: Evaluate information concerning central issues within the history of modern philosophy for quality, validity and bias to determine if it is objective and reliable.

- Objective 1b: Evaluate the relationship of language to logic and analyze, criticize and rationally justify points of view concerning central issues within the history of modern philosophy in the context of reading primary texts critically.

- SLO #2: Reason inductively and deductively, reach conclusions concerning central issues within the history of modern philosophy based on sound or cogent inferences drawn from unambiguous statements of knowledge or belief.

- Objective 2a: Distinguish fact from non-factual judgment, belief from knowledge and fallacious reasoning (invalid or weak) from correct reasoning in respect to central issues within the history of modern philosophy.

PHIL 338 Contemporary Philosophy

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Transferable: CSU; UC
General Education: AA/AS Area I; CSU Area C2; IGETC Area 3B
Catalog Date: June 1, 2020

A comprehensive study of the basic ideas of pragmatists, twentieth century metaphysicians, philosophy of language, and existentialists. Special attention will be given to relevance of their ideas to modern life.

Student Learning Outcomes
Upon completion of this course, the student will be able to:
PHIL 350 Philosophy of Religion

This course is a historical and topical survey of the questions, problems, and theories philosophers have developed in attempts to understand religion as a fundamental impulse within human experience and as a major cultural force. Rather than survey the different religions, this course considers the basic philosophical beliefs and concepts that seem auxiliary to religion. Topics include the possibility of religious knowledge, faith versus reason, theistic arguments, conceptions of God, religious language, atheism, agnosticism, mysticism, the problem of evil, immortality, the challenge of science, and religion's influence on ethics and politics.

Upon completion of this course, the student will be able to:

- SLO #1: identify important questions and conceptions within Philosophy of Religion, distinguish from among divergent interpretations those that are better supported and those that are less well supported, construct well supported interpretations of diverse viewpoints and reason well about written and oral discourse.
- Objective 1a: evaluate information concerning central issues within Philosophy of Religion for quality and bias to determine if it is objective and reliable.
- Objective 1b: evaluate the relationship of language to logic and analyze, criticize and rationally justify points of view concerning central issues within Philosophy of Religion.
- SLO #2: reason inductively and deductively, reach conclusions concerning central issues within Philosophy of Religion based on sound or cogent inferences drawn from unambiguous statements of knowledge or belief.
- Objective 2a: distinguish fact from non-factual judgment, belief from knowledge and fallacious reasoning (invalid or weak) from correct reasoning in respect to central issues within Philosophy of Religion.
- Objective 2b: distinguish between philosophy and religion, philosophical views and religious views.

PHIL 352 Introduction to World Religions

This course will introduce students to the major world religious traditions, including indigenous sacred ways, Hinduism, Buddhism, Taoism and Confucianism, Judaism, Christianity, and Islam. Students will study the practices and beliefs of each tradition and will read selected material from the sacred writings of each tradition. Also, the influence of these religions on contemporary issues in the United States including ethnicity, ethnocentrism, racism, ageism, class differences, and sexual orientation is considered. This course fulfills Cosumnes River College's Ethnic/Multicultural requirement for the Associates Degree. This course is the same as RLST 301. This course, under either name, may be taken only one time for credit.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO #1: identify important questions and conceptions within Philosophy of Religion, distinguish from among divergent interpretations those that are better supported and those that are less well supported, construct well supported interpretations of diverse viewpoints and reason well about written and oral discourse.
- Objective 1a: evaluate information concerning central issues within Philosophy of Religion for quality and bias to determine if it is objective and reliable.
- Objective 1b: evaluate the relationship of language to logic and analyze, criticize and rationally justify points of view concerning central issues within Philosophy of Religion.
- SLO #2: reason inductively and deductively, reach conclusions concerning central issues within Philosophy of Religion based on sound or cogent inferences drawn from unambiguous statements of knowledge or belief.
- Objective 2a: distinguish fact from non-factual judgment, belief from knowledge and fallacious reasoning (invalid or weak) from correct reasoning in respect to central issues within Philosophy of Religion.
- Objective 2b: distinguish between philosophy and religion, philosophical views and religious views.
Upon completion of this course, the student will be able to:

- SLO #1: identify important questions and conceptions concerning world religions, distinguish from among divergent interpretations those that are better supported and those that are less well supported, construct well supported interpretations of diverse viewpoints and reason well about written and oral discourse.
- Objective 1a: evaluate information concerning central issues within world religions for quality and bias to determine if it is objective and reliable.
- Objective 1b: criticize and rationally justify points of view concerning central issues within world religions.
- Objective 1c: reach conclusions about central issues concerning world religions based on accurate interpretations of religious doctrines.
- Objective 1d: distinguish amongst philosophy, religious studies, and religion.
- SLO #2 (PSLO #3): demonstrate the ability to engage in ethical reasoning necessary to exercise responsibility as an ethical individual, professional, local, and global citizen.
- Objective 2a: demonstrate the ability to engage in rational discourse regarding issues in world religion in an ethically responsible manner.
- Objective 2b: demonstrate a critical appreciation of the role world religion has played in human spirituality and morality.

PHIL 356 Introduction to the Bible

In this course, students survey the literary, historical, ethical, theological and philosophical themes of the Bible. Students will read extensive passages from the Hebrew and Christian scriptures with special focus on textual exegesis and analysis. Topics from the Hebrew scriptures include the Law, the development of monotheism, the social justice tradition of the Prophets, and the Writings. Topics from the New Testament scriptures include the investigation of the Gospels and the "Jesus Problem" and the examination of the early development of the Christian Church.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO #1: identify important questions and conceptions concerning Biblical Studies, distinguish from among divergent interpretations those that are better supported and those that are less well supported, construct well supported interpretations and reason well about written and oral discourse.
- Objective 1a: demonstrate skills in text criticism, exegesis, and hermeneutics.
- Objective 1b: evaluate interpretations within Biblical Studies for quality and bias to determine if it is objective as opposed to faith-based.
- Objective 1c: criticize and rationally justify interpretations within Biblical Studies.
- SLO #2: reach conclusions concerning interpretations within Biblical Studies based on accurate methods of text criticism, exegesis, and hermeneutics.
- Objective 2a: distinguish amongst philosophy, biblical studies, and religion.
- SLO #3 (PSLO #3): demonstrate the ability to engage in ethical reasoning necessary to exercise responsibility as an ethical individual, professional, local, and global citizen.
- Objective 3a: demonstrate the ability to engage in rational discourse regarding Biblical Studies in an ethically responsible manner.
- Objective 3b: demonstrate appreciation of the influence of the bible on humanity's literary, moral, and philosophical traditions.
A historical, methodological, and topical survey of significant themes of social and political philosophy from Plato to our present times: authority, freedom, government, justice, law, rights, society and the state.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- understand and appreciate the nature and methods of social science.
- grasp certain important content of the history and topical areas of social and political philosophy.
- develop general and transferable critical thinking abilities that accompany rigorous study of philosophy.
- analyze methodologically the presuppositions and criteria used in solutions.
- cultivate a critical habit of mind enabling one to recognize, reflect, analyze, and then appropriately accept or reject one’s institutional systems and alternatives.

PHIL 485 Honors Seminar: Philosophy of the Martial Arts

This course provides an introduction to the philosophical views that have traditionally been associated with the practice of martial arts and explores the interplay between those views and that practice. It also provides an introduction to those contemporary philosophical issues that arise in the context of present day analytic philosophical reflection on the nature and practice of martial arts. The course thus provides both the opportunity to appreciate the eastern philosophical underpinnings of an activity that has become part of mainstream American Culture and the opportunity to experience the rigorous application of contemporary analytic academic philosophical methodology. Details about the Honors Program can be found in the front of the Catalog and on the CRC website. Enrollment is limited to Honors Program students. This course is the same as HONOR 364 and only one may be taken for credit.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- Employ the general and transferable critical thinking and communication abilities developed by the rigorous study of academic philosophy (SLO 1).
- Demonstrate the ability to engage in upper-division work in the discipline of Philosophy.
- Apply the basic methodology of contemporary analytic philosophy (e.g. assess, critique, deduce, evaluate, research, support, justify, analyze, debate, defend, detect, distinguish, examine, etc.) to understand traditional Asian, as well as contemporary American, martial arts.
- Recognize and explain the fundamental ethical, metaphysical, and epistemological tenets of Confucianism, Buddhism, and Taoism (SLO 2).
- Describe and explain the influence of the fundamental ethical, metaphysical, and epistemological tenets of Confucianism, Buddhism, and Taoism on the traditional study of (Asian) martial arts.
- Demonstrate the ability to navigate a seminar environment (SLO 3).

PHIL 495 Independent Studies in Philosophy
An independent studies project involves an individual student or small group of students in study, research, or activities beyond the scope of regularly offered courses. See the current catalog section of "Special Studies" for full details of Independent Studies.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO #1: Actively engage in intellectual inquiry beyond that required in order to pass a course of study (College Wide Learning Outcome – Area 4).
- Discuss and outline a proposal of study (that can be accomplished within one semester term) with a supervising instructor qualified within the discipline.
- Design an independent study (to be completed individually or by collaboration of a small group) to foster special knowledge, skills, and experience that are not available in any one regularly scheduled course.
- Use information resources to gather discipline-specific information.
- SLO #2: Utilize modes of analysis and critical thinking to apply theoretical perspectives and/or concepts in the major discipline of study to significant problems and/or educational activities (College Wide Learning Outcome – Area 3).
- Analyze and apply the knowledge, skills and experience that are involved in the independent study to theoretical perspectives and/or concepts in the major discipline of study.
- Explain the importance of the major discipline of study in the broader picture of society.
- SLO #3: Communicate a complex understanding of content matter of the major discipline of study (College Wide Outcome – Area 3).
- Demonstrate competence in the skills essential to mastery of the major discipline of study that are necessary to accomplish the independent study.
- SLO #4: Identify personal goals and pursue these goals effectively (College Wide Outcome – Area 4).
- Utilize skills from the "academic tool kit" including time management, study skills, etc., to accomplish the independent study within one semester term.

Religious Studies (RLST)

RLST 301 Introduction to World Religions

| Same As: | PHIL 352 |
| Units: | 3 |
| Hours: | 54 hours LEC |
| Prerequisite: | None. |
| Transferable: | CSU; UC |
| General Education: | CSU Area C2; IGETC Area 3B |
| Catalog Date: | June 1, 2020 |

This course will introduce students to the major world religious traditions, including indigenous sacred ways, Hinduism, Buddhism, Taoism and Confucianism, Judaism, Christianity, and Islam. Students will study the practices and beliefs of each tradition and will read selected material from the sacred writings of each tradition. Also, the influence of these religions on contemporary issues in the United States including ethnicity, ethnocentrism, racism, ageism, class differences, and sexual orientation is considered. This course fulfills Cosumnes River College's Ethnic/Multicultural requirement for the Associates Degree. This course is the same as PHIL 352. This course, under either name, may be taken only one time for credit.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO #1: Identify important questions and conceptions concerning world religions, distinguish from among divergent interpretations those that are better supported and those that are less well supported, construct well supported interpretations of diverse viewpoints and reason well about written and oral discourse.
- Objective 1a: evaluate information concerning central issues within world religions for quality and bias to determine if it is objective and reliable.
- Objective 1b: criticize and rationally justify points of view concerning central issues within world religions.
- Objective 1c: reach conclusions about central issues concerning world religions based on accurate interpretations of religious doctrines.
- Objective 1d: distinguish amongst philosophy, religious studies, and religion.
- SLO #2 (PSLO #3): demonstrate the ability to engage in ethical reasoning necessary to exercise responsibility as an ethical individual, professional, local, and global citizen.
- Objective 2a: demonstrate the ability to engage in rational discourse regarding issues in world religion in an ethically responsible manner.
- Objective 2b: demonstrate a critical appreciation of the role world religion has played in human spirituality and morality.
Photography | Cosumnes River College

The photography program is designed to teach entry-level skills for careers in the photographic industry. Students interested in photography as visual expression or an adjunct to a vocation will also benefit. Flexibility of the advanced program allows a student to concentrate upon a specific photographic career area. Students planning to prepare for a four-year degree in Photography should consult the lower division requirements of the university to which they plan to transfer.

Dean

 (916) 691-7170

✉ BedforB@crc.losrios.edu (mailto:BedforB@crc.losrios.edu)

Associate Degrees

A.A. in Art-Photo

The art-photography program is designed to teach students fine art photography with an emphasis in black and white film based processes. Critical analysis, history and current theories in photography are also requirements.

Students planning to prepare for a four-year degree in Photography should consult the lower division requirements of the university to which they plan to transfer.

Catalog Date: June 1, 2020

Degree Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 300</td>
<td>Drawing and Composition I</td>
<td>3</td>
</tr>
<tr>
<td>PHOTO 301</td>
<td>Beginning Photography (3)</td>
<td>3</td>
</tr>
<tr>
<td>PHOTO 420</td>
<td>History of Photography (3)</td>
<td>3</td>
</tr>
<tr>
<td>PHOTO 310</td>
<td>Intermediate Photography (3)</td>
<td>3</td>
</tr>
<tr>
<td>ARTH 300</td>
<td>Introduction to Art (3)</td>
<td>3</td>
</tr>
<tr>
<td>ART 304</td>
<td>Figure Drawing I (3)</td>
<td>3</td>
</tr>
<tr>
<td>or ART 361</td>
<td>Printmaking: Survey (3)</td>
<td></td>
</tr>
<tr>
<td>PHOTO 320</td>
<td>Color Photography (3)</td>
<td>3</td>
</tr>
<tr>
<td>PHOTO 360</td>
<td>Large Format Photography (3)</td>
<td>3</td>
</tr>
<tr>
<td>PHOTO 365</td>
<td>Alternative Process Photography (3)</td>
<td>3</td>
</tr>
<tr>
<td>or PHOTO 364</td>
<td>Advanced Black and White Photography (3)</td>
<td></td>
</tr>
<tr>
<td>Total Units:</td>
<td></td>
<td>27</td>
</tr>
</tbody>
</table>

The Art-Photo Associate in Arts (A.A.) degree may be obtained by completion of the required program, plus general education requirements, plus sufficient electives to meet a 60-unit total. See CRC graduation requirements.

Student Learning Outcomes
Upon completion of this program, the student will be able to:

- SLO #1 Produce a portfolio that conveys creative self expression.
- SLO #2 Work with silver based and alternative processes in black and white photography.
- SLO #3 Use a variety of film based cameras, including medium and large format.
- SLO #4 Describe the history of photography.
- SLO #5 Recount current trends in photographic theories and aesthetics.

Career Information

Fine art photographer, gallery worker, museum worker, curator or general photographer. Some career options may require more than two years of college study. Classes beyond the associate degree may be required to fulfill some career options or for preparation for transfer to a university program.

A.A. in Photography

The photography program is designed to teach entry-level skills for careers in the photographic industry. Students interested in photography as visual expression or an adjunct to a vocation will also benefit.

Flexibility of the advanced program allows a student to concentrate upon a specific photographic career area.

Students planning to prepare for a four-year degree in Photography should consult the lower division requirements of the university to which they plan to transfer.

HIGHLIGHTS
*modern lab and studio facilities
*twenty four black & white enlargers
*digital media lab
*digital scanners and printers
*field trips to a variety of photographic businesses in Sacramento and the Bay Area
* field study course in Yosemite
*special seminars and internships

Catalog Date: June 1, 2020

Degree Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHOTO 302</td>
<td>Beginning Digital Photography (3)</td>
<td>3</td>
</tr>
<tr>
<td>PHOTO 312</td>
<td>Intermediate Digital Photography (3)</td>
<td>3</td>
</tr>
<tr>
<td>PHOTO 320</td>
<td>Color Photography (3)</td>
<td>3</td>
</tr>
<tr>
<td>PHOTO 340</td>
<td>Careers in Photography</td>
<td>3</td>
</tr>
<tr>
<td>PHOTO 400</td>
<td>Digital Imaging</td>
<td>3</td>
</tr>
<tr>
<td>PHOTO 410</td>
<td>Advanced Digital Imaging</td>
<td>3</td>
</tr>
<tr>
<td>PHOTO 420</td>
<td>History of Photography (3)</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>A minimum of 3 units from the following:</td>
<td>3</td>
</tr>
<tr>
<td>PHOTO 272</td>
<td>Lightroom (1.5)</td>
<td></td>
</tr>
<tr>
<td>PHOTO 273</td>
<td>Video Capture with DSLRs (1.5)</td>
<td></td>
</tr>
<tr>
<td>PHOTO 275</td>
<td>Digital Applications for Alternative Processes (1.5)</td>
<td></td>
</tr>
<tr>
<td>PHOTO 277</td>
<td>Creating a Digital Portfolio (1.5)</td>
<td></td>
</tr>
<tr>
<td>PHOTO 271</td>
<td>Color Management (1.5)</td>
<td></td>
</tr>
<tr>
<td>PHOTO 260</td>
<td>The Eastern Sierra Landscape, Yosemite Valley (2)</td>
<td></td>
</tr>
<tr>
<td>COURSE CODE</td>
<td>COURSE TITLE</td>
<td>UNITS</td>
</tr>
<tr>
<td>-------------</td>
<td>------------------------------------</td>
<td>-------</td>
</tr>
<tr>
<td>PHOTO 350</td>
<td>Photojournalism (3)</td>
<td></td>
</tr>
<tr>
<td>PHOTO 278</td>
<td>Flash Photography (1.5)</td>
<td></td>
</tr>
<tr>
<td>COMM 301</td>
<td>Introduction to Public Speaking (3)</td>
<td>3</td>
</tr>
<tr>
<td>or COMM 361</td>
<td>The Communication Experience (3)</td>
<td></td>
</tr>
<tr>
<td>JOUR 310</td>
<td>Mass Media and Society</td>
<td>3</td>
</tr>
<tr>
<td>RTVF 302</td>
<td>Introduction to Digital Design &amp; Storytelling (3)</td>
<td>3</td>
</tr>
<tr>
<td>or RTVF 304</td>
<td>Introduction to Multimedia (3)</td>
<td></td>
</tr>
<tr>
<td>Total Units:</td>
<td></td>
<td>33</td>
</tr>
</tbody>
</table>

The Photography Associate in Arts (A.A.) degree may be obtained by completion of the required program, plus general education requirements, plus sufficient electives to meet a 60-unit total. See CRC graduation requirements.

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- PSLO #1 describe technical and aesthetic qualities of successful photographs
- PSLO #2 apply a variety of lighting techniques to the production of photographs
- PSLO #3 produce photographs using various cameras
- PSLO #4 produce photographs using various photographic papers and digital output
- PSLO #5 create a portfolio and related materials for job preparation
- PSLO #6 describe successful working relationships with clients and subjects
- PSLO #7 develop a personal visual style

Career Information

Studio Photography; Portrait & Wedding Photography; Photographic Lab Technician; Photojournalism; Industrial or Architectural Photography. Some career options may require more than two years of college study. Classes beyond the associate degree may be required to fulfill some career options or for preparation for transfer to a university program.

Certificates of Achievement

Commercial and Studio Photography Certificate

The commercial and studio program is designed for students who want to enter a career path in studio photography. Students will use strobe equipment to learn lighting techniques, work with professionals in the field and design their own portfolio. Business strategies, self promotion, and workflow methods will also be covered.

Catalog Date: June 1, 2020

Certificate Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHOTO 302</td>
<td>Beginning Digital Photography (3)</td>
<td>3</td>
</tr>
<tr>
<td>PHOTO 312</td>
<td>Intermediate Digital Photography (3)</td>
<td>3</td>
</tr>
<tr>
<td>PHOTO 320</td>
<td>Color Photography (3)</td>
<td>3</td>
</tr>
<tr>
<td>PHOTO 340</td>
<td>Careers in Photography (3)</td>
<td>3</td>
</tr>
<tr>
<td>or PHOTO 400</td>
<td>Digital Imaging (3)</td>
<td></td>
</tr>
</tbody>
</table>
### Student Learning Outcomes

Upon completion of this program, the student will be able to:

- PSLO #1 use a variety of traditional and digital cameras
- PSLO #2 set up strobe lighting in the studio and on location for both product and people
- PSLO #3 create a personal portfolio of images that display expertise in commercial photography
- PSLO #4 define business goals and self promotion strategies
- PSLO #5 interact with photographers and designers to create compelling images

### Career Information

- studio assistant, studio photographer, freelance photographer, editorial photographer, lab manager

### Fine Art Photography Certificate

The fine art photography program is designed for students who want to enter a career path in fine art photography. Students will use a variety of cameras and formats to produce images in both color and black and white. Personal expression and creativity, history and contemporary issues in photography and visual communication will also be emphasized.

**Catalog Date:** June 1, 2020

### Certificate Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHOTO 301</td>
<td>Beginning Photography (3)</td>
<td>3</td>
</tr>
<tr>
<td>PHOTO 310</td>
<td>Intermediate Photography (3)</td>
<td>3</td>
</tr>
<tr>
<td>or PHOTO 364</td>
<td>Advanced Black and White Photography (3)</td>
<td></td>
</tr>
<tr>
<td>PHOTO 320</td>
<td>Color Photography</td>
<td>3</td>
</tr>
<tr>
<td>PHOTO 360</td>
<td>Large Format Photography (3)</td>
<td>3</td>
</tr>
<tr>
<td>COURSE CODE</td>
<td>COURSE TITLE</td>
<td>UNITS</td>
</tr>
<tr>
<td>-------------</td>
<td>------------------------------------------------------------------</td>
<td>-------</td>
</tr>
<tr>
<td>PHOTO 365</td>
<td>Alternative Process Photography (3)</td>
<td>3</td>
</tr>
<tr>
<td>or PHOTO 366</td>
<td>Advanced Alternative Process Photography (3)</td>
<td></td>
</tr>
<tr>
<td>PHOTO 400</td>
<td>Digital Imaging (3)</td>
<td>3</td>
</tr>
<tr>
<td>PHOTO 420</td>
<td>History of Photography (3)</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>A minimum of 3 units from the following:</td>
<td></td>
</tr>
<tr>
<td>PHOTO 260</td>
<td>The Eastern Sierra Landscape, Yosemite Valley (2)</td>
<td>3</td>
</tr>
<tr>
<td>PHOTO 272</td>
<td>Lightroom (1.5)</td>
<td></td>
</tr>
<tr>
<td>PHOTO 273</td>
<td>Video Capture with DSLRs (1.5)</td>
<td></td>
</tr>
<tr>
<td>PHOTO 275</td>
<td>Digital Applications for Alternative Processes (1.5)</td>
<td></td>
</tr>
<tr>
<td>PHOTO 277</td>
<td>Creating a Digital Portfolio (1.5)</td>
<td></td>
</tr>
<tr>
<td>PHOTO 350</td>
<td>Photojournalism (3)</td>
<td></td>
</tr>
<tr>
<td>PHOTO 278</td>
<td>Flash Photography (1.5)</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Total Units:</strong></td>
<td><strong>24</strong></td>
</tr>
</tbody>
</table>

**Student Learning Outcomes**

Upon completion of this program, the student will be able to:

- PSLO #1 communicate visual ideas in a variety of formats
- PSLO #2 describe important historical and contemporary movements in photography
- PSLO #3 produce a portfolio of images emphasizing personal creativity and self expression

**Career Information**

freelance photographer, editorial photographer, photojournalist, gallery apprentice, museum apprentice, teacher

**Portraiture and Wedding Photography Certificate**

The portraiture and wedding program is designed for students who want to enter a career path in wedding photography. Students will learn techniques to pose and work with models and clients, use strobe equipment and available lighting techniques, work with professionals in the field and design their own portfolio. Business strategies, self promotion, and workflow methods will also be covered.

**Catalog Date:** June 1, 2020

**Certificate Requirements**

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHOTO 302</td>
<td>Beginning Digital Photography (3)</td>
<td>3</td>
</tr>
<tr>
<td>PHOTO 312</td>
<td>Intermediate Digital Photography (3)</td>
<td>3</td>
</tr>
<tr>
<td>PHOTO 320</td>
<td>Color Photography (3)</td>
<td>3</td>
</tr>
<tr>
<td>PHOTO 340</td>
<td>Careers in Photography (3)</td>
<td>3</td>
</tr>
<tr>
<td>or PHOTO 400</td>
<td>Digital Imaging (3)</td>
<td></td>
</tr>
<tr>
<td>PHOTO 350</td>
<td>Photojournalism (3)</td>
<td>3</td>
</tr>
<tr>
<td>or PHOTO 410</td>
<td>Advanced Digital Imaging (3)</td>
<td></td>
</tr>
</tbody>
</table>
ARTPH 341 Advanced Alternative Process Photography

This course is an advanced study of historical and alternative processes in photography and is designed to expand on the technical and creative concepts acquired in Beginning Alternative Process Photography. Topics of instruction include a deeper investigation of pinhole photography, handmade cameras, historical photographic processes, creating digital negatives and contact printing. Students will also hang a class exhibition. The class includes research, lectures, visual presentations, lab time, exams, and a portfolio. This course is the same as PHOTO 366.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- PSLO #1 use a variety of traditional and digital cameras
- PSLO #2 set up strobe lighting and available lighting to effectively photograph clients and models
- PSLO #3 create a personal portfolio of images that display expertise in wedding and portrait photography
- PSLO #4 define business goals and self promotion strategies
- PSLO #5 interact with clients, models and other professionals to attain a common visual goal

Career Information

photographer’s assistant, wedding photographer, portrait photographer, studio assistant, editorial photographer, photojournalist
- SLO #1 Research two types of alternative processes
- Create a multimedia presentation of two types of alternative processes and their practitioners
- Compile a research folio containing written research, visual examples and personal examples of researched processes
- SLO #2 Make contact prints
- Explore several methods of enlarging negatives
- Produce a variety of digital negatives
- SLO #3 Produce various alternative processes in photography
- Produce a themed portfolio using two to three alternative photographic processes
- Document each processes as they are completed
- SLO #4 Participate in a class exhibition
- Research local gallery options
- Secure a date for exhibition
- Produce a promo piece for the exhibition
- Produce and frame prints
- Hang the exhibition

Photography (PHOTO)

PHOTO 260 The Eastern Sierra Landscape, Yosemite Valley

| Units: | 2 |
| Hours: | 18 hours LEC; 54 hours LAB |
| Prerequisite: | None. |
| Catalog Date: | June 1, 2020 |

This course is designed to give students an opportunity to photograph in the Eastern Sierra emphasizing the Yosemite Valley. The course will include a variety of topics including using film and digital cameras in the landscape, understanding different natural qualities of light and low light photography. This course includes meetings on campus and a field trip to Yosemite.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO #1 Demonstrate an understanding of lighting conditions in the natural landscape.
- Change ISO setting to accommodate low and bright light.
- Change bracketing functions for exposure.
- SLO #2 Demonstrate competence with auxiliary equipment.
- Set up a tripod, cable release and self-timer functions.
- SLO #3 Describe the history of photography in the area.
- Visit the the Ansel Adams Gallery in Yosemite Valley.
- Write a critical analysis of a photographer.
- SLO #4 Produce a portfolio of digital or traditional photographs.

PHOTO 271 Color Management
This course covers the fundamental principles of color management. Topics of instruction include: calibration, profile generation, color management in Photoshop, and optimizing and preparing images for output to labs. Students will work with digital cameras. The class includes: lectures, lab time, field trips, exams, a journal, and a final project.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO #1 Calibrate a variety of digital hardware devices
- Print out targets on at least 3 different paper types
- Use a spectrophotometer to read targets
- Create profiles based on target outcomes
- SLO #2 Manage color in Photoshop
- Manipulate color profiles for accurate proofing
- SLO #3 Demonstrate color management workflow principles through creation of a final printed project

PHOTO 272 Lightroom

This course is designed to provide students the opportunity to learn the most current photographic archiving software products. Topics of instruction include: importing images, editing imaging and placing images into collections and libraries. Students will work with digital cameras. The class includes: lectures, lab time, field trips, exams, a journal, and a final project.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO #1: Import photographs into Lightroom
- describe the difference between a collection and library
- use keywords and stars to rate images
- compare and rank images side by side
- SLO #2: Work on images using the development module
- describe the options in each portion of the modules
- alter exposure, contrast, and color; both locally and globally
- perform and create presets on images
- SLO #3 Export photographs from the Lightroom
- describe steps for exporting to a folder or the web
- complete a batch process export including file name and file format changes
- SLO #4 Complete a final project in image management
- perform an in class presentation of the final image gallery
PHOTO 273 Video Capture with DSLRs

Units: 1.5
Hours: 18 hours LEC; 27 hours LAB
Prerequisite: PHOTO 302 or 400 with a grade of “C” or better
Catalog Date: June 1, 2020

This course is designed to provide students instruction in shooting video with DSLR cameras. Topics include: custom settings for shooting video, options for sound capture, lighting techniques, video editing and digital story telling. Students will work with digital cameras and accessory equipment. The class includes: lectures, lab time, field trips, exams, a journal, and a final project.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO#1: Capture video footage with a DSLR camera
- define and describe different cameras that offer video capture
- manipulate custom camera settings to optimize video capture
- use stabilization accessories
- SLO #2 Capture sound files for video
- experiment with in-camera and off camera options for sound capture
- SLO #3 Set up lighting for video capture
- experiment with different lighting techniques, including ambient, LED and tungsten sources
- SLO #4 Edit video footage
- describe different video editing software
- produce a 3-5 minute video project
- SLO #4 Describe digital story telling
- analyze various videos for editing, sound, and music

PHOTO 275 Digital Applications for Alternative Processes

Units: 1.5
Hours: 18 hours LEC; 27 hours LAB
Prerequisite: PHOTO 302 or 400 with a grade of “C” or better
Catalog Date: June 1, 2020

This course is designed to provide students instruction in digital applications for alternative processes. Topics include: creating custom curves for alternative process printing, using a variety of software products for creating unique imagery, and applying digital technology to older print processes. Students will work with digital cameras and accessory equipment. The class includes: lectures, lab time, field trips, exams, a journal, and a final project.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO#1 Identify software applications used for alternative processes
- describe applications for contact printing
- describe the differences between cyanotype, platinum and pallidium printing
- SLO#2 Design custom curves for digital negatives
- create step wedges for each process
- determine d-max for each process
- experiment with transparency OHP materials
- SLO#3 Produce a portfolio of alternative process digital prints
PHOTO 277 Creating a Digital Portfolio

Units: 1.5
Hours: 18 hours LEC; 27 hours LAB
Prerequisite: PHOTO 302 or 400 with a grade of "C" or better
Catalog Date: June 1, 2020

This course is designed to provide students instruction in creating a website to promote their photography. Website hosting options, uploading and organizing images will be covered. Students will work with digital cameras and design software. The class includes: lectures, lab time, field trips, exams, a journal, and a final project.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO #1 Describe different hosting options for a photographic website.
- articulat specific needs for different genres of photography
- describe a flash based site
- determine different costs of hosting services
- SLO #2 Prepare imagery for uploading
- edit photographs for content and genre
- sequence images for formal relationships
- resize and sharpen final images
- SLO #3 Create a website
- produce a price list
- create sound tracks for viewing

PHOTO 278 Flash Photography

Units: 1.5
Hours: 18 hours LEC; 27 hours LAB
Prerequisite: PHOTO 301 or 302 with a grade of "C" or better
Catalog Date: June 1, 2020

This course covers flash photography using digital cameras. Topics of instruction include: on camera flash, flash with cord, off camera flash and multiple strobe effects. The class includes: lectures, lab time, field trips, a journal, and a final project.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO #1 Describe options for flash units
- define guide numbers as a criteria for flash
- describe differences between name brand and off brand flash units
- SLO #2 Use on-camera flash
- create images that use: bounce flash, fill flash, flash-ambient, high-speed synch, multiple burst and a variety of lighting ratios
- SLO #3 Use a flash unit with a cord
- create different lighting patterns that use: side lighting, bounce lighting, and backgrounds with and without detail
- SLO #4 Use off-camera flash
PHOTO 295 Independent Studies in Photography

Units: 1 - 3  
Hours: 54 - 162 hours LAB  
Prerequisite: None.  
Catalog Date: June 1, 2020

An independent studies project involves an individual student or small group of students in study, research, or activities beyond the scope of regularly offered courses. See the current catalog section of “Special Studies” for full details of Independent Studies.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO #1: Actively engage in intellectual inquiry beyond that required in order to pass a course of study (College Wide Learning Outcome – Area 4).
- Discuss and outline a proposal of study (that can be accomplished within one semester term) with a supervising instructor qualified within the discipline.
- Design an independent study (to be completed individually or by collaboration of a small group) to foster special knowledge, skills, and experience that are not available in any one regularly scheduled course.
- Use information resources to gather discipline-specific information.
- SLO #2: Utilize modes of analysis and critical thinking to apply theoretical perspectives and/or concepts in the major discipline of study to significant problems and/or educational activities (College Wide Learning Outcome – Area 3).
- Analyze and apply the knowledge, skills and experience that are involved in the independent study to theoretical perspectives and/or concepts in the major discipline of study.
- Explain the importance of the major discipline of study in the broader picture of society.
- SLO #3: Communicate a complex understanding of content matter of the major discipline of study (College Wide Outcome – Area 3).
- Demonstrate competence in the skills essential to mastery of the major discipline of study that are necessary to accomplish the independent study.
- SLO #4: Identify personal goals and pursue these goals effectively (College Wide Outcome – Area 4).
- Utilize skills from the “academic tool kit” including time management, study skills, etc., to accomplish the independent study within one semester term.

PHOTO 301 Beginning Photography

Units: 3  
Hours: 36 hours LEC; 54 hours LAB  
Prerequisite: None.  
Transferable: CSU; UC  
General Education: AA/AS Area I; CSU Area C1  
Catalog Date: June 1, 2020

This course combines lectures with hands-on experience in traditional black and white photography. Students will work primarily with film cameras. Instruction includes camera function, exposure control, film processing, enlarging prints, low light photography, and print finishing. Creative control and elements of composition will also be covered. The format of the class includes lectures, visual presentations, lab time, a field trip, exams and a portfolio. Students may wish to challenge the prerequisite on the basis of equivalent experience. This course is the same as ARTPH 301, and only one may be taken for credit.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO #1 Operate a manual 35mm camera and lens
- expose black and white film shot under a variety of light sources
PHOTO 302 Beginning Digital Photography

**Units:** 3
**Hours:** 36 hours LEC; 54 hours LAB
**Prerequisite:** None.
**Transferable:** CSU; UC
**General Education:** AA/AS Area I
**Catalog Date:** June 1, 2020

This course combines lectures with hands-on experience in digital photography. Instruction includes digital camera function, exposure control, technical and creative control, computer manipulation of images and digital output options. The format of the class includes lectures, visual presentations, lab time, exams and a portfolio.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- SLO #1 Operate a digital camera
- adjust film speed for proper exposure
- adjust white point for proper lighting
- use accessory equipment for a digital camera including: flash unit, tripod, filters and cable release
- recognize and use good compositional techniques
- SLO #2 Analyze a variety of image storage and media options
- use and compare digital media
- SLO #3 Produce a digital portfolio
- perform basic image manipulation in Photoshop
- use a variety of digital output options
- retouch and mount a final image
- SLO #4 Describe basic film-based photography techniques
- differentiate between a digital and traditional SLR camera
- explain basic exposure, development and printing techniques

PHOTO 310 Intermediate Photography
This course is designed to expand on the technical and creative concepts acquired in beginning film photography. Topics of instruction include: exposure and development control, archival printing, introduction to medium and large format photography, studio lighting techniques, and alternative processes. Students will work primarily with film cameras. The class includes lectures, visual presentations, lab time, written tests, and a portfolio. This course is the same as ARTPH 310, and under either name, the course may only be taken one time for credit.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO #1 Expose and develop images using a variety of lighting
  - push and pull images
  - apply the zone system to exposure and development
  - solve equivalent exposures
- SLO #2 Produce an image made with studio lights
  - set up studio lighting equipment
  - operate a light meter in ambient, spot and flash modes
- SLO #3 Produce an archival print or a digital equivalent
  - use fiber based paper with correct processing and mounting
- SLO #4 Create alternative process images
  - differentiate between high contrast, infra red, multiple imagery, solarization, toning, and hand-coloring.
  - create a collage
- SLO #5 Produce a portfolio
  - generate ten images using techniques from the class

PHOTO 312 Intermediate Digital Photography

This course is designed to expand on the technical and creative concepts acquired in beginning digital photography. Topics of instruction include: advanced digital camera functions, exposure control, introduction to studio lighting, computer manipulation of images, digital archiving, digital output options and digital print finishing. The class includes lectures, visual presentations, lab time, written tests, a field trip, and a portfolio.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO #1: Use advanced functions of a digital camera
  - adjust for correct white balance in difficult lighting condition
  - identify all menu options in a DSLR
- SLO #2: Produce an image made with studio lights
  - operate a light meter in ambient, spot and flash modes
- SLO #3: Perform multiple-step image correction with image software
PHOTO 320 Color Photography

This course covers the fundamental principles of color photography. Topics of instruction include: color theory, correct exposure, techniques to determine correct color balance, flash exposure for color and printing digital files. Students will work with digital cameras. The class includes: lectures, visual presentations, lab time, written tests, and a portfolio. This course is the same as ARTPH 322, and under either name, the course may only be taken one time for credit.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO #1 Explain fundamental color theory and its application in color photography
- produce prints with limited color, dominant color, harmonic color and complementary color
- explain color temperature
- SLO #2 Expose and print color images
- differentiate between a variety of digital papers and surfaces
- explain the effects of polarizing, color compensating and light balancing filters
- differentiate between a variety of file formats
- adjust color balance to produce prints
- SLO #3 Produce color alternative process prints
- use techniques in image editing software to create alternative color processes
- research various output choices
- SLO #4 Produce imagery using artificial lighting
- explain how flash and strobe photography is related to color temperature
- experiment with capture stations to view images produced with artificial light
- explain lighting ratios and how they relate to subject contrast in color
- SLO #5 Develop a personal style using color imagery
- produce a portfolio of imagery
- write an artist statement relating to color

PHOTO 340 Careers in Photography

36 hours LEC; 54 hours LAB
PHOTO 320 with a grade of "C" or better
CSU
June 1, 2020
This course is an overview of different careers available in the photographic industry. Fields of study include: portraiture, wedding photography, fashion, commercial and tabletop, photojournalism, and fine art photography. Students are encouraged to pursue their own area of interest by working with professionals in the field. Students may work with digital or traditional cameras. The class includes: lectures, studio visits, lab time, and completion of a resume, price list, and portfolio.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO #1 Compare various professions in photography
- list the skills and training required to enter various fields of photography
- job shadow with a professional in the field
- SLO #2 Produce a portfolio
- determine a personal area of interest in photography
- use the appropriate camera equipment necessary for various jobs in the photographic industry
- SLO #3 Produce a resume, price list and business card

PHOTO 350 Photojournalism

3

Students will study features, sports, spot news, and the photo essay styles of journalistic photography. Students may work with digital or traditional cameras. Students will also capture and use audio to complete multimedia projects. A beginning, advanced, or magazine style digital portfolio will be completed. The course includes lectures, visual presentations, speakers, a required field trip, and lab time. Students will provide their own camera and related materials. (C-ID JOUR 160)

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO #1: Define documentary photography.
- describe the history of photojournalism
- identify major historical and contemporary photojournalists
- critique documentary photographs
- SLO #2: List the steps in becoming a photojournalist.
- identify the difference between newspaper and magazine photography
- apply and demonstrate understanding of ethics of photojournalism
- SLO #3: Produce a documentary portfolio of images.
- demonstrate an understanding of principles of editing and self-editing
- shoot in difficult lighting situations
- shoot and edit a photographic essay
- capture audio for multimedia content
- create a multimedia piece for a final portfolio

PHOTO 360 Large Format Photography
This course is designed to give students a thorough knowledge of view camera operation in the studio and in the field. Topics of instruction include: view camera movements, exposure techniques, processing sheet film, adjustments necessary to print large format negatives, and presentation of the large format image. Students may work in black and white, color, or both. The class includes: lectures, visual presentations, lab time, studio time, and a portfolio. Students are urged to provide their own large format camera. This course is the same as ARTPH 314.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO #1 Adjust a view camera
  - set up a view camera
  - utilize all view camera movements, including: swings, tilts, rises, falls and shifts.
  - apply these movements to control focus and perspective
- SLO #2 Use the view camera in a variety of settings
  - produce a large format image in an architectural style
  - produce a large format image in the studio
  - produce a large format photograph on location
- SLO #3 Develop sheet film
  - experiment with tray and tank methods of development
- SLO #4 Print a 4x5 negative
  - adjust the enlarger for 4x5 negatives
  - apply advanced printing procedures such as making and flashing to create superior prints
  - produce a portfolio of photographs made with a view camera

PHOTO 364 Advanced Black and White Photography

This course is designed to expand on the technical and creative concepts acquired in intermediate photography. Topics of instruction include: zone system, archival printing techniques, advanced methods of image manipulation, and digital fine art printing. Students will work with digital and traditional cameras. The class includes lectures, visual presentations, lab time, exams, and a portfolio.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO #1 use the Zone System
  - test film speed and digital ISO settings
  - apply the zone system to exposure and development
  - use a large format camera
  - produce prints with a full range of zone values
- SLO #2 use advanced printing techniques
PHOTO 365 Alternative Process Photography

This course introduces historical and alternative processes in photography. Topics of instruction include: pin hole photography, handmade cameras, historical photographic processes, enlarging negatives, creating digital negatives and contact printing. Students will also hang a class exhibition. The class includes lectures, visual presentations, lab time, exams, and a portfolio. This course is the same as ARTPH 340.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO #1 Make a pinhole camera
- research material options for a handmade camera
- use film and paper inside a handmade camera for exposure
- SLO #2 Make contact prints
- explore several methods of enlarging negatives
- produce a digital negative
- SLO #3 Research and produce various alternative processes in photography
- produce a timeline outlining historical processes in the history of photography
- produce images using each of following techniques: cyanotype, van dyke brown, and platinum-palladium
- produce several images using the following techniques: cliche-verre, gum bichromate, albumen, calotype, sun print, photogram, and silver-toned
- SLO #4 explore digital fine art printing techniques and determine techniques necessary for production
- define warm tone and cold tone papers
- SLO #5 Participate in a class exhibition
- research local gallery options
- secure a date for exhibition
- produce a promo piece for the exhibition
- produce and frame prints
- hang the exhibition

PHOTO 366 Advanced Alternative Process Photography
This course is an advanced study of historical and alternative processes in photography and is designed to expand on the technical and creative concepts acquired in Beginning Alternative Process Photography. Topics of instruction include a deeper investigation of pinhole photography, handmade cameras, historical photographic processes, creating digital negatives and contact printing. Students will also hang a class exhibition. The class includes research, lectures, visual presentations, lab time, exams, and a portfolio. This course is the same as ARTPH 341.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO #1 Research two types of alternative processes
- Create a multimedia presentation of two types of alternative processes and their practitioners
- Compile a research folio containing written research, visual examples and personal examples of researched processes SLO #2
- Create contact prints
- SLO #2 Create contact prints
- Explore several methods of enlarging negatives Produce a variety of digital negatives independent of instructor
- Produce a variety of digital negatives
- SLO #3 Produce various alternative processes in photography
- Produce a themed portfolio using two to three alternative photographic processes
- Document each processes as they are completed
- SLO #4 Participate in a class exhibition
- Research local gallery options
- Secure a date for exhibition
- Produce a promo piece for the exhibition
- Produce and frame prints
- Hang the exhibition

PHOTO 370 Portraiture and Wedding Photography

This course is designed to provide students with an overview of the portraiture and wedding photography business. Topics include: techniques of lighting, use of appropriate cameras and media, professional practices and strategies for beginning business. Students work with digital cameras. The class includes: lectures, lab time, on-location field trips, exams, a journal, and a portfolio geared toward a professional presentation.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO #1 Create images in a variety of lighting conditions.
- use available light and reflectors for outdoor portraiture
- use fill flash for outdoor portraiture
- use electronic flash equipment, in the studio and on-location
- describe flash-ambient exposure for indoor exposure
PHOTO 372 Advanced Portrait Photography

Units: 3 - 4
Hours: 36 hours LEC; 54 - 108 hours LAB
Prerequisite: PHOTO 320 with a grade of “C” or better
Transferable: CSU
Catalog Date: June 1, 2020

This course is designed to give students an in depth understanding of portraiture. Topics include: techniques of lighting and posing, working with groups and individuals, use of appropriate cameras and films, professional ethics and business strategies. Students may work with digital or traditional cameras. The class includes: lectures, lab time, on-location field trips, exams, a journal, and a portfolio geared toward a professional presentation.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO #1 use studio lighting equipment
- describe accessory equipment for strobes including: reflectors, softboxes, umbrellas, scrims, snoots, reflectors and flags
- set up studio accent lights
- use a flash meter in a variety of modes
- SLO #2 create portraits in a variety of lighting conditions
- shoot a group and individual portraits outdoors using fill flash
- shoot an environmental portrait combining light sources
- SLO #3 identify professional practices in the portrait industry
- develop a price list and model release form
- describe market trends in the Sacramento area
- SLO #4 produce a portfolio
- experiment with a variety of output choices and determine which are most suitable for portfolio presentation

PHOTO 390 Studio Lighting Techniques

Units: 3 - 4
Hours: 36 hours LEC; 54 - 108 hours LAB
Prerequisite: PHOTO 320 with a grade of “C” or better
Transferable: CSU
Catalog Date: June 1, 2020

This course is a study in studio lighting techniques used in commercial photography. Topics of instruction include: correct exposure using strobe, lighting ratios, basic portraiture and advertising, appropriate choice of camera formats, and studies in composition of commercial photographs. Students are encouraged to work in a variety of formats, using black and white and color. Students will primarily use digital cameras. The class includes: lectures, visual presentations and discussions, on-location field trips, lab time, exams, and a portfolio.

Student Learning Outcomes
Upon completion of this course, the student will be able to:

- SLO #1 Use studio lighting equipment.
- use a flash meter in a variety of modes
- calculate and apply lighting ratios to determine exposure
- describe studio accessories, including: booms, flags, c-stands, gels, scrims, reflectors, umbrellas, and softboxes
- SLO #2 Produce a portfolio of images created in the studio.
- photograph portraits using studio lighting
- photograph still lives using studio lighting
- experiment with a variety of props, backgrounds and tabletop options
- prepare and participate in on-location studio shoots, including: on-sight research, equipment handling and set-up procedures, working with models, and roles in assisting.
- SLO #3 Investigate a career as a studio photographer
- attend a fieldtrip at a photographer's studio

PHOTO 392 Commercial and Advertising Photography

Units: 3 - 4
Hours: 36 hours LEC; 54 - 108 hours LAB
Prerequisite: PHOTO 320 with a grade of “C” or better
Transferable: CSU
Catalog Date: June 1, 2020

This course covers studio lighting techniques used in the production of advertising photographs. Topics of instruction include: advanced studio lighting techniques, correct exposure using strobe, appropriate choice of camera format and films, studies in composition and meaning of advertising photographs, and market research. Students are encouraged to work in a variety of formats, using both film and digital cameras. The class includes: lectures, visual presentations and discussions, on-location field trips, lab time, written tests, a journal, and a portfolio geared toward a professional presentation.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO #1 Use studio lighting equipment
- use a flash meter in a variety of advanced modes
- use strobe and studio accessories, including booms, flags, c-stands, gels, scrims, reflectors, umbrellas and softboxes
- describe characteristics of lighting, including sources, color temperature, modification, multiple strobe, matching light to subject and creative applications
- SLO #2 Produce a portfolio of images created in the studio
- photograph images with challenging surfaces and subjects including: glass, plastics and metal
- recreate successful images found from outside sources
- participate in on-location studio shoots, including location research, and equipment safety setup procedures
- produce an image by levitating an object in the studio
- SLO #3 Study market trends in commercial advertising images
- critique successful images and produce a journal
- develop strategies for marketing a portfolio, including: studying local market trends, and changing presentation styles for clients
- meet with a professional in the field (for example, an art director) to discuss professional expectations
PHOTO 400 Digital Imaging

Units: 3
Hours: 36 hours LEC; 54 hours LAB
Prerequisite: None.
Transferable: CSU
Catalog Date: June 1, 2020

This is an introductory course in digital imaging and electronic desktop photography. Methods currently used in publishing will be emphasized. The class includes lectures, use of computers and scanners, slide presentations, occasional off-campus class meetings, and preparation of a notebook and a digital portfolio.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO #1: Produce photographs using various camera, film and digital choices
- Acquire and import digital files, set-up and scan slides and prints digital photographs.
- SLO #2: Produce photographs using various digital techniques
- Demonstrate competency with Adobe Photoshop.
- Assess and retouch digital images using a variety of tools in Photoshop.
- Compose digital images with copy including usage of layers.
- SLO #3: Create a portfolio and related materials for job preparation
- Integrate established work flow, edit and prepare images for digital printing output
- Create CD of images by combining photo portfolio and sound on CD
- Output completed digital files.

PHOTO 410 Advanced Digital Imaging

Units: 3
Hours: 36 hours LEC; 54 hours LAB
Prerequisite: PHOTO 400 with a grade of “C” or better
Transferable: PHOTO 400 with a grade of “C” or better
Catalog Date: June 1, 2020

This course is an advanced study of digital imaging and related software programs. Methods currently used in publishing will be emphasized. The class includes lectures, use of computers, scanners, and a variety of output devices, and preparation of a digital portfolio. This course will introduce the student to the emerging field of multimedia and visit various local businesses.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO #1: Produce photographs using various camera, film and digital choices.
- Demonstrate competency in using a variety of scanning devices, including flatbed and transparency.
- Demonstrate competency in acquiring various types digital files.
- SLO #2: Demonstrate proficiency in advanced software applications related to digital imaging, such as Adobe's Photoshop, InDesign, Illustrator and Painter.
- Demonstrate competency in advanced digital manipulation techniques such as using layers, masks, blend modes and paths.
- SLO #3: Produce photographs using various photographic papers and digital output.
- Produce a digital portfolio in a variety of outputs including inkjet print and photo cd.
- SLO #4: Create a portfolio and related materials for job preparation.
- Produce multiple self-promotional materials using a variety of advanced digital manipulation techniques
- Produce a complete portfolio demonstrating competency in advanced digital imaging techniques
PHOTO 420 History of Photography

This course provides an in-depth study of photography and photographically derived images. The course will focus on the development of the first photograph processes from the nineteenth century to current technologies. The format of the class includes lecture and discussions, visual presentations and a field trip. This course is the same as ARTPH 342, and only one may be taken for credit.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO #1: Define the major movements in the history of photography
- produce a timeline for the world history of photography
- author a research paper on a major movement or artist in the history of photography
- SLO #2: Evaluate different visual styles in photography
- produce a multi-media presentation of a major movement or artist in the history of photography
- attend a field trip to a major photographic collection
- SLO #3: Describe photographic processes from the 19th Century to the present
- create an example of an historical process
- complete a journal depicting a technology timeline

PHOTO 495 Independent Studies in Photography

An independent studies project involves an individual student or small group of students in study, research, or activities beyond the scope of regularly offered courses. See the current catalog section of “Special Studies” for full details of Independent Studies.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO #1: Actively engage in intellectual inquiry beyond that required in order to pass a course of study (College Wide Learning Outcome – Area 4).
- Discuss and outline a proposal of study (that can be accomplished within one semester term) with a supervising instructor qualified within the discipline.
- Design an independent study (to be completed individually or by collaboration of a small group) to foster special knowledge, skills, and experience that are not available in any one regularly scheduled course.
- Use information resources to gather discipline-specific information.
- SLO #2: Utilize modes of analysis and critical thinking to apply theoretical perspectives and/or concepts in the major discipline of study to significant problems and/or educational activities (College Wide Learning Outcome – Area 3).
- Analyze and apply the knowledge, skills and experience that are involved in the independent study to theoretical perspectives and/or concepts in the major discipline of study.
- Explain the importance of the major discipline of study in the broader picture of society.
PHOTO 498 Work Experience in Photography

This course provides students with opportunities to develop marketable skills in preparation for employment in their major field of study or advancement within their career. It is designed for students interested in work experience and/or internships in transfer level degree occupational programs. Course content includes understanding the application of education to the workforce; completion of required forms which document the student's progress and hours spent at the work site; and developing workplace skills and competencies. Appropriate level learning objectives are established by the student and the employer. During the semester, the student is required to participate in a weekly orientation and 75 hours of related paid work experience, or 60 hours of unpaid work experience for one unit. An additional 75 or 60 hours of related work experience is required for each additional unit. Work Experience may be taken for a total of 16 units when there are new or expanded learning objectives. Only one Work Experience course may be taken per semester.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- **DEMONSTRATE AN UNDERSTANDING AND APPLICATION OF PROFESSIONAL WORKPLACE BEHAVIOR IN A FIELD OF STUDY RELATED ONE'S CAREER.(SLO 1)**
  - Understand the effects time, stress, and organizational management have on performance.
  - Demonstrate an understanding of consistently practicing ethics and confidentiality in a workplace.
  - Examine the career/life planning process and relate its relevancy to the student.
  - Demonstrate an understanding of basic communication tools and their appropriate use.
  - Demonstrate an understanding of workplace etiquette.
  - **DESCRIBE THE CAREER/LIFE PLANNING PROCESS AND RELATE ITS RELEVANCY TO ONE'S CAREER.(SLO 2)**
  - Link personal goals to long term achievement.
  - Display an understanding of creating a professional first impression.
  - Understand how networking is a powerful job search tool.
  - Understand necessary elements of a résumé.
  - Understand the importance of interview preparation.
  - Identify how continual learning increases career success.
  - **DEMONSTRATE APPLICATION OF INDUSTRY KNOWLEDGE AND THEORETICAL CONCEPTS AS WRITTEN IN LEARNING OBJECTIVES IN PARTNERSHIP WITH THE EMPLOYER WORK SITE SUPERVISOR.(SLO 3)**
The CRC Physics department offers a full array of transferable courses that fulfill both major and general education requirements. Physics sequences include a three-semester calculus-based sequence for computer science and engineering students, a two-semester calculus-based sequence for life science and architecture students, and a two-semester trigonometry-based sequence for life science and architecture students.

### Associate Degrees for Transfer

#### A.S.-T. in Physics

The Associate in Science in Physics for Transfer degree provides students with a thorough overview of the field of physics. Students will have demonstrated sufficient understanding in the fields of mechanics, electricity and magnetism, thermodynamics, mechanical and electromagnetic waves, modern physics, the scientific method and mathematics to successfully transfer to a four-year institution with a major in physics.

The Associate in Science in Physics for Transfer degree fulfills the general requirements of the California State University for transfer. Students with this degree will receive priority admission with junior status to the California State University system, although not necessarily to a particular campus or major.

**Catalog Date:** June 1, 2020

#### Degree Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYS 411</td>
<td>Mechanics of Solids and Fluids</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 421</td>
<td>Electricity and Magnetism</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 431</td>
<td>Heat, Waves, Light and Modern Physics</td>
<td>4</td>
</tr>
<tr>
<td>MATH 400</td>
<td>Calculus I</td>
<td>5</td>
</tr>
<tr>
<td>MATH 401</td>
<td>Calculus II</td>
<td>5</td>
</tr>
<tr>
<td>MATH 402</td>
<td>Calculus III</td>
<td>5</td>
</tr>
<tr>
<td>Total Units:</td>
<td></td>
<td>27</td>
</tr>
</tbody>
</table>

The Associate in Science in Physics for Transfer (A.S.-T) degree may be obtained by completion of 60 transferable, semester units with a minimum 2.0 GPA, including (a) the major or area of emphasis described in the Required Program, and (b) either the Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education-Breadth Requirements.

#### Student Learning Outcomes

Upon completion of this program, the student will be able to:
• explain the scientific method and its application to the fundamental concepts of physics including mechanics, electricity and magnetism, thermodynamics, mechanical and electromagnetic waves, optics and modern physics.

• solve conceptual, numeric and symbolic problems in physics (specifically the fields of mechanics, electricity and magnetism, thermodynamics, mechanical and electromagnetic waves, optics and modern physics) using mathematics through calculus.

• demonstrate the proper use of basic laboratory devices including metersticks, balances, digital multimeters, and oscilloscopes.

• apply mathematical concepts including single and multivariable calculus, vector calculus, and basic differential equations in order to model physical systems and solve physical problems.

• create graphical representations of data and analyze those graphs to determine the results of laboratory activities.

• write a clear, coherent and thorough lab report.

Career Information

This degree is designed to facilitate successful transfer to four-year programs that prepare students for advanced study in physics and related fields including biophysics, physical chemistry, geophysics, and astrophysics. Physicists with undergraduate and graduate degrees have a wide range of employment opportunities including research, engineering, computer programming, and teaching. NOTE TO TRANSFER STUDENTS: The Associate Degree for Transfer program is designed for students who plan to transfer to a campus of the California State University (CSU). Other than the required core, the courses you choose to complete this degree will depend to some extent on the selected CSU for transfer. In addition, some CSU-GE Breadth or IGETC requirements can also be completed using courses required for this associate degree for transfer major (known as “double-counting”). Meeting with a counselor to determine the most appropriate course choices will facilitate efficient completion of your transfer requirements. For students wishing to transfer to other universities (UC System, private, or out-of-state), the Associate Degree for Transfer may not provide adequate preparation for upper-division transfer admissions, because many universities require more lower division courses than those in this degree. Even the CSUs that accept this transfer degree may likely require more lower division courses to achieve the Bachelor degree. Specifically, courses in general chemistry, differential equations, linear algebra, and computer programming may better prepare the transfer student for certain universities. It is critical that you meet with a CRC counselor to select and plan the courses for the major, as programs vary widely in terms of the required preparation.

Associate Degrees

A.S. in General Science

Areas of Study include:

• Physical Anthropology
• Astronomy
• Biology
• Chemistry
• Engineering
• Physical Geography
• Geology
• Physics

Eighteen (18) units of transfer level course work in science is required. Two laboratory courses must be included: one in the physical sciences and one in the biological sciences. Courses may be selected from astronomy, biology, chemistry, geology, physical geography, physical anthropology, and physics. The student, in consultation with a counselor, should choose science courses to meet his or her program, transfer, or general education requirements.

Students interested in transferring to a four-year university with a science major are encouraged to complete a science AS or AS-T degree such as Anthropology, Biology, Chemistry, Engineering, Geography, Geology, or Physics. This General Science degree may not include the majors-level transfer courses needed for many science majors. Students are strongly recommended to see a counselor for guidance.

Catalog Data: June 1, 2020

Degree Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>A. Life Science with Lab:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>A minimum of 4 units from the following:</td>
<td></td>
</tr>
<tr>
<td>ANTH 300</td>
<td>Biological Anthropology (3)</td>
<td></td>
</tr>
<tr>
<td>and ANTH 301</td>
<td>Biological Anthropology Laboratory (1)</td>
<td></td>
</tr>
<tr>
<td>BIOL 307</td>
<td>Biology of Organisms (4)</td>
<td></td>
</tr>
<tr>
<td>COURSE CODE</td>
<td>COURSE TITLE</td>
<td>UNITS</td>
</tr>
<tr>
<td>-------------</td>
<td>--------------</td>
<td>-------</td>
</tr>
<tr>
<td>BIOL 310</td>
<td>General Biology (4)</td>
<td></td>
</tr>
<tr>
<td>BIOL 400</td>
<td>Principles of Biology (5)</td>
<td></td>
</tr>
<tr>
<td>BIOL 410</td>
<td>Principles of Botany (5)</td>
<td></td>
</tr>
<tr>
<td>BIOL 420</td>
<td>Principles of Zoology (5)</td>
<td></td>
</tr>
<tr>
<td>BIOL 430</td>
<td>Anatomy and Physiology (5)</td>
<td></td>
</tr>
<tr>
<td>BIOL 431</td>
<td>Anatomy and Physiology (5)</td>
<td></td>
</tr>
<tr>
<td>BIOL 440</td>
<td>General Microbiology (4)</td>
<td></td>
</tr>
</tbody>
</table>

**B. Physical Science with Lab:**

A minimum of 3 units from the following:

3

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASTR 400</td>
<td>Astronomy Laboratory (1)</td>
<td></td>
</tr>
<tr>
<td>and ASTR 300</td>
<td>Introduction to Astronomy (3)</td>
<td></td>
</tr>
<tr>
<td>CHEM 300</td>
<td>Beginning Chemistry (4)</td>
<td></td>
</tr>
<tr>
<td>CHEM 305</td>
<td>Introduction to Chemistry (5)</td>
<td></td>
</tr>
<tr>
<td>CHEM 306</td>
<td>Introduction to Organic and Biological Chemistry (5)</td>
<td></td>
</tr>
<tr>
<td>CHEM 309</td>
<td>Integrated General, Organic, and Biological Chemistry (5)</td>
<td></td>
</tr>
<tr>
<td>CHEM 322</td>
<td>Environmental Chemistry Laboratory (1)</td>
<td></td>
</tr>
<tr>
<td>and CHEM 321</td>
<td>Environmental Chemistry (3)</td>
<td></td>
</tr>
<tr>
<td>CHEM 400</td>
<td>General Chemistry I (5)</td>
<td></td>
</tr>
<tr>
<td>CHEM 401</td>
<td>General Chemistry II (5)</td>
<td></td>
</tr>
<tr>
<td>CHEM 420</td>
<td>Organic Chemistry I (5)</td>
<td></td>
</tr>
<tr>
<td>CHEM 421</td>
<td>Organic Chemistry II (5)</td>
<td></td>
</tr>
<tr>
<td>GEOG 301</td>
<td>Physical Geography Laboratory (1)</td>
<td></td>
</tr>
<tr>
<td>and GEOG 300</td>
<td>Physical Geography: Exploring Earth's Environmental Systems (3)</td>
<td></td>
</tr>
<tr>
<td>GEOL 301</td>
<td>Physical Geology Laboratory (1)</td>
<td></td>
</tr>
<tr>
<td>and GEOL 300</td>
<td>Physical Geology (3)</td>
<td></td>
</tr>
<tr>
<td>GEOL 306</td>
<td>Earth Science Laboratory (1)</td>
<td></td>
</tr>
<tr>
<td>and GEOL 305</td>
<td>Earth Science (3)</td>
<td></td>
</tr>
<tr>
<td>GEOL 311</td>
<td>Historical Geology Laboratory (1)</td>
<td></td>
</tr>
<tr>
<td>and GEOL 310</td>
<td>Historical Geology (3)</td>
<td></td>
</tr>
<tr>
<td>ENGR 304</td>
<td>How Things Work (3)</td>
<td></td>
</tr>
<tr>
<td>PHYS 350</td>
<td>General Physics (4)</td>
<td></td>
</tr>
<tr>
<td>PHYS 360</td>
<td>General Physics (4)</td>
<td></td>
</tr>
<tr>
<td>PHYS 370</td>
<td>Introductory Physics - Mechanics and Thermodynamics (5)</td>
<td></td>
</tr>
<tr>
<td>PHYS 380</td>
<td>Introductory Physics - Electricity and Magnetism, Light and Modern Physics (5)</td>
<td></td>
</tr>
<tr>
<td>PHYS 411</td>
<td>Mechanics of Solids and Fluids (4)</td>
<td></td>
</tr>
<tr>
<td>PHYS 421</td>
<td>Electricity and Magnetism (4)</td>
<td></td>
</tr>
<tr>
<td>COURSE CODE</td>
<td>COURSE TITLE</td>
<td>UNITS</td>
</tr>
<tr>
<td>-------------</td>
<td>-----------------------------------------------------------------------------</td>
<td>-------</td>
</tr>
<tr>
<td>PHYS 431</td>
<td>Heat, Waves, Light and Modern Physics</td>
<td>4</td>
</tr>
</tbody>
</table>

**C. Additional Science Courses:**

A minimum of 11 units from the following:

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANTH 300</td>
<td>Biological Anthropology</td>
<td>3</td>
</tr>
<tr>
<td>ANTH 301</td>
<td>Biological Anthropology Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>ASTR 300</td>
<td>Introduction to Astronomy</td>
<td>3</td>
</tr>
<tr>
<td>ASTR 400</td>
<td>Astronomy Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>BIOL 300</td>
<td>The Foundations of Biology</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 307</td>
<td>Biology of Organisms</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 310</td>
<td>General Biology</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 342</td>
<td>The New Plagues: New and Ancient Infectious Diseases Threatening World Health</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 350</td>
<td>Environmental Biology</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 352</td>
<td>Conservation Biology</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 390</td>
<td>Natural History Field Study (0.5 - 4)</td>
<td></td>
</tr>
<tr>
<td>BIOL 400</td>
<td>Principles of Biology</td>
<td>5</td>
</tr>
<tr>
<td>BIOL 410</td>
<td>Principles of Botany</td>
<td>5</td>
</tr>
<tr>
<td>BIOL 420</td>
<td>Principles of Zoology</td>
<td>5</td>
</tr>
<tr>
<td>BIOL 430</td>
<td>Anatomy and Physiology</td>
<td>5</td>
</tr>
<tr>
<td>BIOL 431</td>
<td>Anatomy and Physiology</td>
<td>5</td>
</tr>
<tr>
<td>BIOL 440</td>
<td>General Microbiology</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 462</td>
<td>Genetics in Contemporary Human Society</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 300</td>
<td>Beginning Chemistry</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 305</td>
<td>Introduction to Chemistry</td>
<td>5</td>
</tr>
<tr>
<td>CHEM 306</td>
<td>Introduction to Organic and Biological Chemistry</td>
<td>5</td>
</tr>
<tr>
<td>CHEM 309</td>
<td>Integrated General, Organic, and Biological Chemistry</td>
<td>5</td>
</tr>
<tr>
<td>CHEM 321</td>
<td>Environmental Chemistry</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 322</td>
<td>Environmental Chemistry Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>CHEM 400</td>
<td>General Chemistry I</td>
<td>5</td>
</tr>
<tr>
<td>CHEM 401</td>
<td>General Chemistry II</td>
<td>5</td>
</tr>
<tr>
<td>CHEM 420</td>
<td>Organic Chemistry I</td>
<td>5</td>
</tr>
<tr>
<td>CHEM 421</td>
<td>Organic Chemistry II</td>
<td>5</td>
</tr>
<tr>
<td>ENGR 304</td>
<td>How Things Work</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 300</td>
<td>Physical Geography: Exploring Earth's Environmental Systems (3)</td>
<td></td>
</tr>
<tr>
<td>GEOG 301</td>
<td>Physical Geography Laboratory (1)</td>
<td></td>
</tr>
<tr>
<td>GEOG 305</td>
<td>Global Climate Change</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 306</td>
<td>Weather and Climate</td>
<td>3</td>
</tr>
<tr>
<td>COURSE CODE</td>
<td>COURSE TITLE</td>
<td>UNITS</td>
</tr>
<tr>
<td>-------------</td>
<td>------------------------------------</td>
<td>-------</td>
</tr>
<tr>
<td>GEOL 300</td>
<td>Physical Geology (3)</td>
<td></td>
</tr>
<tr>
<td>GEOL 301</td>
<td>Physical Geology Laboratory (1)</td>
<td></td>
</tr>
<tr>
<td>GEOL 305</td>
<td>Earth Science (3)</td>
<td></td>
</tr>
<tr>
<td>GEOL 306</td>
<td>Earth Science Laboratory (1)</td>
<td></td>
</tr>
<tr>
<td>GEOL 310</td>
<td>Historical Geology (3)</td>
<td></td>
</tr>
<tr>
<td>GEOL 311</td>
<td>Historical Geology Laboratory (1)</td>
<td></td>
</tr>
<tr>
<td>GEOL 330</td>
<td>Introduction to Oceanography (3)</td>
<td></td>
</tr>
<tr>
<td>GEOL 390</td>
<td>Field Studies in Geology (1 - 4)</td>
<td></td>
</tr>
<tr>
<td>PHYS 310</td>
<td>Conceptual Physics (3)</td>
<td></td>
</tr>
<tr>
<td>PHYS 350</td>
<td>General Physics (4)</td>
<td></td>
</tr>
<tr>
<td>PHYS 360</td>
<td>General Physics (4)</td>
<td></td>
</tr>
<tr>
<td>PHYS 370</td>
<td>Introductory Physics - Mechanics and Thermodynamics (5)</td>
<td></td>
</tr>
<tr>
<td>PHYS 380</td>
<td>Introductory Physics - Electricity and Magnetism, Light and Modern Physics (5)</td>
<td></td>
</tr>
<tr>
<td>PHYS 411</td>
<td>Mechanics of Solids and Fluids (4)</td>
<td></td>
</tr>
<tr>
<td>PHYS 421</td>
<td>Electricity and Magnetism (4)</td>
<td></td>
</tr>
<tr>
<td>PHYS 431</td>
<td>Heat, Waves, Light and Modern Physics (4)</td>
<td></td>
</tr>
<tr>
<td>Total Units:</td>
<td></td>
<td>18</td>
</tr>
</tbody>
</table>

1Courses used in A or B above will not count towards C, except units exceeding the 4 or 3 unit minimum in A and B. For example, a student completing the 5 unit CHEM 309 under B could apply 2 of those units towards C. A total of 18 science units is required.

The General Science Associate in Science (A.S.) degree may be obtained by completion of the required program, plus general education requirements, plus sufficient electives to meet a 60-unit total. See CRC graduation requirements.

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- explain the core perspectives of the scientific method and apply it to at least one scientific discipline. (SLO 1)
- solve introductory problems of a conceptual and/or numerical nature of at least one scientific discipline. (SLO 2)
- accurately apply the basic vocabulary and concepts of at least one scientific discipline verbally and in writing. (SLO 3)
- recognize the use and misuse of scientific concepts in society including politics and the media. (SLO 4)

A.S. in Physics

The Associate in Science in Physics degree provides students with a thorough overview of the field of physics. Students will have demonstrated sufficient understanding in the fields of mechanics, electricity and magnetism, thermodynamics, mechanical and electromagnetic waves, modern physics; the scientific method, mathematics and chemistry to successfully transfer to a four-year institution with a major in physics.

Catalog Date: June 1, 2020

Degree Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 400</td>
<td>General Chemistry I</td>
<td>5</td>
</tr>
<tr>
<td>COURSE CODE</td>
<td>COURSE TITLE</td>
<td>UNITS</td>
</tr>
<tr>
<td>-------------</td>
<td>--------------------------------------------------</td>
<td>-------</td>
</tr>
<tr>
<td>CHEM 401</td>
<td>General Chemistry II</td>
<td>5</td>
</tr>
<tr>
<td>MATH 400</td>
<td>Calculus I</td>
<td>5</td>
</tr>
<tr>
<td>MATH 401</td>
<td>Calculus II</td>
<td>5</td>
</tr>
<tr>
<td>MATH 402</td>
<td>Calculus III</td>
<td>5</td>
</tr>
<tr>
<td>MATH 420</td>
<td>Differential Equations</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 411</td>
<td>Mechanics of Solids and Fluids</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 421</td>
<td>Electricity and Magnetism</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 431</td>
<td>Heat, Waves, Light and Modern Physics</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td><strong>Total Units:</strong></td>
<td><strong>41</strong></td>
</tr>
</tbody>
</table>

The Physics Associate in Science (A.S.) degree may be obtained by completion of the required program, plus general education requirements, plus sufficient electives to meet a 60-unit total. See CRC graduation requirements.

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- explain the scientific method and its application to the fundamental concepts of physics including mechanics, electricity and magnetism, thermodynamics, mechanical and electromagnetic waves, optics, modern physics and general chemistry.
- solve conceptual, numeric and symbolic problems in physics (mechanics, electricity and magnetism, thermodynamics, mechanical and electromagnetic waves, optics and modern physics) and general chemistry using mathematics through calculus.
- demonstrate the proper use of basic laboratory devices including metersticks, balances, digital multimeters, and oscilloscopes.
- apply mathematical concepts including algebra, single and multivariable calculus, vector calculus, and basic differential equations in order to model physical systems and solve physical problems.
- create graphical representations of data and analyze those graphs to determine the results of laboratory activities.
- write a clear, coherent and thorough lab report.

Career Information

This degree is designed to facilitate successful transfer to four-year programs that prepare students for advanced study in physics and related fields including biophysics, physical chemistry, geophysics, and astrophysics. Physicists with undergraduate and graduate degrees have a wide range of employment opportunities including research, engineering, computer programming, and teaching. NOTE TO TRANSFER STUDENTS: It is critical that you meet with a CRC counselor to select and plan the courses for the major, as university physics programs vary widely in terms of the required preparation. Specifically, some programs may require courses in linear algebra and computer programming as well as the courses included in this degree.

Astronomy (ASTR)

ASTR 300 Introduction to Astronomy

| Units:     | 3                  |
| Hours:     | 54 hours LEC       |
| Prerequisite: | None              |
| Transferable:   | CSU; UC            |
| General Education: | AA/AS Area IV; CSU Area B; IGETC Area 5A |
| Catalog Date:   | June 1, 2020       |

This course is a descriptive course in general astronomy treating the nature and evolution of the solar system, stars, galaxies, cosmology and life in the universe.

Student Learning Outcomes
Upon completion of this course, the student will be able to:

- **DEVELOP AN UNDERSTANDING OF EARLY ASTRONOMY AND CELESTIAL MOTION (SLO 1, PSLO 2).**
  - Explain the structure of the celestial sphere.
  - Differentiate between the geocentric and heliocentric models of the universe proposed by Ptolemy and Copernicus, respectively.
  - State contributions made by the Greeks, Brahe, Kepler, Galileo and Newton.
  - State Newton's Law of Universal Gravitation and how it can be used to explain an orbiting body around another.
  - Describe the principal reasons for the daily and annual motion of the stars, Sun and Moon, and state the reason for the seasons.
  - Explain why planetary retrograde motion is observed.
  - Describe what causes the different types of lunar and solar eclipses.
  - Have an understanding of the Scientific Method.

- **DISCUSS SOME OF THE TOOLS AND MEASURING METHODS USED IN ASTRONOMY (SLO 2, PSLO 2 AND 3).**
  - Explain what causes stellar parallax.
  - Define the astronomical unit (AU), the light year (ly) and the parsec (pc) and express numbers in scientific notation.
  - Demonstrate a basic understanding of atomic structure and the origin of light and its properties.
  - Explain what takes place in transitions between energy levels and how this is represented in a spectrum.
  - State the relationship between wavelength, frequency and the speed of an electromagnetic wave.
  - State the regions of the electromagnetic spectrum and arrange them in order of increasing energy, wavelength, or frequency.
  - Explain the conditions under which the three principal spectra are produced and the effect temperature has on Blackbody radiation spectra and on color.
  - Explain the basics of Doppler shift.
  - Discuss the importance of telescopes.
  - Compare reflecting and refracting telescopes and any limitations they may have.
  - Demonstrate an understanding of nonoptical telescopes and how and where they are used.
  - Explain some of the techniques that are used to improve resolution.

- **DEMOSTRATE KNOWLEDGE OF THE PROPERTIES OF THE SOLAR SYSTEM. (SLO 3, PSLO 2).**
  - List the planets in the Solar System in order and describe a possible reason for the differences between the two major groups of planets and the characteristics that distinguishes planets of each group.
  - State the accepted theory for the formation of the Moon and its influence on Earth.
  - Demonstrate knowledge of key features of smaller objects in the solar system including dwarf planets, moons, comets, asteroids, and meteoroids.
  - Explain how astronomers detect extra-solar planets.

- **DEVELOP AN UNDERSTANDING OF THE EVOLUTION AND PROPERTIES OF STARS, ESPECIALLY OUR SUN, AND GALAXIES (SLO 4, PSLO 2).**
  - Explain the basic properties of the Sun--hydrostatic equilibrium, source of energy, magnetic activity and its cycles and determination of its composition.
  - Identify the regions in the HR diagram and summarize some of the properties of stars in each region.
  - Explain what is meant by the interstellar medium.
  - Summarize the composition and evolution of stars (protostars, main sequence stars, novae, supernovae, neutron stars, and black holes).
  - Explain how astronomers might detect a black hole.
  - Develop a basic understanding of the Milky Way galaxy and other galaxies.
  - Categorize galaxies according to shape and size.
  - Discuss how galactic motion infers the expansion of the universe.
• DEVELOP A BASIC UNDERSTANDING OF COSMOLOGY AND THE SEARCH FOR LIFE IN THE UNIVERSE (SLO 5, PSLO 2).

• Demonstrate knowledge of the Big Bang theory and of any experimental data supporting the Big Bang theory.

• Describe what is meant by spacetime.

• Express the current understanding of the fate of universe.

• State what methods astronomers use to search for extra-terrestrial life.

• Demonstrate a basic understanding of each factor in the Drake equation.

ASTR 400 Astronomy Laboratory

Units: 1
Hours: 54 hours LAB
Prerequisite: None.
Corequisite: ASTR 300
Transferable: CSU; UC
General Education: CSU Area B3; IGETC Area 5C
Catalog Date: June 1, 2020

This course covers topics including constellations, star charts, and motions of the Earth, Moon and other astronomical bodies. Students will apply the techniques that astronomers use to study the Earth, Moon, Sun, planets and stars. The course includes observations with the naked eye, binoculars and/or telescopes.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• IDENTIFY AND CLASSIFY COMMON CELESTIAL OBJECTS. (SLO 1)

• identify major constellations and stars.

• classify stars according to constellation and spectrum.

• INCORPORATE PROPER ASTRONOMICAL OBSERVATION TECHNIQUES. (SLO 2)

• operate a basic telescope and use the naked eye and binoculars to make astronomical observations.

• ASSESS THE EFFECTS OF MOTIONS OF CELESTIAL OBJECTS ON OBSERVATIONS. (SLO 3)

• explain how the Earth's, moon's and sun's motions cause cycles in the sky.

• predict the night sky on any given evening using star charts.

• ANALYZE LIGHT TO DETERMINE PROPERTIES OF ASTRONOMICAL OBJECTS. (SLO 4)

• measure relative motion of and distance to stars using Doppler shifts and relative intensities.

• research composition of astronomical objects using spectral analysis.

ASTR 495 Independent Studies in Astronomy

Units: 1 - 3
Hours: 54 - 162 hours LAB
Prerequisite: None.
Transferable: CSU
Catalog Date: June 1, 2020

An independent studies project involves an individual student or small group of students in study, research, or activities beyond the scope of regularly offered courses. See the current catalog section of "Special Studies" for full details of Independent Studies.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• SLO #1: Actively engage in intellectual inquiry beyond that required in order to pass a course of study (College Wide Learning Outcome – Area 4).
Discuss and outline a proposal of study (that can be accomplished within one semester term) with a supervising instructor qualified within the discipline.

Design an independent study (to be completed individually or by collaboration of a small group) to foster special knowledge, skills, and experience that are not available in any one regularly scheduled course.

Use information resources to gather discipline-specific information.

SLO #2: Utilize modes of analysis and critical thinking to apply theoretical perspectives and/or concepts in the major discipline of study to significant problems and/or educational activities (College Wide Learning Outcome – Area 3).

Analyze and apply the knowledge, skills and experience that are involved in the independent study to theoretical perspectives and/or concepts in the major discipline of study.

Explain the importance of the major discipline of study in the broader picture of society.

SLO #3: Communicate a complex understanding of content matter of the major discipline of study (College Wide Outcome – Area 3).

Demonstrate competence in the skills essential to mastery of the major discipline of study that are necessary to accomplish the independent study.

SLO #4: Identify personal goals and pursue these goals effectively (College Wide Outcome – Area 4).

Utilize skills from the “academic tool kit” including time management, study skills, etc., to accomplish the independent study within one semester term.

---

**ASTR 498 Work Experience in Astronomy**

**Units:** 1 - 4  
**Hours:** 60 - 300 hours LAB  
**Prerequisite:** None.  
**Enrollment Limitation:** Students must be in a paid or unpaid internship, volunteer position or job related to career goals in Astronomy.  
**Transferable:** CSU  
**General Education:** AA/AS Area III(b)  
**Catalog Date:** June 1, 2020

This course provides students with opportunities to develop marketable skills in preparation for employment in their major field of study or advancement within their career. It is designed for students interested in work experience and/or internships in transfer level degree occupational programs. Course content includes understanding the application of education to the workforce; completion of required forms which document the student's progress and hours spent at the work site; and developing workplace skills and competencies. Appropriate level learning objectives are established by the student and the employer. During the semester, the student is required to participate in a weekly orientation and 75 hours of related paid work experience, or 60 hours of unpaid work experience for one unit. An additional 75 or 60 hours of related work experience is required for each additional unit. Work Experience may be taken for a total of 16 units when there are new or expanded learning objectives. Only one Work Experience course may be taken per semester.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- **DEMONSTRATE AN UNDERSTANDING AND APPLICATION OF PROFESSIONAL WORKPLACE BEHAVIOR IN A FIELD OF STUDY RELATED ONE’S CAREER**(SLO 1)  
  - Understand the effects time, stress, and organizational management have on performance.
  - Demonstrate an understanding of consistently practicing ethics and confidentiality in a workplace.
  - Examine the career/life planning process and relate its relevancy to the student.
  - Demonstrate an understanding of basic communication tools and their appropriate use.
  - Demonstrate an understanding of workplace etiquette.

- **DESCRIBE THE CAREER/LIFE PLANNING PROCESS AND RELATE ITS RELEVANCY TO ONE’S CAREER**(SLO 2)  
  - Link personal goals to long term achievement.
  - Display an understanding of creating a professional first impression.
  - Understand how networking is a powerful job search tool.
  - Understand necessary elements of a résumé.
  - Understand the importance of interview preparation.
Identify how continual learning increases career success.

DEMONSTRATE APPLICATION OF INDUSTRY KNOWLEDGE AND THEORETICAL CONCEPTS AS WRITTEN IN LEARNING OBJECTIVES IN PARTNERSHIP WITH THE EMPLOYER WORK SITE SUPERVISOR. (SLO 3)

Physics (PHYS)

PHYS 310 Conceptual Physics

Units: 3
Hours: 54 hours LEC
Prerequisites: None.
Advisory: MATH 100 or 102, or placement through the assessment process.
Transferable: CSU; UC (No credit for PHYS 310 if taken after PHYS 350, PHYS 360, PHYS 370, PHYS 380, PHYS 411, PHYS 411 or PHYS 431)
General Education: AA/AS Area IV; CSU Area B1; IGETC Area 5A
Catalog Date: June 1, 2020

This course provides a conceptual overview of Newtonian and modern physics for non-science and science students alike. The conceptual approach to physics is tied to the student's personal experience in the everyday world, so that the student learns to see physics not as just a classroom or laboratory activity, but as a part of his or her surroundings. The class is open to students with no previous physics background.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO #1: EXPLAIN THE SCIENTIFIC METHOD AND HOW SCIENTISTS APPLY IT TO UNDERSTANDING NATURE.
- SLO #2: EVALUATE SIMPLE AND COMMON MECHANICAL SYSTEMS USING CLASSICAL MECHANICS INCLUDING ONE- AND/OR TWO-DIMENSIONAL KINEMATICS, NEWTON'S LAWS OF MOTION, GRAVITATION, MOMENTUM, WORK AND ENERGY.
- determine the forces acting on a familiar system and draw the appropriate free body diagram.
- solve conceptual problems of a mechanical nature using kinematics, the laws of motion, gravitation, work and energy.
- solve simple numerical problems using kinematics and the laws of motion.
- SLO #3: EXPLAIN BASIC ATOMIC STRUCTURE AND DIFFERENT STATES OF MATTER
- describe basic atomic theory.
- compare and contrast solids, liquids and gases.
- solve conceptual problems applying the atomic theory of matter and the definitions of solid, liquid, gas and concepts such as density and fluid mechanics.
- SLO #4: EXPLAIN AND DEFINE HEAT, HEAT TRANSFER AND ITS RESULTS.
- compare and contrast heat and temperature.
- recognize the different ways in which heat can be transferred.
- discuss some effects of heat transfer such as temperature or phase change and thermal expansion.
- SLO #5: EXPLAIN THE SOURCES AND BEHAVIORS OF WAVES.
- recognize the different types of waves and discuss the quantities used to describe waves.
- discuss the wave nature of phenomena such as light and sound.
- SLO #6: EXPLAIN THE FUNDAMENTAL CONCEPTS AND DEFINITIONS RELATED TO CHARGE AND CHARGE INTERACTIONS INCLUDING BASIC ELECTRICAL CIRCUITS.
- compare and contrast electrostatic and magnetic forces and the dependence of each on charge, distance, motion, etc.
- explain the terms potential difference and current, their relation to each other and application to basic DC circuits.
- solve conceptual problems applying the basic theories of electricity and magnetism and DC circuit analysis.
- solve simple numerical problems using the basic theories of DC circuit analysis.
PHYS 350 General Physics

This course, the first semester of General Physics, is a transferable course required for many life science and other majors and may also be taken for general education credit. Materials covered will include classical mechanics (including kinematics, statics, dynamics, Newton's Laws, energy and momentum conservation, rigid body motion and oscillatory motion), fluid mechanics, mechanical waves (including sound), and thermodynamics.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- APPLY APPROPRIATELY NEWTON'S LAWS OF MOTION TO MECHANICAL SYSTEMS, DEVELOP AND ARTICULATE A NEWTONIAN WORLDVIEW (SLO 1; PSLO 2, 4)
- differentiate between terms that describe motion such as displacement, velocity and acceleration.
- compare and contrast vector and scalar quantities.
- analyze a mechanical system to identify all external forces acting on it, and using Newton's Laws of Motion, predict the resulting motions of the system.
- evaluate mechanical systems for conserved quantities such as momentum or mechanical energy, and use these conserved quantities to predict the motion.
- recognize the forces resulting in oscillations and mechanical waves and correctly apply definitions and mechanical concepts to these systems to make predictions.
- DEVELOP CONNECTIONS BETWEEN THE BEHAVIOR OF ATOMS AND MOLECULES AND THE MACROSCOPIC QUANTITIES PHYSICISTS USE TO DESCRIBE SYSTEMS THROUGH THE APPLICATION OF THERMODYNAMIC PRINCIPLES (SLO 2; PSLO 2, 4)
- distinguish between pressure, temperature, heat, internal energy and their relation to the molecules of a system.
- evaluate thermodynamic systems using the Laws of Thermodynamics.
- SOLVE CONCEPTUAL, SYMBOLIC AND NUMERIC PHYSICAL PROBLEMS AT AN APPROPRIATE LEVEL USING MATH THROUGH COLLEGE ALGEBRA AND TRIGONOMETRY. MORE SPECIFICALLY, STUDENTS WILL BE ABLE TO DIFFERENTIATE BETWEEN DIFFERENT TYPES OF PROBLEMS, EVALUATE THE GIVEN DATA FOR ITS SIGNIFICANCE, FORMULATE A SOLUTION STRATEGY, AND EVALUATE THE RESULTS. (SLO 3; PSLO 3)
- identify and analyze conceptual, symbolic and numeric problems in one- and two-dimensional motion, formulate solution strategies and evaluate results.
- analyze conceptual, symbolic and numeric dynamics, statics, circular motion and gravitation problems using Newton's Laws, formulate solution strategies and evaluate results.
- graphically and mathematically add and subtract vectors.
- identify mechanical systems appropriate to the application of the work-energy theorem, apply this theorem to conceptual, symbolic and quantitative problems and evaluate results.
- identify and analyze conceptual, symbolic, and quantitative problems applying the conservation of mechanical energy and/or linear momentum, formulate solution strategies and evaluate results.
- identify and analyze conceptual, symbolic, and quantitative problems applying the concepts, definitions and principles of rotational motion, including rotational kinematics, torque, rotational inertia, mechanical energy, and angular momentum, formulate solution strategies and evaluate results.
- identify and analyze conceptual, symbolic, and quantitative problems applying the concepts, definitions and principles of simple harmonic motion and mechanical waves, including pendulums and spring oscillators, waves on a string and sound, and wave interference, formulate solution strategies and evaluate results.
- identify and analyze conceptual, symbolic, and quantitative problems applying the concepts, definitions and principles of thermodynamics, including temperature, thermal expansion, heat transfer and calorimetry, formulate solution strategies and evaluate results.
- identify and analyze conceptual, symbolic and quantitative problems of thermodynamic systems using the Laws of Thermodynamics, formulate solution strategies and evaluate results.

- MODEL BASIC LAB SKILLS AND APPLY AND EVALUATE METHODS FOR DISPLAYING AND INTERPRETING EXPERIMENTAL DATA.  
  (SLO 4; PSLO 5, 6)

- design, conduct, analyze and interpret scientific experiments in the fields of mechanics and thermodynamics.

- demonstrate skilled laboratory techniques, including use of metersticks, timing devices, thermometers, computer-aided data acquisition devices, etc.

- create graphical representations of experimental data to clearly demonstrate trends, and use those representations to formulate conclusions relevant to mechanical and thermodynamic systems.

**PHYS 360 General Physics**

**Units:** 4  
**Hours:** 54 hours LEC; 54 hours LAB  
**Prerequisites:** PHYS 350 with a grade of "C" or better  
**Transferable:** 
CSU; UC (PHYS 350, 360, 370, 380, 411, 421, 431 combined: maximum transfer credit of one series*; deduct credit for duplication of topics)  
**General Education:** 
CSU Area B1; CSU Area B3; IGETC Area 5A; IGETC Area 5C  
**C-ID:** C-ID PHYS 110; Part of C-ID PHYS 100S  
**Catalog Date:** June 1, 2020

This course, the second semester of General Physics, is a transferable course required for many life science and other students. Material covered will include classical electricity and magnetism (electrostatics, electric fields and potentials, magnetic fields, electromagnetic induction and electromagnetic radiation), DC and AC circuits, light, geometric and wave optics, special relativity, atomic structure, quantum physics and nuclear physics.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- **SLO #1 – EVALUATE A PHYSICAL SYSTEM FOR ELECTROMAGNETIC INTERACTIONS, PROPERLY APPLY THE LAWS OF ELECTRICITY AND MAGNETISM TO PHYSICAL SYSTEMS, AND INTEGRATE THIS INTO A NEWTONIAN VISION OF THE UNIVERSE.**

  - Evaluate motions of charges in electric and magnetic systems using Newtonian mechanics including forces, work and energy.

  - Generate appropriate shapes and relative magnitudes of electric and magnetic fields based on different charge and/or current distributions.

  - Predict the behavior of simple DC electrical circuits using power sources, resistors and capacitors.

  - Compare and contrast the different regions of the electromagnetic spectrum based on frequency and/or wavelength.

- **SLO #2 – DEVELOP AND ARTICULATE A BASIC UNDERSTANDING OF THE BRANCHES OF MODERN PHYSICS INCLUDING SPECIAL RELATIVITY AND QUANTUM PHYSICS.**

  - Critique classical physics and assess its limitations. More specifically, the student will evaluate physical phenomena that classical physics does not adequately explain.

  - Discuss the quantum mechanical model of the atom.

- **SLO #3 – SOLVE CONCEPTUAL, SYMBOLIC AND NUMERIC PHYSICAL PROBLEMS AT AN APPROPRIATE LEVEL USING MATH THROUGH TRIGONOMETRY AND COLLEGE ALGEBRA.**BY RECOGNIZING DIFFERENT TYPES OF PROBLEMS, EVALUATING THE GIVEN INFORMATION FOR ITS SIGNIFICANCE, FORMULATING A SOLUTION STRATEGY, AND EVALUATING THE RESULTS.

  - Identify and analyze conceptual, symbolic and numeric problems of the electric and magnetic fields and forces, formulate solution strategies and evaluate results.

  - Identify and analyze conceptual, symbolic and numeric electrostatic energy problems including electric potential, formulate solution strategies and evaluate results.

  - Identify and analyze conceptual, symbolic, and numeric problems of DC circuits, formulate solution strategies and evaluate results.

  - Identify and analyze conceptual, symbolic, and quantitative problems of electromagnetic induction, formulate solution strategies and evaluate results.

  - Identify and analyze conceptual, symbolic, and quantitative problems of the ray and wave natures of light including reflection, refraction, mirrors and thin lenses, interference and polarization, formulate solution strategies and evaluate results.

  - Identify and analyze conceptual, symbolic, and quantitative problems of the modern physics including special relativity and introductory quantum physics. Formulate solution strategies and evaluate results.
Student Learning Outcomes

Upon completion of this course, the student will be able to:

- **SLO #1** – develop and articulate a Newtonian worldview. The student will appropriately apply Newton’s Laws of motion to mechanical systems, will recognize prior misconceptions about the mechanical universe and replace them with correct concepts.

- differentiate between terms that describe motion such as displacement, velocity and acceleration.

- compare and contrast vector and scalar quantities.

- analyze a system to identify all external forces acting on it.

- evaluate a mechanical system using Newton’s Laws of Motion, apply these laws to the system, predict the resulting motions.

- evaluate mechanical systems for conserved quantities, determine the quantities that are conserved, and defend these conclusions.

- **SLO #2** – develop connections between the behavior of atoms and molecules and the macroscopic quantities physicists use to describe systems through the application of thermodynamic principles

- distinguish between pressure, temperature, heat, internal energy and their relation to the molecules of a system.

- evaluate thermodynamic systems using the Laws of Thermodynamics.

- **SLO #3** – solve conceptual, symbolic and numeric physical problems at an appropriate level using math through trigonometry and basic calculus. More specifically, students will be able to differentiate between different types of problems, evaluate the given data for its significance, formulate a solution strategy, and evaluate the results.

- identify and analyze conceptual, symbolic and numeric problems in one- and two-dimensional motion, formulate solution strategies and evaluate results.

- analyze conceptual, symbolic and numeric dynamics, statics, circular motion and gravitation problems using Newton’s Laws, formulate solution strategies and evaluate results.

- graphically and mathematically add and subtract vectors.

- identify mechanical systems appropriate to the application of the work-energy theorem, apply this theorem to conceptual, symbolic and quantitative problems and evaluate results.

**PHYS 370 Introductory Physics - Mechanics and Thermodynamics**

**Units:** 5  
**Hours:** 72 hours LEC; 54 hours LAB  
**Prerequisite:** MATH 350 with a grade of “C” or better  
**Transferable:** CSU; UC (PHYS 350, 360, 370, 380, 411, 421, 431 combined: maximum transfer credit of one series; deduct credit for duplication of topics)  
**General Education:** AA/AS Area IV; CSU Area B1; CSU Area B3; IGETC Area 5A; IGETC Area 5C  
**C-ID:** C-ID PHYS 105; Part of C-ID PHYS 100S  
**Catalog Date:** June 1, 2020

This course, the first semester of the Introductory Physics sequence, is designed for students transferring to programs which require two semesters of calculus-based physics such as some life science and architecture programs. Material covered will include classical mechanics (kinematics, statics, dynamics, Newton’s Laws, work, conservation of mechanical energy and momentum, rotations and oscillations), fluid mechanics, mechanical waves including sound, and thermodynamics. Basic calculus skills will be assumed in the derivation and application of physical principles.
identify and analyze conceptual, symbolic, and quantitative problems applying the conservation of mechanical energy and/or linear momentum, formulate solution strategies and evaluate results.

identify and analyze conceptual, symbolic, and quantitative problems applying the concepts, definitions and principles or rotational motion, including rotational kinematics, torque, rotational inertia, mechanical energy, and angular momentum. Formulate solution strategies and evaluate results.

identify and analyze conceptual, symbolic, and quantitative problems applying the concepts, definitions and principles or simple harmonic motion and mechanical waves, including pendulums and spring oscillators, waves on a string and sound, and wave interference. Formulate solution strategies and evaluate results.

identify and analyze conceptual, symbolic, and quantitative problems applying the concepts, definitions and principles or thermodynamics, including temperature, thermal expansion, heat transfer and calorimetry. Formulate solution strategies and evaluate results.

identify and analyze conceptual, symbolic and quantitative problems of thermodynamic systems using the Laws of Thermodynamics laws, formulate solution strategies and evaluate results.

SLO #4 – develop basic lab skills and apply and evaluate methods for displaying and interpreting experimental data.

design, conduct, analyze and interpret scientific experiments in the fields of mechanics and thermodynamics.

demonstrate skilled laboratory techniques, including use of metersticks, timing devices, thermometers, etc.

create graphical representations of experimental data to clearly demonstrate trends, and use those representations to formulate conclusions relevant to mechanical and thermodynamic systems.

PHYS 380 Introductory Physics - Electricity and Magnetism, Light and Modern Physics

Units: 5
Hours: 72 hours LEC; 54 hours LAB
Pre-requisite: PHYS 370 with a grade of "C" or better
Transferable: CSU; UC (PHYS 350, 360, 370, 380, 411, 421, 431 combined: maximum transfer credit of one series*; deduct credit for duplication of topics)
General Education: CSU Area B1; CSU Area B3; IGETC Area 5A; IGETC Area 5C
C-ID: C-ID PHYS 110; Part of C-ID PHYS 100S
Catalog Date: June 1, 2020

This course, the second semester of the Introductory Physics sequence, is designed for students transferring to programs which require two semesters of calculus-based physics such as some life science and architecture programs. Material covered will include electrostatics, electrical circuits and devices, magnetism, light, and modern physics (including special relativity, quantum, atomic and nuclear physics). Basic calculus skills will be assumed in the derivation and application of physical principles.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO #1 – evaluate a physical system for electromagnetic interactions, properly apply the laws of electricity and magnetism to physical systems, and integrate this into a Newtonian vision of the universe.
- evaluate motions of charges in electric and magnetic systems using Newtonian mechanics including forces, work and energy.
- generate appropriate shapes and relative magnitudes of electric fields based on different charge and/or current distributions.
- predict the behavior of simple DC electrical circuits using power sources, resistors and capacitors.
- compare and contrast the different regions of the electromagnetic spectrum based on frequency and/or wavelength.
- SLO #2 – develop a basic understanding of the branches of modern physics including Special Relativity and Quantum Physics.
- critique classical physics and assess its limitations. More specifically, the student will evaluate physical phenomena that classical physics can not adequately explain.
- design a working quantum mechanical model of the atom.
- SLO #3 – solve conceptual, symbolic and numeric physical problems at an appropriate level using math through trigonometry and basic calculus. More specifically, students will be able to differentiate between different types of problems, evaluate the given data for its significance, formulate a solution strategy, and evaluate the results.
- identify and analyze conceptual, symbolic and numeric problems of the electric field and force, formulate solution strategies and evaluate results.
- identify and analyze conceptual, symbolic and numeric electrostatic energy problems including electric potential, formulate solution strategies and evaluate results.

- identify and analyze conceptual, symbolic, and numeric problems of DC circuits, formulate solution strategies and evaluate results.

- identify and analyze conceptual, symbolic, and numeric problems of magnetic fields and forces, formulate solution strategies and evaluate results.

- identify and analyze conceptual, symbolic, and quantitative problems of electromagnetic induction.

- identify and analyze conceptual, symbolic, and quantitative problems of the ray nature of light including reflection, refraction, mirrors and thin lenses. Formulate solution strategies and evaluate results.

- identify and analyze conceptual, symbolic, and quantitative problems of the wave nature of light including interference and polarization. Formulate solution strategies and evaluate results.

- identify and analyze conceptual, symbolic, and quantitative problems of the modern physics including special relativity and introductory quantum physics. Formulate solution strategies and evaluate results.

- SLO #4 – develop basic lab skills and apply and evaluate methods for displaying and interpreting experimental data.

- design, conduct, analyze and interpret scientific experiments in the fields of electricity and magnetism, light and modern physics.

- design and build simple DC circuits using power sources, resistors and capacitors.

- demonstrate skilled laboratory techniques, including use of multimeters.

- create graphical representations of experimental data to clearly demonstrate trends, and use those representations to formulate conclusions relevant to electromagnetic systems and light.

**PHYS 411 Mechanics of Solids and Fluids**

**Units:** 4

**Hours:** 54 hours LEC; 54 hours LAB

**Prerequisites:** MATH 400 with a grade of "C" or better

**Transferable:**
- CSU; UC (PHYS 350, 360, 370, 380, 411, 421, 431 combined: maximum transfer credit of one series; deduct credit for duplication of topics)

**General Education:**
- AA/AS Area IV; CSU Area B1; CSU Area B3; IGETC Area 5A; IGETC Area 5C

**C-ID:** C-ID PHYS 205; Part of C-ID PHYS 200S

**Catalog Date:** June 1, 2020

The course examines the fundamentals of mechanics: vectors, kinematics, Newton's laws of motion, work, energy, momentum, conservation principles, oscillations, fluids, and gravitation. This course is recommended for students studying the Physical Sciences, Engineering, and Computer Information Science, as well as some students studying Architecture or Mathematics.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- DEVELOP AND ARTICULATE A NEWTONIAN WORLDVIEW AND APPROPRIATELY APPLY NEWTON'S LAWS OF MOTION TO MECHANICAL SYSTEMS. (SLO 1, PSLO 2)

- differentiate between terms that describe motion such as displacement, velocity and acceleration.

- compare and contrast vector and scalar quantities.

- analyze a mechanical system to identify all external forces acting on it, and using Newton's Laws of Motion, predict the resulting motions of the system.

- evaluate mechanical systems for conserved quantities such as momentum or mechanical energy, and use these conserved quantities to predict the motion.

- recognize the forces that produce oscillatory motion and correctly apply definitions and mechanical concepts to these systems to predict the motion.

- SOLVE CONCEPTUAL, SYMBOLIC AND NUMERIC PHYSICAL PROBLEMS AT AN APPROPRIATE LEVEL USING MATH THROUGH CALCULUS. MORE SPECIFICALLY, STUDENTS WILL BE ABLE TO DIFFERENTIATE BETWEEN DIFFERENT TYPES OF PROBLEMS, EVALUATE THE GIVEN DATA FOR ITS SIGNIFICANCE, FORMULATE A SOLUTION STRATEGY, AND EVALUATE THE RESULTS. (SLO 2, PSLO 3)

- identify and analyze conceptual, symbolic and numeric problems in one- and two-dimensional motion, formulate solution strategies and evaluate results.
analyze conceptual, symbolic and numeric dynamics, statics, circular motion and gravitation problems using Newton's Laws, formulate solution strategies and evaluate results.

graphically and mathematically add and subtract vectors, and calculate the vector and scalar products.

identify mechanical systems appropriate to the application of the work-energy theorem, apply this theorem to conceptual, symbolic and quantitative problems and evaluate results.

identify and analyze conceptual, symbolic, and quantitative problems applying the conservation of mechanical energy and/or linear momentum, formulate solution strategies and evaluate results.

identify and analyze conceptual, symbolic, and quantitative problems applying the concepts, definitions and principles or rotational motion, including rotational kinematics, torque, rotational inertia, mechanical energy, and angular momentum, formulate solution strategies and evaluate results.

identify and analyze conceptual, symbolic, and quantitative problems applying the concepts, definitions and principles of simple harmonic motion, formulate solution strategies and evaluate results.

identify and analyze conceptual, symbolic, and quantitative problems of fluid statics and dynamics, formulate solution strategies and evaluate results.

DEVELOP BASIC LAB SKILLS AND APPLY AND EVALUATE METHODS FOR DISPLAYING AND INTERPRETING EXPERIMENTAL DATA. (SLO 3, PSLO 5 & 6)

design, conduct, analyze and interpret scientific experiments in the field of mechanics.

demonstrate skilled laboratory techniques, including use of metersticks, timing devices, and computer-aided data acquisition devices.

create graphical representations of experimental data to clearly demonstrate trends, and use those representations to formulate conclusions relevant to mechanical systems.

evaluate experimental procedures, data and results in writing.

PHYS 421 Electricity and Magnetism

Students will be able to:

SLO#1--DEVELOP AND ARTICULATE AN UNDERSTANDING OF ELECTROMAGNETIC SYSTEMS AND IN SOME CASES HOW THEY INTEGRATE INTO A NEWTONIAN WORLDVIEW.

demonstrate a basic understanding of electric and magnetic fields and the forces associated with them.

demonstrate a basic understanding of electric potential and potential energy.

demonstrate a basic understanding of induction and how it relates to mechanical motion.

demonstrate a basic understanding of electric current, resistance, capacitance, electromagnetic force (emf) and dielectrics.

demonstrate proper usage of measuring devices such as ammeters, voltmeters, ohmmeters and oscilloscopes.

SLO#2--SOLVE CONCEPTUAL, SYMBOLIC AND NUMERICAL PHYSICAL PROBLEMS INVOLVING ELECTROMAGNETIC INTERACTIONS AT AN APPROPRIATE LEVEL USING MATH UP TO AND INCLUDING CALCULUS.

apply definitions and physical laws to solve conceptual and analytic problems of an electric and/or magnetic nature.

identify, analyze and solve quantitative problems of an electric and/or magnetic nature requiring the application of vector components and vector sums and products.
- construct and evaluate integrals in problems involving Gauss' Law, electric fields and potentials of charge distributions, Ampere's Law, and the Biot-Savart Law.
- calculate the resistance of materials given their shape and resistivity.
- solve problems that include resistors or capacitors in series or in parallel.
- discuss the theory and applications of resistors, capacitors and inductors (e.g. in RC, LC and RLC circuits).
- demonstrate a basic understanding of electric field, potential, current, magnetic field and induction.
- identify and solve problems involving electromagnetic induction by using Faraday's and Lenz's Laws.
- use Kirchhoff's Rules to solve DC and AC circuits.
- analyze and solve quantitative AC circuit problems using reactance, impedance and phasor diagrams.
- demonstrate a basic understanding of the propagation of electromagnetic radiation and Maxwell's equations.
- SLO#3--DEVELOP BASIC LAB SKILLS AND APPLY AND EVALUATE METHODS FOR DISPLAYING AND INTERPRETING EXPERIMENTAL DATA.
- design, build, analyze and quantitatively solve basic AC and DC circuits that include electric sources, resistors, capacitors and/or inductors.
- operate basic electric measuring devices including multimeters and oscilloscopes.
- create and analyze graphical representations of experimental data.
- clearly communicate experimental procedures, data and results in writing.

PHYS 431 Heat, Waves, Light and Modern Physics

**Units:** 4
**Hours:** 54 hours LEC; 54 hours LAB
**Prerequisite:** MATH 401 and PHYS 411 with grades of "C" or better
**Transferable:** CSU; UC (PHYS 350, 360, 380, 411, 421, 431 combined: maximum transfer credit of one series; deduct credit for duplication of topics)
**General Education:** CSU Area B1; CSU Area B3; IGETC Area 5A; IGETC Area 5C
**C-ID:** C-ID PHYS 215; Part of C-ID PHYS 200S
**Catalog Date:** June 1, 2020

This course examines the fundamentals of thermodynamics, waves and modern physics. Topics include temperature, heat, kinetic theory of gases, thermodynamics, mechanical waves, sound, light reflection and refraction, interference and diffraction, optics, lasers, special relativity, quantum physics, atomic physics, nuclear physics, and particle physics.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- SLO#1--DEVELOP AND ARTICULATE A BASIC UNDERSTANDING OF THERMODYNAMIC SYSTEMS, WAVE PROPERTIES, SOUND, REFLECTION AND REFRACTION OF LIGHT, GEOMETRICAL OPTICS AND MODERN PHYSICS THAT INCLUDES RELATIVITY, QUANTUM PHYSICS, AND NUCLEAR PHYSICS.
- apply the concepts of basic thermodynamics and elementary statistical mechanics.
- construct a conceptual understanding and intuition for the fundamental principles of mechanical waves including standing waves, normal modes and sound.
- apply the concepts of mechanical waves and basic electromagnetic theory to describe light (electromagnetic radiation) and its properties including reflection, refraction, polarization, geometric and wave optics.
- construct a conceptual understanding and intuition for the fundamental principles of special relativity.
- construct a conceptual understanding and intuition for the fundamental principles of quantum, nuclear and particle physics.
- SLO#2--SOLVE CONCEPTUAL, SYMBOLIC AND NUMERIC PHYSICAL PROBLEMS AT AN APPROPRIATE LEVEL USING MATH UP TO CALCULUS.
- identify and solve problems of thermodynamics systems that include heat capacities, heat transfer, calorimetry, heat engines, entropy and PV diagrams.
- solve problems dealing with mechanical waves, sound, standing waves, and normal modes.
• identify and solve problems dealing with the laws of reflection and refraction (Snell's Law) and polarization.
• solve problems dealing with lenses and/or mirrors and create ray-tracing diagrams to identify the location of images.
• prove the laws of reflection and refraction using Huygen’s and/or Fermat’s principles.
• solve basic problems dealing with special relativity.
• solve basic problems in the areas of elementary quantum, nuclear and particle physics.
• SLO#3--DEVELOP BASIC LAB SKILLS AND APPLY AND EVALUATE METHODS FOR DISPLAYING AND INTERPRETING EXPERIMENTAL DATA.
• design, build, conduct and analyze experiments in the field of thermodynamics, mechanical waves, sound, geometrical optics, and modern physics.
• create and analyze graphical representations of experimental data and compare them to theoretical predictions.
• clearly communicate experimental procedures, data and results in writing.

PHYS 495 Independent Studies in Physics

| Units: | 1 - 3 |
| Hours: | 54 - 162 hours LAB |
| Prerequisite: | None. |
| Transferable: | CSU |
| Catalog Date: | June 1, 2020 |

An independent studies project involves an individual student or small group of students in study, research, or activities beyond the scope of regularly offered courses. See the current catalog section of "Special Studies" for full details of Independent Studies.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• SLO #1: Actively engage in intellectual inquiry beyond that required in order to pass a course of study (College Wide Learning Outcome – Area 4).
• Discuss and outline a proposal of study (that can be accomplished within one semester term) with a supervising instructor qualified within the discipline.
• Design an independent study (to be completed individually or by collaboration of a small group) to foster special knowledge, skills, and experience that are not available in any one regularly scheduled course.
• Use information resources to gather discipline-specific information.
• SLO #2: Utilize modes of analysis and critical thinking to apply theoretical perspectives and/or concepts in the major discipline of study to significant problems and/or educational activities (College Wide Learning Outcome – Area 3).
• Analyze and apply the knowledge, skills and experience that are involved in the independent study to theoretical perspectives and/or concepts in the major discipline of study.
• Explain the importance of the major discipline of study in the broader picture of society.
• SLO #3: Communicate a complex understanding of content matter of the major discipline of study (College Wide Outcome – Area 3).
• Demonstrate competence in the skills essential to mastery of the major discipline of study that are necessary to accomplish the independent study.
• SLO #4: Identify personal goals and pursue these goals effectively (College Wide Outcome – Area 4).
• Utilize skills from the "academic tool kit" including time management, study skills, etc., to accomplish the independent study within one semester term.

PHYS 498 Work Experience in Physics
This course provides students with opportunities to develop marketable skills in preparation for employment in their major field of study or advancement within their career. It is designed for students interested in work experience and/or internships in transfer level degree occupational programs. Course content includes understanding the application of education to the workforce; completion of required forms which document the student's progress and hours spent at the work site; and developing workplace skills and competencies. Appropriate level learning objectives are established by the student and the employer. During the semester, the student is required to participate in a weekly orientation and 75 hours of related paid work experience, or 60 hours of unpaid work experience for one unit. An additional 75 or 60 hours of related work experience is required for each additional unit. Work Experience may be taken for a total of 16 units when there are new or expanded learning objectives. Only one Work Experience course may be taken per semester.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- **DEMONSTRATE AN UNDERSTANDING AND APPLICATION OF PROFESSIONAL WORKPLACE BEHAVIOR IN A FIELD OF STUDY RELATED ONE'S CAREER. (SLO 1)**
  - Understand the effects time, stress, and organizational management have on performance.
  - Demonstrate an understanding of consistently practicing ethics and confidentiality in a workplace.
  - Examine the career/life planning process and relate its relevancy to the student.
  - Demonstrate an understanding of basic communication tools and their appropriate use.
  - Demonstrate an understanding of workplace etiquette.

- **DESCRIBE THE CAREER/LIFE PLANNING PROCESS AND RELATE ITS RELEVANCY TO ONE'S CAREER. (SLO 2)**
  - Link personal goals to long-term achievement.
  - Display an understanding of creating a professional first impression.
  - Understand how networking is a powerful job search tool.
  - Understand necessary elements of a résumé.
  - Understand the importance of interview preparation.
  - Identify how continual learning increases career success.

- **DEMONSTRATE APPLICATION OF INDUSTRY KNOWLEDGE AND THEORETICAL CONCEPTS AS WRITTEN IN LEARNING OBJECTIVES IN PARTNERSHIP WITH THE EMPLOYER WORK SITE SUPERVISOR. (SLO 3)**
Plant Science | Cosumnes River College

This CRC program offers courses designed for students in the Agriculture, Agriculture Business, and Horticulture programs.

Dean
Nancy Reitz
(916) 691-7391
reitzn@crc.losrios.edu

Plant Science (PLTS)

PLTS 300 Introduction to Plant Science

3 units
36 hours LEC; 54 hours LAB
None.
CSU; UC
AA/AS Area IV
June 1, 2020

This course is designed to provide the students with a working knowledge of the fundamental structures and processes of plants. Principles to be applied cover plant structures, physiology, heredity, environmental relationship to growth, adaptation, and management of crops. Techniques of research, exploration of plant growth, and identification of economical crops will be included. Fields trips may be required.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO 1: Demonstrate independent learning and effective communication skills.
  - Operate independently by attending class regularly.
  - Utilize time management effectively and prioritize tasks to meet deadlines.
  - Communicate effectively (orally and/or written)

- SLO 2: Demonstrate a fundamental understanding of the California agriculture industry.
  - Identify the major markets of the agriculture industry and verify how these markets function in their county in the state of California.
  - Identify and evaluate the various agricultural occupations and the associated employment requirements and opportunities.
  - Identify and evaluate common practices of various agricultural business types.

- SLO 3: Demonstrate a fundamental understanding of basic botany and plant genetics as it relates to plant science and production agriculture.
  - Assess the role of plant cells, cells structures, and basic genetics in vegetative development, plant growth, and plant production.
  - Recognize the major structures of plants and explain the function of each major plant structure.
  - Identify and explain the requirements of plant growth.
  - Explain plant identification and botanical terminology.
  - Examine the role of plants in genetic engineering and biotechnology.
  - Analyze the characteristics and qualities of agronomic, vegetable, and ornamental crops.
Assess plant propagation through sexual and asexual methods.

SLO 4: Demonstrate a fundamental understanding of soils and soil-water, soil-water-plant relationships. Explain soil development and structure, and describe sustainable soil maintenance and management practices.

Evaluate various plant species’ nutritional needs, and measure, mix, and apply fertilizers.

Evaluate soil-water and soil-water-plant relationships.

Evaluate water efficient irrigation methods and estimate watering needs.

SLO 5: Demonstrate a fundamental understanding of common agricultural practices.

Identify common agricultural / horticultural tools and equipment.

Describe the methods utilized to plant and care for various crops.

Compare various cultural practices, and the resulting effect of each on plant health and development.

Describe the process of plant selection.

Recognize symptoms and signs of plant diseases and pests, and identify past damage.

Identify and explain common integrated pest management practices.

Analyze the methods and practices utilized in the establishment, production, and management of vegetable crops.

Analyze the methods and practices utilized in the establishment, production, and management of fruit and nut crops.

Analyze the methods and practices utilized in the establishment, production, and management of flower and foliage crops.

Analyze the methods and practices utilized in the establishment, production, and management of forage and ornamental grasses.

Evaluate the some of the roles plants play in herbology and pharmacology.

---

PLTS 310 Soils, Soil Management, and Plant Nutrition

Same As: HORT 302
Units: 3
Hours: 36 hours LEC; 54 hours LAB
Prerequisite: None.
Advisory: CSU; UC
Transferable: AA/AS Area IV; CSU Area B1; CSU Area B3; IGETC Area 5A; IGETC Area 5C
C-ID AG - PS 128L
Catalog Date: June 1, 2020

This course provides a basic knowledge of the physical, chemical, and biological properties of soils. The course includes factors of: fundamental soil properties, soil and plant relationships, principles of soil formation, fertilizers and soil management, salinity, pH, erosion management, and non-agricultural uses. Field trips may be required. This course is the same as Hort 302, and only one may be taken for credit.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO 1: Demonstrate independent learning and effective communication skills.
- Operate independently by attending and / or logging into class regularly when the course is offered online or an online component is utilized as part of the course.
- Utilize time management effectively and prioritize tasks to meet deadlines.
- Demonstrate effective oral and written communication.
- SLO 2: Demonstrate a fundamental understanding of the physical and chemical properties of soils.
- Apply the Scientific Method of research through soils and plant specific laboratory applications.
- Compare the textural classes of soil through laboratory analysis.
- Explain the role of soil structure and evaluate the effects of tillage management in soil productivity.
• Analyze the physical, chemical, and biological properties of soils, and understand their formation and how they are reservoirs for nutrients, water, and microscopic life.

• Assess the physical and chemical properties of soil through laboratory analysis.

• SLO 3: Demonstrate a fundamental understanding of the role of soil in plant nutrition.

• Identify the chemical elements necessary for plant growth through laboratory analysis.

• Diagnose common chemical deficiency and toxicity symptoms.

• Examine common cultural practices utilized to keep a soil's nutritional elements in an adequate supply and proper balance.

• Validate the fundamentals of plant nutrition through laboratory analysis.

• SLO 4: Demonstrate a fundamental understanding of best soil management practices in sustainable horticulture.

• Explain why our soils, as a natural resource, must be managed and preserved.

• Demonstrate how to effectively manage the physical, chemical, and biological properties of soils for sustained productivity.

• Examine the methods and means of utilizing organic matter to improve soil structure, support soil biology, and to maintain and stimulate soil health.

• Analyze the effects of soil compaction in crop production and horticultural situations, and explain common methods utilized to alleviate soil compaction.

• Analyze the effects of soil erosion in crop production and horticultural situations, and explain common methods utilized to prevent soil erosion.

• Explain why irrigated soils must be managed in special ways to preserve its productivity.

• Explain the effects of salts and high sodium levels on soil structure, pH, drainage, and plant productivity.

• Validate the fundamentals of soil management through laboratory analysis.

PLTS 332 Integrated Pest Management

Same As: HORT 303
Units: 3
Hours: 36 hours LEC; 54 hours LAB
Prerequisite: None.
Advisory: HORT 300 and PLTS 300
Transferable: CSU
Catalog Date: June 1, 2020

This course is a study of local plant pests including weeds, diseases, invertebrates, and vertebrates. It includes recognition of symptoms and causes, life cycle of the pests, host and habitat relationships, and the integrated pest management strategies and best management practices to achieve control. Field trips may be required. This course is the same as HORT 303, and only one may be taken for credit.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• SLO 1: Demonstrate independent learning and effective communication skills.

• Operate independently by attending or logging into class regularly.

• Utilize time management effectively and prioritize tasks to meet deadlines.

• Demonstrate effective oral and written communication.

• SLO 2: Demonstrate a fundamental understanding of jobsite safety and effective and efficient work habits.

• Validate and demonstrate safety consciousness in work dress/apparel, tool use, jobsite demeanor, and personal protective equipment use.

• Assess jobsite hazards, reduce work related risks, and influence others to work in a safe and efficient manner.

• Select appropriate personal protective equipment for a given pesticide.

• Demonstrate the safe and efficient use of pesticide application equipment.

• SLO 3: Assess, evaluate, and implement the principles and practices of integrated pest management.
- Evaluate the economic significance of plant pest problems in horticulture.
- Assess the reasons conventional pest control options are no longer desirable.
- Demonstrate the ability to diagnose and analyze pest damage, recommend integrated pest management strategies, and select proper control measures.
- Identify insects and closely related plant pests, common diseases and abiotic plant disorders, weed species, and beneficial organisms as evident from existing signs and symptoms.
- Compare and contrast various methods of conventional and integrated pest management strategies.
- Demonstrate the ability to safely and accurately prepare pesticide application equipment.
- Demonstrate the ability to safely and efficiently operate pesticide application equipment through the application of pesticide materials during a simulated exercise.
- Formulate a seasonal pest management plan using the principles of integrated pest management.

SLO 4: Demonstrate a fundamental understanding of licensing and/or certification, and business and professional standards in integrated pest management.

- Analyze landscape pest management professions and identify and explain requirements for employment and/or licensing or certification.
- Recognize and explain the benefits of additional/supplemental licensing and certification through state agencies and professional associations.
- Examine and explain the California state Department of Pesticide Regulation laws and regulations, and the CDPR rules governing the Qualified Applicator's Certificate and Landscape Maintenance Gardener's pesticide license.
- Validate and demonstrate the importance of professionalism in the landscape industry, and described the professional industry associations and certification programs.
- Recognize and explain the standard practices of various types of landscape construction/maintenance businesses, including estimating and bidding procedures, business practices, and working with state agencies.

### PLTS 495 Independent Studies in Plant Science

<table>
<thead>
<tr>
<th>Units</th>
<th>1 - 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hours</td>
<td>54 - 162 hours LAB</td>
</tr>
<tr>
<td>Prerequisite</td>
<td>None.</td>
</tr>
<tr>
<td>Transferable</td>
<td>CSU</td>
</tr>
<tr>
<td>Catalog Date</td>
<td>June 1, 2020</td>
</tr>
</tbody>
</table>

An independent studies project involves an individual student or small group of students in study, research, or activities beyond the scope of regularly offered courses. See the current catalog section of "Special Studies" for full details of Independent Studies.

### Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO #1: Actively engage in intellectual inquiry beyond that required in order to pass a course of study (College Wide Learning Outcome – Area 4).
- Discuss and outline a proposal of study (that can be accomplished within one semester term) with a supervising instructor qualified within the discipline.
- Design an independent study (to be completed individually or by collaboration of a small group) to foster special knowledge, skills, and experience that are not available in any one regularly scheduled course.
- Use information resources to gather discipline-specific information.
- SLO #2: Utilize modes of analysis and critical thinking to apply theoretical perspectives and/or concepts in the major discipline of study to significant problems and/or educational activities (College Wide Learning Outcome – Area 3).
- Analyze and apply the knowledge, skills and experience that are involved in the independent study to theoretical perspectives and/or concepts in the major discipline of study.
- Explain the importance of the major discipline of study in the broader picture of society.
- SLO #3: Communicate a complex understanding of content matter of the major discipline of study (College Wide Outcome – Area 3).
- Demonstrate competence in the skills essential to mastery of the major discipline of study that are necessary to accomplish the independent study.

- SLO #4: Identify personal goals and pursue these goals effectively (College Wide Outcome – Area 4).

- Utilize skills from the "academic tool kit" including time management, study skills, etc., to accomplish the independent study within one semester term.

### PLTS 498 Work Experience in Plant Science

<table>
<thead>
<tr>
<th>Units:</th>
<th>1 - 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hours:</td>
<td>60 - 300 hours LAB</td>
</tr>
<tr>
<td>Prerequisite:</td>
<td>None.</td>
</tr>
<tr>
<td>Enrollment Limitation:</td>
<td>Students must be in a paid or unpaid internship, volunteer position or job related to career goals in Plant Science.</td>
</tr>
<tr>
<td>Transferable:</td>
<td>CSU</td>
</tr>
<tr>
<td>General Education:</td>
<td>AA/AS Area III(b)</td>
</tr>
<tr>
<td>Catalog Date:</td>
<td>June 1, 2020</td>
</tr>
</tbody>
</table>

This course provides students with opportunities to develop marketable skills in preparation for employment in their major field of study or advancement within their career. It is designed for students interested in work experience and/or internships in transfer level degree occupational programs. Course content includes understanding the application of education to the workforce; completion of required forms which document the student's progress and hours spent at the work site; and developing workplace skills and competencies. Appropriate level learning objectives are established by the student and the employer. During the semester, the student is required to participate in a weekly orientation and 75 hours of related paid work experience, or 60 hours of unpaid work experience for one unit. An additional 75 or 60 hours of related work experience is required for each additional unit. Work Experience may be taken for a total of 16 units when there are new or expanded learning objectives. Only one Work Experience course may be taken per semester.

### Student Learning Outcomes

Upon completion of this course, the student will be able to:

- **DEMONSTRATE AN UNDERSTANDING AND APPLICATION OF PROFESSIONAL WORKPLACE BEHAVIOR IN A FIELD OF STUDY RELATED ONE’S CAREER.(SLO 1)**
  - Understand the effects time, stress, and organizational management have on performance.
  - Demonstrate an understanding of consistently practicing ethics and confidentiality in a workplace.
  - Learn the career/life planning process and relate its relevancy to the student.
  - Demonstrate an understanding of basic communication tools and their appropriate use.
  - Demonstrate an understanding of workplace etiquette.

- **DESCRIBE THE CAREER/LIFE PLANNING PROCESS AND RELATE ITS RELEVANCY TO ONE’S CAREER.(SLO 2)**
  - Link personal goals to long term achievement.
  - Display an understanding of creating a professional first impression.
  - Understand how networking is a powerful job search tool.
  - Understand necessary elements of a résumé.
  - Understand the importance of interview preparation.
  - Identify how continual learning increases career success.

- **DEMONSTRATE APPLICATION OF INDUSTRY KNOWLEDGE AND THEORETICAL CONCEPTS AS WRITTEN IN LEARNING OBJECTIVES IN PARTNERSHIP WITH THE EMPLOYER WORK SITE SUPERVISOR.(SLO 3)**
Political Science  
| Cosumnes River College

The study of political science and international relations involves not only the examination of the structure of government and political systems but the examination of the interaction of individuals and institutions within those systems. These courses offer valuable insight into events on the local, state, national and international levels and they also encourage involvement of the citizenry.

Dean

 (916) 691-7142
 WilliaL3@crc.losrios.edu

Associate Degree for Transfer

A.A.-T. in Political Science

The Associate in Arts for Transfer degree in Political Science provides a clearly articulated curricular track for students who wish to transfer to a UC or CSU campus, while also serving the diverse needs of students interested in the breadth and depth of the field of Political Science. Additionally, this degree exposes students to the core principles and practices of the field in order to build a foundation for their future personal, academic, or vocational paths.

Note: It is highly recommended that students consider an internship offered by a participating agency or department.

The Associate in Arts degree in Political Science for Transfer provides students with a major that fulfills the general requirements of the California State University for transfer. Students with this degree will receive priority admission with junior status to the California State University system. The Associate in Arts degree in Political Science for Transfer (AA-T) may be obtained by the completion of 60 transferable, semester units with a minimum 2.0 GPA, including (a) the major or area of emphasis described in the Required Program outlined below (earning a C or better in these courses) and (b) either the Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education-Breadth Requirements.

Catalog Date: June 1, 2020

Degree Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>POLS 301</td>
<td>Introduction to Government: United States (3)</td>
<td>3</td>
</tr>
<tr>
<td>or POLS 481</td>
<td>Introduction to Government: United States - Honors (3)</td>
<td></td>
</tr>
<tr>
<td>or HONOR 367</td>
<td>Introduction to Government: United States – Honors (3)</td>
<td></td>
</tr>
<tr>
<td>POLS 302</td>
<td>Comparative Politics</td>
<td>3</td>
</tr>
<tr>
<td>POLS 310</td>
<td>Introduction to International Relations</td>
<td>3</td>
</tr>
<tr>
<td>POLS 320</td>
<td>Introduction to Political Theory</td>
<td>3</td>
</tr>
<tr>
<td>POLS 382</td>
<td>Statistics for Social Science</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>A minimum of 3 units from the following:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>POLS 311 International Political Economy (3)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>POLS 312 Politics of the Middle East (3)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>POLS 313 Latin America (3)</td>
<td></td>
</tr>
<tr>
<td>COURSE CODE</td>
<td>COURSE TITLE</td>
<td>UNITS</td>
</tr>
<tr>
<td>-------------</td>
<td>--------------</td>
<td>-------</td>
</tr>
<tr>
<td>POLS 314</td>
<td>Modern Europe and the Unification Process (3)</td>
<td></td>
</tr>
<tr>
<td>POLS 315</td>
<td>Pacific Rim (3)</td>
<td></td>
</tr>
<tr>
<td>POLS 317</td>
<td>Global Studies: Africa (3)</td>
<td></td>
</tr>
<tr>
<td>POLS 318</td>
<td>Global Studies: Central Asia (3)</td>
<td></td>
</tr>
<tr>
<td>POLS 319</td>
<td>Global Studies: Southeast Asia (3)</td>
<td></td>
</tr>
<tr>
<td>POLS 324</td>
<td>Revolutions &amp; Ideologies (3)</td>
<td></td>
</tr>
<tr>
<td><strong>Total Units:</strong></td>
<td></td>
<td><strong>18</strong></td>
</tr>
</tbody>
</table>

The Associate in Arts in Political Science for Transfer (AA-T) degree may be obtained by completion of 60 transferable, semester units with a minimum 2.0 GPA, including (a) the major or area of emphasis described in the Required Program, and (b) either the Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education-Breadth Requirements.

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- Describe the fundamentals of political science and governance. (PSLO 1)
- Compare and contrast contemporary comparative systems and governance. (PSLO 2)
- Evaluate the relationship between the governing process and public policy. (PSLO 3)
- Examine how citizen and interest group participation influence political systems. (PSLO 4)
- Analyze the role of culture and its influence on politics. (PSLO 5)
- Assess how the design of political institutions and processes affect policy and stability. (PSLO 6)
- Analyze politics and diplomacy in the international system. (PSLO 7)
- Apply basic research methods to political science. (PSLO 8)
- Analyze political and public policy making processes, and relate these to current issues and problems, for evaluating political events and their role in the political system. (PSLO 9)
- Compare and contrast various theories of justice and the just state. (PSLO 10)
- Evaluate various theories of the purpose of government and apply to a critical analysis of current political events. (PSLO 11)

Career Information

Career opportunities in political science include, but are not limited to, advocate/organizer, campaign worker, diplomat, educator/teacher, events planner, foreign affairs specialist, lawyer, legislative aide (state and federal), lobbyist, political consultant, and public relations specialist.

Political Science (POLS)

POLS 301 Introduction to Government: United States

| Units: | 3 |
| Hours: | 54 hours LEC |
| Prerequisites: | None. |
| Advisory: | ENGWR 101 with a grade of “C” or better; or equivalent skills demonstrated through the assessment process for eligibility for ENGWR 300. |
| Transferable: | CSU; UC |
| General Education: | AA/AS Area V(a); CSU Area DB; CSU Area F2; CSU Area F3; IGETC Area 4H |
| C-ID: | C-ID POLS 110 |
| Catalog Date: | June 1, 2020 |
An introduction to Political Science, American government and politics. Structured to promote political and analytical understanding and thinking regarding American politics and government. Areas of concentration include principles, institutions, problems, processes, theory, philosophy, and ideology. Satisfies the State requirement regarding the Constitution, American Institutions, and State and Local Government.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO #1: demonstrate comprehension of the complexity of the American democratic system.
- define key terms used in the study of the American system.
- explain how the American system affects the student's life in terms of freedoms, restraints, and public policy.
- SLO #2: explain the conditions and values necessary for political democracy to exist.
- SLO #3: illustrate the relationship between national, state and local governments and evaluate the effectiveness of the federal system.

POLS 302 Comparative Politics

This is a comparative study and analysis of political systems, ideologies, institutions, policies, cultures, histories, and the development of selected foreign governments. Special emphasis is placed on the cultural and social dimensions of political behavior and attitudes in connection with governmental and political practices typical of particular geographical regions. Coverage includes an examination of selected developed and lesser developed nation-states from a global perspective.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- analyze, synthesize and explain the differences and similarities of world governments as to their composition, function and policies (SLO #1)
- identify problems and prospects of specific nations by utilizing comparative data analysis or demographics.
- demonstrate an understanding of cultures through politics, political culture, popular civic participation (SLO #2)
- compare specific countries by identifying common denominators and symbiotic relationships

POLS 304 Introduction to Government: California

This course covers the essential organization, institutions, and processes of California state and local government. It fulfills the California State University requirement for state and local government, but not the requirement for the U.S. Constitution.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO #1: Assess the relationship between citizens and the state of California with emphasis on the impacts of cultural, economic, political, and social diversity
- SLO #2 Describe the various institutions of California government and how each functions in the policymaking process.
- SLO #3 Compare and contrast the California and U.S. Constitutions and the effect of these differences on policy making, civil rights and liberties, and political behavior.
- SLO #4 Analyze the effects of structural differences between the federal model and the structure of California government institutions on the policy making process and political behavior.
- SLO #5 Examine public financing in California and analyze the interconnectedness of federal, state, and local budgets.
- SLO #6 Analyze public opinion and the political behavior of California citizens.
- Compare and contrast the structure of California government and the federal model.

POLS 310 Introduction to International Relations

- Units: 3
- Hours: 54 hours LEC
- Prerequisites: None.
- Advisory: ENGW 101 with a grade of "C" or better; or equivalent skills demonstrated through the assessment process for eligibility for ENGW 300.
- Transferable: CSU; UC
- General Education: AA/AS Area V(b); CSU Area DB; IGETC Area 4H
- C-ID: C-ID POLS 140
- Catalog Date: June 1, 2020

This is an introduction to international relations and a survey of the nation-state system, techniques of interaction, the issue of war, nationalism, power alignments, international actors, transnational movements, diplomacy, political economy, and perceptions in world politics. Particular emphasis is placed on an analysis of the world outlook of Central and Eastern Europe, Russia, the United States, the major western allies, China, and the lesser developed world.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- discuss the field of International Relations and global analysis (SLO #1)
- examine the historical development of the academic field of International Relations.
- compare and contrast the models and theories basic to the study of International Relations.
- provide an in-depth analysis of the primary topics of focus of the field, including but not limited to: Power, Balance of Power, Ideology, International Security, The Formulation and Implementation of Foreign Policy, the Causes and Nature of War, International Political Economy, Transnational Movements, Diplomacy, and International Trade, Monetary Exchange, Law, and Organizations.
- recognize the nature of problems, and importance of, the current nation-state system (SLO #2)
- relate the reasons behind, and nature of, the perceptions of global politics and issues held by the United States, Russia, China, America’s allies and the lesser developed nations-states of the world.
- think critically regarding the subject of global politics necessary for success in higher education.

POLS 311 International Political Economy

- Units: 3
- Hours: 54 hours LEC
- Prerequisites: None.
- Advisory: ENGW 300, or placement through the assessment process.
- Transferable: CSU; UC
- General Education: CSU Area DB; IGETC Area 4H
- Catalog Date: June 1, 2020

This course is designed to introduce students to the major theories, institutions and issues in international political economy. International political economy examines the interaction between politics and economics on a global scale; in particular, how political forces influence markets, and how market forces influence politics. In this course of study, students will examine the major theoretical perspectives on political economy, such as mercantilism, liberalism, Marxism and statism. Students are then introduced to the major components of the international economy: multilateral trade, domestic trade policy, international finance and currency policy. Last, this course focuses on several major issues in international political economy. Examples might include the gap between the developed and developing world, the globalized economy, the role of transnational corporations, the political economies of oil, migration, food, or the environment.
Upon completion of this course, the student will be able to:

- **DEMONSTRATE AN UNDERSTANDING OF STATES, OF MARKETS, AND HOW THEY INTERACT. (SLO#1)**
  
  Understand the different priorities of states and markets and how they allocate resources differently.

  Understand the different degrees of state-market interaction, including but not limited to laissez faire capitalism, social market systems (mixed systems) and command economies.

- **EXAMINE THE MAJOR THEORETICAL APPROACHES TO INTERNATIONAL POLITICAL ECONOMY, INCLUDING BUT NOT LIMITED TO MERCANTILISM/NEO-MERCANTILISM, LIBERALISM/NEO-LIBERALISM, RATIONAL CHOICE THEORY AND MARXIST CRITIQUES. (SLO#2)**
  
  Understand the linkages between mercantilism/neo-mercantilism and protectionist trade policy.

  Examine Ricardo's liberal theory of comparative advantage.

  Understand the linkages between liberalism/neo-liberalism and free trade policy.

  Understand the linkages between liberalism/neo-liberalism and its offshoots, including but not limited to Keynesianism.

  Understand the contribution of rational choice theory and models to overcoming the problem of international economic cooperation.

  Understand the contribution of Marxist critiques, including but not limited to Modern World Systems Theory and Dependency Theory, in challenging the premise of free trade and explaining the puzzle of uneven development.

  Describe how globalization has increased the tension between mercantilism/neo-mercantilism and liberal/neo-liberal approaches.

- **DEMONSTRATE AN UNDERSTANDING OF THE BASIC PREMISES OF INTERNATIONAL TRADE AND TRADE POLICY. (SLO#3)**
  
  Articulate the founding premises of liberal trade theory that everyone benefits from free trade and that free trade ensures the most efficient use of resources.

  Identify common problems in trade cooperation.

  Describe barriers to trade including but not limited to traditional tariff barriers and modern non-tariff barriers such as procurement practices, import quotas and protection of intellectual property.

  Understand the terminology of international trade, including but not limited to such concepts as absolute and comparative advantage, and factor endowments.

  Understand the history and development of the World Trade Organization (WTO).

- **DEMONSTRATE AN UNDERSTANDING OF THE DOMESTIC ORIGINS OF NATIONAL TRADE POLICIES. (SLO#4)**
  
  Identify the different ways in which capital, labor and other societal groups may interact to influence trade policy.

  Describe the Stolper-Samuelson theory of factor endowments and varying trade preferences.

  Describe the sectoral conflict model of competing preferences among exporting and importing economic sectors.

  Describe the society-centered approach to explaining trade policy outcomes.

  Demonstrate an understanding of the history of US trade policy, including but not limited to such events as the Smoot-Hawley Act, the gradual removal of trade policy from Congress and the rise of fast-track trade legislation.

- **DEMONSTRATE AN UNDERSTANDING OF THE FOUNDATIONS OF INTERNATIONAL FINANCE. (SLO#5)**
  
  Demonstrate an understanding of the basic concepts of international finance, including but not limited to the balance of payments, capital and finance accounts, current accounts, surpluses, and deficits.

  Describe the consequences of a current account imbalance, including but not limited to the effect on currency.

  Demonstrate an understanding of the system of exchange rates, including but not limited to the difference between fixed and floating exchange rates.

  Describe the effect of inflation and interest rates on exchange rates.

  Describe the concepts of international purchasing power, and strong versus weak currencies.

  Examine government options for addressing balance of payment problems, including but not limited to currency manipulation, fiscal policy and monetary policy.
Demonstrate an understanding of the history of the international monetary system, including but not limited to the Bretton Woods system, the rise and role of the International Monetary Fund, the collapse of the Bretton Woods system, and international finance in a globalized world.

• DEMONSTRATE AN UNDERSTANDING OF THE PROBLEMS BETWEEN THE DEVELOPED AND DEVELOPING WORLD (ALSO DESCRIBED AS NORTH-SOUTH RELATIONS). (SLO#6)

Describe the impact of colonization and de-colonization on the economies of the developing world.

Understand the premises, strengths and weaknesses of dependency theory.

Understand the linkages between dependency theory and the various economic policies of the developing world, including but not limited to autarky and Import Substitution Industrialization (ISI).

Describe the logic and policies of ISI as well as the outcomes of it.

Examine the history of foreign aid and foreign loans, including the accumulation of international debt.

Examine the history, responses to, and outcomes of the Latin American debt crisis.

Examine the Asian model of development.

Contrast the Latin American model of development with the Asian model.

Identify the current problems of development and approaches to solving the problems of development, including but not limited to micro-credit.

DEMONSTRATE AN UNDERSTANDING OF THE CONCEPT AND ROLES OF A TRANS-NATIONAL CORPORATION (TNC). (SLO#7)

Identify the characteristics of a TNC.

Describe the different models of TNCs (vertically integrated versus horizontally integrated).

Describe the potential impacts of TNCs, including both the positive and negative impacts.

Describe the potential of a TNC to impact the political process.

Examine efforts on the part of states and the international community to regulate.

DEMONSTRATE AN UNDERSTANDING OF THE PROCESS OF GLOBALIZATION AND ECONOMIC INTEGRATION. (SLO#8)

Examine the history of globalization.

Identify periods of high levels of global integration as well as periods of low levels of integration.

Examine the potential impact of globalization and interdependence on such concepts as peace, domestic economic stability, and uneven development.

Examine the history of European integration and the development of the single market.

Describe the economic policies underlying European integration, including, but not limited to, the Common Agricultural Policy, Regional Development Funds, and the Euro.

IDENTIFY CURRENT EVENTS RELATED TO INTERNATIONAL POLITICAL ECONOMY. (SLO#9)

Describe current issues and problems in the international economy.

POLS 312 Politics of the Middle East

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Advisory: ENGWR 101
Transferable: CSU; UC
General Education: AA/AS Area V(b); CSU Area DB; IGETC Area 4H
Catalog Date: June 1, 2020
Area Studies courses cover the government and politics of selected nations within a distinct geopolitical area of the world in order to gain understanding of the institutions and dynamics of the area. This Area Studies survey course is designed to give students an understanding of the Middle East. It covers the region in biblical times, its history as part of the Ottoman Empire, its independence and inclusion in the Mandate system and its modern day existence through the twentieth century. The impact of religion, colonialism, the natural resource situation, socio-economics, ideology, conflict and resolution and foreign and domestic policies will be examined in the region on a country-by-country basis. The Palestinian Question, from both the Israeli and Palestinian perspectives will also be analyzed. Countries to be covered include Saudi Arabia, Iran, Egypt, Israel, Jordan, Iraq, Syria, and Lebanon. The course concludes with a summation of the region as it stands today and an assessment of where it is likely to go in the near future.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO 1 explain the origins, evolution and organization of area cultures and politics.
- describe the factors that influence the development and organization of cultures and politics.
- trace the impact of those factors by describing the major events in the history of the region.
- compare and contrast the impact of those factors on specific aspects of the cultural and political development of the Middle East.
- SLO 2 describe the dynamics of the area's political processes in the contexts of social and economic forces of globalization, regional integration and disintegration;
- describe major forces of globalization and regional integration and disintegration.
- assess the impact of these forces on specific political processes in the Middle East.
- SLO 3 compare and contrast theories and concepts utilized in the disciplined study of countries and regions.
- SLO 4 synthesize and refine their process of thinking and communicating with regard to other cultures, nations and regions, enhancing critical analysis skills and independent action.
- evaluate texts and other sources critically and be able to draw rational conclusions from that reading.
- communicate effectively about cultures, nations, and regions both verbally and in short and long written formats.
- research information concerning the politics and cultures of the Middle East and produce a research paper based on this information.

POLS 313 Latin America

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Advisory: ENGWR 101
Transferable: CSU; UC
General Education: AA/AS Area V(b); CSU Area DB; IGETC Area 4H
Catalog Date: June 1, 2020

Area Studies courses cover the government and politics of selected nations within a distinct geopolitical area of the world in order to gain understanding of the institutions and dynamics of the area. This Area Studies survey course is designed to give students an understanding of Latin America. It covers the region in the pre-Columbian era, its history as part of the Spanish Empire, the independence movements of the nineteenth century and the modern day existence of each nation state in the area to the twenty-first century. The impact of religion, colonialism, the natural resource situation, socio-economics, ideology, conflict and resolution and foreign and domestic policies will be examined in the region on a country-by-country basis. The course includes an examination of dominant political institutions, actors, processes and belief systems within the context of political culture and history and an analysis of area political economy and foreign policy in the environment of global interdependence. Countries to be covered include Mexico, Guatemala, El Salvador, Nicaragua, Venezuela, Peru, Bolivia, Colombia, Ecuador, Chile, Argentina, Uruguay, Cuba, Haiti, Jamaica and the Dominican Republic. The course concludes with a summation of the region as it stands today and an assessment of where it is likely to go in the near future.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO 1 Explain the origins, evolution and organization of area cultures and politics; describe the factors that influence the development and organization of cultures and politics; trace the impact of those factors by describing the major events in the history of the region; compare and contrast the impact of those factors on specific aspects of the cultural and political development of Latin America.
• SLO 2 Describe the dynamics of the area's political processes in the contexts of social and economic forces of globalization, regional integration and disintegration; describe major forces of globalization and regional integration and disintegration; assess the impact of these forces on specific political processes in Latin America.

• SLO 3 Compare and contrast theories and concepts utilized in the disciplined study of countries and regions.

• SLO 4 Synthesize and refine their process of thinking and communicating with regard to other cultures, nations and regions, enhancing critical analysis skills and independent action; evaluate texts and other sources critically and be able to draw rational conclusions from that reading; communicate effectively about cultures, nations, and regions both verbally and in short and long written formats; research information concerning the politics and cultures of Latin America and produce a research paper based on this information.

POLS 314 Modern Europe and the Unification Process

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Advisory: ENGWR 101
Transferable: CSU; UC
General Education: AA/AS Area V(b); CSU Area DB; IGETC Area 4H
Catalog Date: June 1, 2020

Area Studies courses cover the government and politics of selected nations within a distinct geopolitical area of the world in order to gain understanding of the institutions and dynamics of the area. This Area Studies survey course is designed to give students an understanding of modern Europe and the trends, processes and issues surrounding unification.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• SLO 1 explain the origins, evolution and organization of area cultures and politics.
• describe the factors that influence the development and organization of cultures and politics.
• trace the impact of those factors by describing the major events in the history of the region.
• compare and contrast the impact of those factors on specific aspects of the cultural and political development of Europe.
• SLO 2 describe the dynamics of the area's political processes in the contexts of social and economic forces of globalization, regional integration and disintegration;
• describe major forces of globalization and regional integration and disintegration.
• assess the impact of these forces on specific political processes in Europe.
• SLO 3 compare and contrast theories and concepts utilized in the disciplined study of countries and regions.
• SLO 4 synthesize and refine their process of thinking and communicating with regard to other cultures, nations and regions, enhancing critical analysis skills and independent action.
• evaluate texts and other sources critically and be able to draw rational conclusions from that reading.
• communicate effectively about cultures, nations, and regions both verbally and in short and long written formats.
• research information concerning the politics and cultures of Europe and produce a research paper based on this information.

POLS 315 Pacific Rim

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Advisory: ENGWR 101
Transferable: CSU; UC
General Education: AA/AS Area V(b); CSU Area D; IGETC Area 4
Catalog Date: June 1, 2020

Area Studies courses cover the government and politics of selected nations within a distinct geopolitical area of the world in order to gain understanding of the institutions and dynamics of the area. This Area Studies survey course is designed to give students an understanding of the Pacific Rim and its trends, processes and issues.
Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO 1 explain the origins, evolution and organization of area cultures and politics.
- describe the factors that influence the development and organization of cultures and politics.
- trace the impact of those factors by describing the major events in the history of the region.
- compare and contrast the impact of those factors on specific aspects of the cultural and political development of the Pacific Rim.
- SLO 2 describe the dynamics of the area's political processes in the contexts of social and economic forces of globalization, regional integration and disintegration;
- describe major forces of globalization and regional integration and disintegration.
- assess the impact of these forces on specific political processes in the Pacific Rim.
- SLO 3 compare and contrast theories and concepts utilized in the disciplined study of countries and regions.
- SLO 4 synthesize and refine their process of thinking and communicating with regard to other cultures, nations and regions, enhancing critical analysis skills and independent action.
- evaluate texts and other sources critically and be able to draw rational conclusions from that reading.
- communicate effectively about cultures, nations, and regions both verbally and in short and long written formats.
- research information concerning the politics and cultures of the Pacific Rim and produce a research paper based on this information.

POLS 317 Global Studies: Africa

Units: 3
Hours: 54 hours LEC
Prerequisite: ENGWR 101
Advisory: CSU; UC
Transferable: AA/AS Area V(b); CSU Area D; IGETC Area 4
Catalog Date: June 1, 2020

Global Studies courses cover the government and politics of selected nations within a distinct geopolitical area of the world in order to gain understanding of the institutions and dynamics of the area. This Global Studies survey course is designed to give students an understanding of Africa. It covers the region's history, its independence movements and the modern day existence of nation states in the area to the twenty-first century. The impact of history, colonialism, the natural resource situation, socio-economics, ideology, conflict and resolution and foreign and domestic policies will be examined in the region on a country-by-country basis. The course includes an examination of dominant political institutions, actors, processes and belief systems within the context of political culture and history and an analysis of area political economy and foreign policy in the environment of global interdependence. The course concludes with a summation of the region as it stands today and an assessment of where it is likely to go in the near future.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO #1: Explain the origins, evolution and organization of area cultures and politics.
- Describe the factors that influence the development and organization of cultures and politics.
- Trace the impact of those factors by describing the major events in the history of the region.
- Compare and contrast the impact of those factors on specific aspects of the cultural and political development of Africa.
- SLO #2: Describe the dynamics of the area's political processes in the contexts of social and economic forces of globalization, regional integration and disintegration.
- Describe major forces of globalization and regional integration and disintegration.
- Assess the impact of these forces on specific political processes in Africa.
- SLO #3: Compare and contrast theories and concepts utilized in the disciplined study of countries and regions.
- SLO #4: Synthesize and refine their process of thinking and communicating with regard to other cultures, nations and regions, enhancing critical analysis skills and independent action.
**POLS 318 Global Studies: Central Asia**

- **Units:** 3
- **Hours:** 54 hours LEC
- **Prerequisite:** None.
- **Advisory:** ENGWR 300
- **Transferable:** CSU; UC
- **General Education:** CSU Area DB; IGETC Area 4H
- **Catalog Date:** June 1, 2020

Global Studies courses cover the government and politics of selected nations within a distinct geopolitical area of the world in order to gain understanding of the institutions and dynamics of the area. This Global Studies survey course is designed to give students an understanding of Central Asia. It covers the region's history, its natural resource situation, socio-economics, ideology, conflict and resolution and foreign and domestic policies on a country-by-country basis. The course includes an examination of dominant political institutions, actors, processes and belief systems within the context of political culture and history and an analysis of area political economy and foreign policy in the environment of global interdependence. The course concludes with a summation of the region as it stands today and an assessment of where it is likely to go in the near future.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- **SLO #1:** Explain the origins, evolution and organization of area cultures and politics.
- **SLO #2:** Describe the factors that influence the development and organization of cultures and politics.
- **SLO #3:** Trace the impact of those factors by describing the major events in the history of the region.
- **SLO #4:** Compare and contrast the impact of those factors on specific aspects of the cultural and political development of Central Asia.

**POLS 319 Global Studies: Southeast Asia**

- **Units:** 3
- **Hours:** 54 hours LEC
- **Prerequisite:** None.
- **Advisory:** ENGWR 300
- **Transferable:** CSU; UC
- **General Education:** CSU Area DB; IGETC Area 4H
- **Catalog Date:** June 1, 2020

Evaluate texts and other sources critically and be able to draw rational conclusions from that reading.
Research information concerning the politics and cultures of Central Asia and produce a research paper based on this information.
Communicate effectively about cultures, nations, and regions both verbally and in short and long written formats.
Global Studies courses cover the government and politics of selected nations within a distinct geopolitical area of the world in order to gain understanding of the institutions and dynamics of the area. This Global Studies survey course is designed to give students an understanding of Southeast Asia. It covers the region's history, its natural resource situation, socio-economics, ideology, conflict and resolution and foreign and domestic policies on a country-by-country basis. The course includes an examination of dominant political institutions, actors, processes and belief systems within the context of political culture and history and an analysis of area political economy and foreign policy in the environment of global interdependence. The course concludes with a summation of the region as it stands today and an assessment of where it is likely to go in the near future.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO #1: Explain the origins, evolution and organization of area cultures and politics.
- Describe the factors that influence the development and organization of cultures and politics.
- Trace the impact of those factors by describing the major events in the history of the region.
- Compare and contrast the impact of those factors on specific aspects of the cultural and political development of Southeast Asia.
- SLO #2: Describe the dynamics of the area's political processes in the contexts of social and economic forces of globalization, regional integration and disintegration.
- Describe major forces of globalization and regional integration and disintegration.
- Assess the impact of these forces on specific political processes in Southeast Asia.
- SLO #3: Compare and contrast theories and concepts utilized in the disciplined study of countries and regions.
- SLO #4: Synthesize and refine their process of thinking and communicating with regard to other cultures, nations and regions, enhancing critical analysis skills and independent action.
- Evaluate texts and other sources critically and be able to draw rational conclusions from that reading.
- Research information concerning the politics and cultures of Southeast Asia and produce a research paper based on this information.
- Communicate effectively about cultures, nations, and regions both verbally and in short and long written formats.

POLS 320 Introduction to Political Theory

In this course, students will examine theoretical approaches to politics and ways of thinking about politics, covering important thinkers and topics during the ancient, medieval, and modern periods.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO 1: demonstrate an understanding of the Greco-Roman and Judeo-Christian origins of the Western political thought.
- explain the development of a particular category of thought in its own historical context.
- recognize the life and times of various political thinkers.
- SLO 2: describe the logical coherence of a particular category of thought through different historical periods.
- verify thought empirically, testing the philosophical underpinning of a particular thought through observation.
- distinguish continuity from changes in the respective transitions from classic to medieval, to modern and to postmodern periods.
- compare the predominant thought with alternative thoughts in a particular period of time.
- evaluate significant historical events that give birth to the fundamental assumptions of a political thought.
SLO 3: Integrate thought with practice, using thought as guidance to critically analyze current affairs.

SLO 4: Determine which political thought offers more promise, best responds to particular challenges, and best meets the needs of the people.

**POLS 324 Revolutions & Ideologies**

**Units:** 3  
**Hours:** 54 hours LEC  
**Prerequisite:** None.  
**Advisory:** ENGWR 101  
**Transferable:** CSU; UC  
**General Education:** CSU Area DB; IGETC Area 4H  
**Catalog Date:** June 1, 2020

This course seeks to study ideologies and revolutions. Revolutions herald change in political systems. They can be based on ideologies or economic, religious or other differences.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- SLO #1: Understand the potential causes of revolutions.  
- SLO #2: Identify causes in society that can lead to a revolution.  
- SLO #3: Explain the theories underpinning a revolutionary movement.  
- SLO #4: Report on the course of a revolution.  
- SLO #5: Explain the consequences of revolutions on established institutions.  
- SLO #6: Evaluate the potential for and explain the consequences of a counter-revolution.

**POLS 380 Introduction to Research Design and Methodology**

**Units:** 3  
**Hours:** 54 hours LEC  
**Prerequisite:** POLS 301, 302, or 310 with a grade of "C" or better  
**Transferable:** CSU; UC  
**General Education:** CSU Area D; IGETC Area 4  
**C-ID:** C-ID POLS 160  
**Catalog Date:** June 1, 2020

This course is designed to introduce students to the political science research process. The course will address research design, quantitative and qualitative analysis and contemporary methodologies.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- **UNDERSTAND THE PROCESS AND STAGES OF POLITICAL SCIENCE RESEARCH. (SLO 1)**  
- Describe the role of theoretical models in research.  
- Properly apply deductive reasoning models such as game theory.  
- Explain the relationship between observation and the inductive development of theoretical models  
- Evaluate causal relationships and testable hypotheses.  
- **PERFORM STATISTICAL TESTS, INCLUDING BUT NOT LIMITED TO DESCRIPTIVE STATISTICS, TABULAR ANALYSIS, BI-VARIATE AND MULTI-VARIATE REGRESSION. (SLO 2)**  
- Analyze statistical tests, including but not limited to descriptive statistics, tabular analysis, bi-variate and multi-variate regression.  
- Use statistical software programs to perform statistical tests.
- Evaluate overall research findings on the combined basis of its research design, data collection, validity and reliability. (SLO 3)
- Evaluate a research design on the basis of its methodology
- Appraise a data set on the basis of its collection practices.
- Estimate the validity and reliability of research based on its methodology.
- Apply knowledge of the research process to the evaluation of political science research and news reports.

**POLS 382 Statistics for Social Science**

**Units:** 3
**Hours:** 54 hours LEC
**Prerequisite:** MATH 120 or 125 with a grade of "C" or better, or placement through the assessment process.
**Transferable:** CSU; UC (POLS 382, ECON 310, PSYC 330, STAT 300 and STAT 480 combined: maximum credit, 1 course)
**General Education:** AA/AS Area II(b) (effective Summer 2020)
**Catalog Date:** June 1, 2020

This course focuses upon the concepts and applications of descriptive and inferential statistics in political science and other social sciences. Topics include descriptive statistics, probability and sampling distributions, hypothesis testing, statistical inference, correlation and regression, chi-square, t-tests, and analysis of variance procedures. This course will analyze and interpret social science data sets using both hand computation and statistical software.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- SLO 1: ORGANIZE AND ANALYZE DATA.
  - Organize raw data into tables, frequency distributions, charts, and graphs.
  - Differentiate between discrete and continuous variables.
  - Identify different kinds of measurement including nominal, ordinal, interval, and ratio measures.
- SLO 2: CALCULATE AND ANALYZE DATA USING DESCRIPTIVE STATISTICS.
  - Calculate simple statistics such as frequencies and percentages, and measures of central tendency such as mean, median, and mode.
  - Describe the variability of a data set using concepts such as range, variance, and standard deviation.
- SLO 3: DEMONSTRATE AN UNDERSTANDING OF THE PRINCIPLES OF PROBABILITY AND HYPOTHESIS TESTING.
  - Understand the role of the Central Limit Theorem. distributions.
  - Construct and interpret confidence intervals.
  - Apply the principles of probability using probability distributions including Z scores, student t distributions, and Chi-Square distributions.
  - Differentiate between one and two tailed tests.
  - Determine and interpret levels of statistical significance.
  - Distinguish the difference between Type I and Type II errors.
- SLO 4: ANALYZE BIVARIATE AND MULTIVARIATE RELATIONSHIPS USING REGRESSION.
  - Estimate relationships using Ordinary Least Squares (OLS) regression techniques.
  - Test for statistical significance using ANOVA and F tests.
  - Identify and test for known violations of OLS regression in data analysis, including multi-collinearity and non-linearity.
- SLO 5: DEMONSTRATE MATHEMATICAL COMPETENCY AND THE APPLICATION OF QUANTITATIVE REASONING.
  - Calculate simple statistics such as frequencies, percentages, standard deviations, and variance by hand.
  - Calculate more sophisticated statistical estimations, such as regression, using statistical software such as SPSS.
POLS 481 Introduction to Government: United States - Honors

Upon completion of this course, the student will be able to:

- **SLO 1: UTILIZE MODES OF ANALYSIS AND CRITICAL THINKING IN THE STUDY OF AMERICAN GOVERNMENT AS APPLIED TO SIGNIFICANT ISSUES AND/OR PROBLEMS.**
  - Describe the nature of government and its theoretical foundations and functions.
  - Relate American political thought, the Constitution, and governing institutions to one another.
  - Identify and explain the structures and functions of the United States and California governments prescribed by their respective constitutions.
  - Compare and contrast the federal, state and local governments with respect to their political foundations, functions, and contemporary problems.
  - Explain the civil liberties and civil rights of individuals as articulated in the United States Constitution and federal court decisions.
  - Identify and evaluate political processes within the United States and California, including the development of political ideologies, voting behavior and other forms of political participation.

- **SLO 2: ACTIVELY ENGAGE IN INTELLECTUAL INQUIRY AND CRITICAL THINKING BEYOND THAT REQUIRED IN ORDER TO PASS A COURSE OF STUDY IN AMERICAN DEMOCRACY.**
  - Analyze complex readings and processes as they apply to contemporary issues in American Politics.
  - Illustrate and appraise the relationship between national, state, and local governments and evaluate the effectiveness of the federal system.
  - Discuss and analyze contemporary political issues and operations in the United States and California.

- **SLO 3: RECOGNIZE THE ETHICAL DIMENSIONS OF DECISIONS AND ACTIONS.**
  - Hypothesize the conditions under which various political outcomes are likely to occur and provide theoretical explanations for said outcomes.

- **SLO 4: ARTICULATE AN AWARENESS OF THE VARIETY OF PERSPECTIVES WITHIN POLITICAL SCIENCE AND THE RELEVANCE OF THESE PERSPECTIVES TO ONE'S OWN LIFE.**
  - Evaluate and explain how the American system affects the student's life in terms of freedoms, restraints, and public policy.
  - Analyze the role of culture, diversity, and ideology in shaping public opinion and public policy in the United States and California.

- **SLO 5: EXPRESS IDEAS CLEARLY IN WELL-ORGANIZED WRITTEN MESSAGES**
POLS 495 Independent Studies in Political Science

Units: 1 - 3
Hours: 54 - 162 hours LAB
Prerequisite: None.
Transferable: CSU
Catalog Date: June 1, 2020

An independent studies project involves an individual student or small group of students in study, research, or activities beyond the scope of regularly offered courses. See the current catalog section of “Special Studies” for full details of Independent Studies.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- **SLO #1**: Actively engage in intellectual inquiry beyond that required in order to pass a course of study (College Wide Learning Outcome – Area 4).
- Discuss and outline a proposal of study (that can be accomplished within one semester term) with a supervising instructor qualified within the discipline.
- Design an independent study (to be completed individually or by collaboration of a small group) to foster special knowledge, skills, and experience that are not available in any one regularly scheduled course.
- Use information resources to gather discipline-specific information.
- **SLO #2**: Utilize modes of analysis and critical thinking to apply theoretical perspectives and/or concepts in the major discipline of study to significant problems and/or educational activities (College Wide Learning Outcome – Area 3).
- Analyze and apply the knowledge, skills and experience that are involved in the independent study to theoretical perspectives and/or concepts in the major discipline of study.
- Explain the importance of the major discipline of study in the broader picture of society.
- **SLO #3**: Communicate a complex understanding of content matter of the major discipline of study (College Wide Outcome – Area 3).
- Demonstrate competence in the skills essential to mastery of the major discipline of study that are necessary to accomplish the independent study.
- **SLO #4**: Identify personal goals and pursue these goals effectively (College Wide Outcome – Area 4).
- Utilize skills from the “academic tool kit” including time management, study skills, etc., to accomplish the independent study within one semester term.
Psychology | Cosumnes River College

Psychology concerns itself with the study of behavior of humans and other animals. Part of its appeal and fascination is the fact that it involves both pure science and the practical application of science to matters of everyday life. Those pursuing psychology as a field of study will find many Career Opportunities centering around helping others understand, predict and control their own behavior and the behavior of others. Training in psychology also provides a valuable foundation for other professions that deal with people.

Dean
 (916) 691-7142
 WilliaL3@crc.losrios.edu

Associate Degree for Transfer

A.A.-T. in Psychology

The Cosumnes River College Psychology Associate of Arts Degree for Transfer Program is designed to facilitate successful transfer to baccalaureate psychology degree programs. This degree provides students with the lower division breadth and depth of the field of psychology. Additionally, this degree exposes students to the core principles and practices in the field. Students will learn to: apply psychological theory and the scientific method; compare and contrast the major theoretical orientations in psychology; integrate content knowledge, cognitive and affective skills and technical proficiency; evaluate psychological data; apply psychological principles to the development of interpersonal, occupational and social skills; and recognize the complexity of social, cultural, and international diversity and the principles of equity, justice and inclusion in their lives.

Catalog Date: June 1, 2020

Degree Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSYC 300</td>
<td>General Principles</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 312</td>
<td>Biological Psychology</td>
<td>4</td>
</tr>
<tr>
<td>PSYC 320</td>
<td>Social Psychology (3)</td>
<td>3</td>
</tr>
<tr>
<td>or PSYC 371</td>
<td>Life Span Developmental Psychology (3)</td>
<td>3</td>
</tr>
<tr>
<td>or SOC 300</td>
<td>Introductory Sociology (3)</td>
<td></td>
</tr>
<tr>
<td>PSYC 330</td>
<td>Introductory Statistics for the Behavioral Sciences</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 335</td>
<td>Research Methods in Psychology</td>
<td>3</td>
</tr>
</tbody>
</table>

3 units from the following:

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSYC 320</td>
<td>Social Psychology (3)</td>
<td>3</td>
</tr>
<tr>
<td>or PSYC 340</td>
<td>Abnormal Behavior (3)</td>
<td></td>
</tr>
<tr>
<td>or PSYC 356</td>
<td>Human Sexuality (3)</td>
<td></td>
</tr>
<tr>
<td>or PSYC 368</td>
<td>Cross Cultural Psychology (3)</td>
<td></td>
</tr>
<tr>
<td>or PSYC 371</td>
<td>Life Span Developmental Psychology (3)</td>
<td></td>
</tr>
</tbody>
</table>

Total Units: 19
If PSYC 320 or PSYC 371 is not taken as part of the required core sequence, a student may choose it as one of the options listed above.

The Associate in Arts in Psychology for Transfer (AA-T) degree may be obtained by completion of 60 transferable, semester units with a minimum 2.0 GPA, including (a) the major or area of emphasis described in the Required Program, and (b) either the Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education-Breadth Requirements.

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- Differentiate between scientifically derived knowledge and myth and conjecture about the topics of psychology and demonstrate understanding of psychological theory and scientific method. This includes the abilities to: Recognize the way in which research leads to generally accepted conclusions and the integration of new research data with the building of a body of scientific knowledge; Demonstrate critical thinking skills shown by the analysis of data sets, testing of assumptions, and synthesizing information to draw a logical conclusion.

- Compare and contrast the major theoretical orientations in psychology, demonstrate knowledge of basic psychological terminology regarding behavior, cognition, and emotion, and be able to express this clearly when writing or speaking about psychology. This includes the abilities to: Write clear responses to essay questions without including extraneous information or omitting key information necessary to provide a clear, concise, college-level answer; utilize test-taking skills such as critical analysis of information, test-time management and focused writing; analyze the logic of a multiple choice question and choose the correct response among related items; use appropriate computer software, databases, and other technology to enhance knowledge; tolerate the ambiguity that accompanies a consideration of complex information and multiple perspectives.

- Integrate content knowledge, cognitive and affective skills and technical proficiency in completing exams, term papers, presentations and other class assignments. These skills include: ambiguity tolerance, learning, memory, logical thinking, problem solving, decision-making, and critical thinking. This includes the abilities to: Write clear responses to essay questions without including extraneous information or omitting key information necessary to provide a clear, concise, college-level answer; utilize test-taking skills such as critical analysis of information, test-time management and focused writing; analyze the logic of a multiple choice question and choose the correct response among related items; use appropriate computer software, databases, and other technology to enhance knowledge; tolerate the ambiguity that accompanies a consideration of complex information and multiple perspectives.

- Evaluate psychological data, draw reasonable conclusions, recognize the ethical implications of these conclusions, and apply these conclusions to personal, community, and scientific problems. This includes the abilities to: Conduct a thorough literature review; Choose appropriate research design, methodology, and statistical analyses in support of a specific hypothesis; Design and conduct a research study which may include the following techniques: observation, interviews, focus group, surveys, case studies, correlational and experimental designs; Collect data and keep organized records; Analyze and interpret data, draw appropriate conclusions and make recommendations; Reach and clearly express logical conclusions based on data; Relate, in presentations and/or in written reports, how psychological information is relevant to personal and community issues; Recognize the ethical implications of psychological research and the responsibility to use knowledge wisely.

- Apply psychological principles to the development of interpersonal, occupational and social skills and life-long personal growth. This includes the abilities to: Understand the concept of self-, personal-, social-, and ethnic- identity, and its role in the development of self-esteem and morals; Recognize the dynamic interaction of relationships and how it affects our ability to be socially successful with peers, family, and genders; Understand how group processes affect behavior such as attribution theory, attitude formation, prejudice, stereotyping, conformity, compliance, and obedience.

- Recognize the complexity of social, cultural, and international diversity and the principles of equity, justice and inclusion in their lives. This includes the abilities to: Weigh evidence and develop an understanding of different perspectives (e.g. gender, cross cultural, international); Demonstrate knowledge of ethical issues faced by psychologists; Reflect on own personal and professional values and biases by discussing and documenting dialogue, activities and interactions in journals, portfolios, and other documentation methods; Recognize, understand, and respect the complexity of socio-cultural and international diversity through classroom discussions, essays, analysis of biases in published literature, and participation in community, classroom and cultural events; Evaluate all practices, personal and professional, for equality, justice, and inclusion as reflected in internal thoughtful introspection and external application of appropriate interventions, processes, and/or strategies.

Career Information

Psychologists with advanced degrees and professional certificates have a broad range of employment opportunities including, but not limited to, clinical practice, research, and teaching. Clinical and counseling psychologists work in a variety of settings and with a wide range of clients. Research psychologists work in a range of fields associated with the study of human behavior, including biomedical, organizational psychology, sports psychology, and cognitive neuroscience. NOTE TO TRANSFER STUDENTS: The Associate Degree for Transfer program is designed for students who plan to transfer to a campus of the California State University (CSU). Other than the required core, the courses you choose to complete this degree will depend to some extent on the selected CSU for transfer. In addition, some CSU-GE Breadth or IGETC requirements can also be completed using courses required for this associate degree for transfer major (known as “double-counting”). Meeting with a counselor to determine the most appropriate course choices will facilitate efficient completion of your transfer requirements. For students wishing to transfer to other universities (UC System, private, or out-of-state), the Associate Degree for Transfer may not provide adequate preparation for upper-division transfer admissions; it is critical that you meet with a CRC counselor to select and plan the courses for the major, as programs vary widely in terms of the required preparation.

Psychology (PSYC)
PSYC 300 General Principles

This course is an introduction to the scientific study of human behavior. Topics include scientific method, the biological basis of behavior, sensation, perception, consciousness, conditioning and learning, memory, cognition, developmental psychology, motivation, emotion, stress and health, personality, abnormal psychology, psychotherapy, and social psychology. PSYC 300 is designed for psychology majors, behavioral science majors, and other students who desire a comprehensive overview of general principles of contemporary psychology.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- **SLO #1.** Differentiate between scientifically derived knowledge and myth and conjecture about the topics of psychology and demonstrate understanding of psychological theory and scientific method.
- compare and contrast the scientific method to other approaches to understanding human behavior.
- compare and contrast experimental and non-experimental methods.
- **SLO #2.** Evaluate psychological data, draw reasonable conclusions, recognize the ethical implications of these conclusions, and apply these conclusions to personal, community, and scientific problems.
- reach and clearly express logical conclusions based on data derived from inquiry in the field of psychology.
- recognize the ethical implications of psychological research and the responsibility to pursue and use knowledge wisely.
- **SLO #3.** Compare and contrast the major theoretical orientations in psychology, demonstrate knowledge of basic psychological terminology regarding behavior, cognition, and emotion, and be able to express this clearly when writing or speaking about psychology.
- compare and contrast the major perspectives in psychology.
- synthesize and/or apply knowledge of concepts, theory, and research findings surveyed within the following sub-disciplines in psychology: biology of behavior, sensation, perception, consciousness, conditioning and learning, memory, cognition, developmental psychology, motivation, emotion, stress and health, personality, abnormal psychology, psychotherapy, and social psychology.
- **SLO #4.** Integrate content knowledge, cognitive and affective skills and technical proficiency in completing exams, term papers, presentations and other class assignments. These skills include: ambiguity tolerance, learning, memory, logical thinking, problem-solving, decision-making, and critical thinking.
- **SLO #5.** Apply psychological principles to the development of interpersonal, occupational and social skills and life-long personal growth.
- demonstrate the application of psychological principles to personal, interpersonal, occupational, and social contexts.
- **SLO #6.** Recognize the complexity of social, cultural, and international diversity and the principles of equity, justice and inclusion in their lives.
- demonstrate understanding of individual and sociocultural differences with respect to the topics addressed in general psychology.

PSYC 312 Biological Psychology

| Units: | 4 |
| Hours: | 54 hours LEC; 54 hours LAB |
| Prerequisite: | PSYC 300 with a grade of "C" or better |
| Transferable: | CSU; UC |
| General Education: | AA/AS Area IV; CSU Area B2; CSU Area B3; CSU Area D9; IGETC Area 5B; IGETC Area 5C |
| C-ID: | C-ID PSY 150 |
| Catalog Date: | June 1, 2020 |
This course examines the biochemical, cellular, and organismal physiological substrates of normal and abnormal behavior. The course content focuses on interactions of the central nervous system, peripheral nervous system, endocrine and immune systems to produce consciousness, sensation, perception, thinking, motivation and emotion. These areas will be addressed within an evolutionary context that emphasizes developmental plasticity of the individual and the species. Current methods of obtaining data (e.g. neuroimaging techniques) will be examined and evaluated. Students will be required to perform anatomical identification of brain structures using a mammalian brain (e.g. sheep brain).

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO #1. Differentiate between scientifically derived knowledge and myth and conjecture about the topics of psychology and demonstrate understanding of psychological theory and scientific method.
- compare and contrast the scientific method and other approaches to understanding human behavior.
- evaluate current physiological research methods such as ablations, skin conductance levels (SCL), evoked-response potentials via electroencephalogram (EEG), magnetic resonance imaging (MRI) and positron emission tomography (PET).
- understand cognitive neuropsychology and evaluate neuropsychological testing.
- SLO #2. Compare and contrast the major theoretical orientations in biopsychology, demonstrate knowledge of basic psychological terminology regarding behavior, cognition, and emotion, and be able to express this clearly when writing or speaking about biopsychology.
- analyze behavior at biochemical, cellular and organismal levels.
- identify parts of the neuron and describe their action potentials as a result of naturally-occurring neurotransmitters, hormones, and cytokines.
- recognize how an organism’s physiology and behavior have been fine tuned by its ontological (individual) development and its phylogenetic (species) development.
- identify structures of the nervous, endocrine and immune systems and their interactions.
- SLO #3. Evaluate psychological data, draw reasonable conclusions, recognize the ethical implications of these conclusions, and apply these conclusions to personal, community, and scientific problems.
- test hypothesis through application of scientific method in the context of biopsychological inquiry.
- demonstrate familiarity with the APA guidelines for ethical research with humans and animals.
- evaluate the implications of biopsychological research findings and demonstrate familiarity with bioethical issues.
- SLO #4. Integrate content knowledge, cognitive and affective skills and technical proficiency in completing exams, term papers, presentations and other class assignments. These skills include: ambiguity tolerance, learning, memory, logical thinking, problem-solving, decision-making, and critical thinking.
- SLO #5. Apply psychological principles to the development of interpersonal, occupational and social skills and life-long personal growth.
- describe the etiology and outcomes of neurological diseases such as psychoses, cognitive disorders, mood disorders and motor disorders.
- predict the actions of pharmacological agents and explain how they exert their effects in domains such as eating, sexuality, consciousness, sleep, motor activity, mood and addiction.

PSYC 320 Social Psychology

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Transferable: CSU; UC
General Education: AA/AS Area V(b); CSU Area D9; IGETC Area 4I
C-ID: C-ID PSY 170
Catalog Date: June 1, 2020

This course focuses on the scientific study of human interaction, with an emphasis on the individual within a social context. Study includes: social perception, social cognition, attitudes and attitude change, the self and social identity, prejudice, interpersonal attraction, close relationships, social influence, prosocial behavior, aggression, and group behavior.

Student Learning Outcomes
Upon completion of this course, the student will be able to:

- SLO #1. Differentiate between scientifically derived knowledge and myth and conjecture about the topics of social behavior and demonstrate understanding of psychological theory and scientific method.
- compare and contrast the scientific method to other approaches to understanding social behavior.
- compare and contrast experimental and non-experimental methods.
- SLO #2. Evaluate psychological data, draw reasonable conclusions, recognize the ethical implications of these conclusions, and apply these conclusions to personal, community, and scientific problems.
- reach and clearly express logical conclusions based on data derived from inquiry in the field of social psychology.
- recognize the ethical implications of social psychological research and the responsibility to pursue and apply knowledge wisely.
- SLO #3. Compare and contrast the major theoretical orientations in social psychology, demonstrate knowledge of basic psychological terminology regarding social behavior and be able to express this clearly when writing or speaking about social psychological topics.
- compare and contrast the major perspectives in social psychology.
- synthesize and/or apply knowledge of concepts, theories, and research findings surveyed within the following lines of inquiry within the discipline of social psychology: social cognition, social perception, attitudes and attitude change, the self and social identity, prejudice and discrimination, interpersonal attraction, close relationships, social influence, prosocial behavior, aggression, and group behavior.
- SLO #4. Integrate content knowledge, cognitive and affective skills and technical proficiency in completing exams, term papers, presentations and other class assignments. These skills include: ambiguity tolerance, learning, memory, logical thinking, problem-solving, decision-making, and critical thinking.
- apply critical thinking to the analysis of social behavior and related issues.
- SLO #5. Apply social psychological principles to the development of interpersonal, occupational and social skills and life-long personal growth.
- demonstrate the application of social psychological principles to personal, interpersonal, organizational, and social contexts.
- SLO #6. Recognize the complexity of social, cultural, and international diversity and the principles of equity, justice and inclusion in their lives.
- demonstrate understanding of individual and sociocultural differences with respect to the topics addressed in social psychology.

PSYC 330 Introductory Statistics for the Behavioral Sciences

- Units: 3
- Hours: 54 hours LEC
- Prerequisite: MATH 120 or 125 with a grade of "C" or better; or the equivalent.
- Transferable: CSU; UC (POLS 382, ECON 310, PSYC 330, STAT 300 and STAT 480 combined: maximum credit, 1 course)
- General Education: AA/AS Area II(b); CSU Area B4; IGETC Area 2
- C-ID: C-ID MATH 110
- Catalog Date: June 1, 2020

This course focuses on the concepts and applications of descriptive and inferential statistics in psychology and other behavioral sciences. Topics include: descriptive statistics; sample spaces and probability; random variables and expected value; discrete and continuous distributions -- binomial, t-tests for two populations; and applications using data from disciplines including business, social sciences, life science, health science, and education; parametric and nonparametric statistical methods, hypothesis testing, statistical inference and p-values, effect size and power; correlation and regression regarding prediction; chi-square; t-tests; and analysis of variance procedures. Application of both hand computation and statistical software (e.g. SPSS) to data in a behavioral and social science contexts will be emphasized to include the interpretation of the relevance of the statistical findings.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO #1. Evaluate psychological data, draw reasonable conclusions, recognize the ethical implications of these conclusions, and apply these conclusions to personal, community, and scientific problems.
- perform statistical calculations.
- organize raw data appropriately and meaningfully.
Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO #1. Differentiate between scientifically derived knowledge and myth and conjecture about the topics of psychology and demonstrate understanding of psychological theory and scientific method.
- compare and contrast the scientific method to other approaches to understanding human behavior.
- compare and contrast experimental and non-experimental methods.
- SLO #2. Evaluate psychological data, draw reasonable conclusions, recognize the ethical implications of these conclusions, and apply these conclusions to personal, community, and scientific problems.
- formally state hypotheses and test them using the scientific method.
- conduct a thorough literature review.
- choose appropriate research design, methodology, and statistical analyses in support of a specific hypothesis.
- demonstrate knowledge of the APA Code of Ethics in the treatment of human and nonhuman participants in the design, data collection, interpretation, and reporting of psychological research.
- design research studies which may include the following techniques: observation, interviews, focus group, surveys, case studies, correlational and experimental designs.
- collect data and keep organized records.
- reach and clearly express logical conclusions based on data.
recognize the ethical implications of psychological research and the responsibility to use knowledge wisely.

SLO #3. Compare and contrast the major theoretical orientations in psychology, demonstrate knowledge of basic psychological terminology regarding behavior, cognition, and emotion, and be able to express this clearly when writing or speaking about psychology.

utilize APA style effectively in the production of a research report.

SLO #4. Integrate content knowledge, cognitive and affective skills and technical proficiency in completing exams, term papers, presentations and other class assignments. These skills include: ambiguity tolerance, learning, memory, logical thinking, problem-solving, decision-making, and critical thinking.

analyze and interpret data, draw appropriate conclusions and make recommendations.

analyze data using Statistical Package for the Social Sciences (SPSS) software.

SLO #5. Apply psychological principles to the development of interpersonal, occupational and social skills and life-long personal growth.

relate, in presentations and/or in written reports, how psychological information is relevant to personal and community issues.

reach and clearly express logical conclusions based on data derived from inquiry in the field of psychology.

use appropriate computer software, databases, and other technology to enhance knowledge.

identify the components of evaluation research and its application.

PSYC 340 Abnormal Behavior

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Transferable: CSU; UC
General Education: AA/AS Area V(b); AA/AS Area III(b); CSU Area D9; CSU Area E1; IGETC Area 4I
C-ID: C-ID PSY 120
Catalog Date: June 1, 2020

This course is an exploration of the broad questions of normality and abnormality. It offers the investigation of specific mental, emotional, and behavioral difficulties and current approaches to psychological intervention including present community mental health practice. This course considers the contribution of biological, psychological and social factors to the development and persistence of behavior disorders. PSYC 340 is a useful course for students majoring in Human Services and/or preparing for a career in psychology or the helping professions.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- Differentiate between scientifically derived knowledge and myth and conjecture about the topics of abnormal psychology and demonstrate understanding of psychological theory and scientific method. [SLO #1]

- compare and contrast the scientific method and other approaches to addressing abnormal behavior.

- compare and contrast experimental and non-experimental methods.

- apply the DSM-V classification system and evaluate approaches to clinical assessment and the diagnosis of psychological disorders.

- Compare and contrast the major theoretical orientations in abnormal psychology, demonstrate knowledge of basic psychological terminology regarding behavior, cognition, and emotion, and be able to express this clearly when writing or speaking about abnormal psychology. [SLO #2]

- compare and contrast the major perspectives in the study of psychopathology.

- identify and describe specific mental, emotional, and behavioral difficulties.

- synthesize and appraise the contributions of biological, psychological, and social factors to the development and persistence of behavioral disorders.

- evaluate issues that pertain to people experiencing severe problems in adaptive behavior.

- Evaluate psychological data, draw reasonable conclusions, recognize the ethical implications of these conclusions, and apply these conclusions to personal, community, and scientific problems. [SLO #3]

- reach and clearly express logical conclusions based on data derived from inquiry in the field of abnormal psychology.
think critically with respect to individual expression of psychological disorders and to community and social issues that pertain.

recognize the ethical implications of research in the field of psychopathology and the responsibility to pursue and use empirical knowledge wisely.

Integrate content knowledge, cognitive and affective skills and technical proficiency in completing exams, term papers, presentations and other class assignments. These skills include: ambiguity tolerance, learning, memory, logical thinking, problem-solving, decision-making, and critical thinking. [SLO #4]

Apply psychological principles to the development of interpersonal, occupational and social skills and life-long personal growth. [SLO #5]

c ompare, contrast, and evaluate medical, behaviorist, cognitive, humanistic, psychodynamic and other approaches to psychological intervention including present community health practices.

apply theories of change to behavioral issues involving “diseases of lifestyle”; such as substance abuse, eating disorders, and stress related disorders.

Recognize the complexity of social, cultural, and international diversity and the principles of equity, justice and inclusion in their lives. [SLO #6]

demonstrate understanding of individual and cultural differences pertaining to the topics addressed in the study of psychopathology and psychotherapy.

demonstrate understanding of clinical ethics, patients' rights, and the broader sociopolitical issues associated with the problem of abnormal behavior.

PSYC 356 Human Sexuality

This course provides a balanced scientific understanding of human sexual thoughts, feelings, and behavior grounded in both female and male perspectives and experiences. Course topics include an examination of the methodology of sexology, gender issues, sexual anatomy and physiology, sexual arousal and response, love and communication, sexual behavior patterns, sexual orientations, contraception, conception and childbirth, sexual development across the lifespan, adult living patterns, sexual difficulties and solutions, sexually transmitted diseases, atypical sexual behavior, sexual coercion, and pornography and prostitution.

Upon completion of this course, the student will be able to:

- SLO #1 Differentiate between scientifically derived knowledge and myth and conjecture about the topics addressed by the study of human sexuality and demonstrate understanding of psychological theory and scientific method.

- Compare and contrast experimental and non-experimental methods.

- Demonstrate an understanding of the impact of social/historical context and politics on human sexual thoughts, feelings, and behaviors.

- Dispel myths, doubts, and anxieties related to knowledge, attitudes, and behaviors about sexuality.

- SLO #2. Compare and contrast the major theoretical orientations in the study of human sexual behavior, demonstrate knowledge of basic biological, psychological, and socio-cultural terminology regarding sexual behavior and be able to express this clearly when writing or speaking about human sexual behavior.

- compare and contrast the major perspectives in the study of human sexual behavior.

- demonstrate an understanding of the key sex research findings.

- identify and explain the processes involved in female and male reproductive and sexual physiology and interpersonal attachment.

- develop an understanding of variation in human sexual behavior and motivation.

- demonstrate an understanding of the factors that influence sexual development and interaction across the life span.

- describe the causes and correlates of sexual difficulties and variances.
• identify and explain the mechanisms and associated issues relevant to contraception, conception, pregnancy, labor and birth, breastfeeding, and postpartum sexuality.
• compare and contrast approaches that offer alternatives to conventional pregnancy.
• identify guidelines for safeguarding and improving sexual health and well-being.
• identify guidelines for improving the health and well-being of the new mother, her partner, her newborn, and her family.
• compare and contrast the symptoms and impact of common sexually transmitted diseases.
• demonstrate an understanding of medical risk and vulnerability.
• identify guidelines for safeguarding sexual health and well-being.
• recognize the defining features of sexual coercion, pornography, and prostitution and their implications for behavior.
• compare and contrast the research findings on rape, incest, sexual harassment, pornography, and prostitution.
• compare and contrast effective and ineffective communication strategies.
• SLO #3. Evaluate psychological data, draw reasonable conclusions, recognize the ethical implications of these conclusions, and apply these conclusions to personal, community, and scientific problems.
• recognize the ethical implications of research in the study of human sexual behavior and the responsibility to pursue and use empirical knowledge wisely.
• reach and clearly express logical conclusions based on data derived from inquiry in the field of human sexual behavior.
• apply critical thinking skills to the analysis of research findings on sexual motivation, variety, difficulties, and issues.
• SLO #4. Integrate content knowledge, cognitive and affective skills and technical proficiency in completing exams, term papers, presentations and other class assignments. These skills include: ambiguity tolerance, learning, memory, logical thinking, problem-solving, moral reasoning, decision-making, and critical thinking.
• think critically with respect to individual expression of human sexual behavior and to community and social issues that pertain.
• apply critical thinking skills to the analysis of research findings on childhood, adolescent, and adult sexuality.
• SLO #5. Apply biopsychosocial principles derived from the study of human sexual behavior to the development of interpersonal, occupational and social skills and life-long personal growth.
• apply communication skills for sharing thoughts and feelings about human sexuality.
• apply critical thinking skills to the analysis of research findings on sexual behavior.
• apply critical thinking skills and guidelines for avoiding and/or coping with nonconsensual and/or gratuitous sexual circumstances.
• comprehend the implications of this knowledge for daily life.
• make responsible and intelligent choices based on personal needs, desires, and values rather than on elements like guilt, fear, pressure, or ignorance.
• SLO #6. Recognize the complexity of social, cultural, and international diversity and the principles of equity, justice and inclusion in their lives.
• demonstrate understanding of individual and cultural differences pertaining to the topics addressed in the study of human sexual behavior.
• demonstrate understanding of the ethical issues and broader sociopolitical issues associated with the study of human sexual behavior.

PSYC 368 Cross Cultural Psychology

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Transferable: CSU; UC
General Education: AA/AS Area V(b); AA/AS Area Vl; CSU Area D; IGETC Area 4
Catalog Date: June 1, 2020

This course explores the impact of cultural influences on the psychological and individual development of ethnic group members. Emphasis will be placed on integrating traditional theoretical approaches and current cross-cultural statistical research and theory in the study of African-Americans, Asian Americans, Hispanic Americans, Native Americans, gays & lesbians, the elderly, and the disabled.
Upon completion of this course, the student will be able to:

- SLO #1. Differentiate between scientifically derived knowledge and myth and conjecture about the topics of cross cultural psychology and demonstrate understanding of psychological theory and scientific method.
- compare and contrast research biases in the study of individuals from diverse populations.
- research psychological concepts applied to diverse groups from a theoretical perspective and research orientation.
- SLO #2. Compare and contrast the major theoretical orientations in cross cultural psychology, demonstrate knowledge of basic psychological terminology regarding behavior, cognition, and emotion, and be able to express this clearly when writing or speaking about cross cultural psychology.
- define culture; ethnic group demographics; family and gender roles; collectivism and individualism; research methodologies; identity formation and ethnicity; stereotypes, prejudice and discrimination; cognition and intelligence; language, bilingualism and non verbal communication; psychosocial stressors; and behavior disorders.
- demonstrate an understanding of, describe, and critically analyze the research on the impact of culture and minority status on basic psychological processes.
- describe and analyze specific empirical studies of psychological issues among diverse individuals.
- synthesize the research on the influence of culture on issues related to physical and mental health.
- SLO #3. Integrate content knowledge, cognitive and affective skills and technical proficiency in completing exams, term papers, presentations and other class assignments. These skills include: ambiguity tolerance, learning, memory, logical thinking, problem-solving, decision-making, and critical thinking.
- SLO #4. Evaluate cross cultural psychological data, draw reasonable conclusions, recognize the ethical implications of these conclusions, and apply these conclusions to personal, community, and scientific problems.
- demonstrate an understanding of cross cultural research and its application to minority populations identified issues and problems.
- SLO #5. Apply cross cultural psychological principles to the development of interpersonal, occupational and social skills and life-long personal growth.
- understand and analyze psychological issues related to individual and institutionalized ethnocentrism, stereotyping, and prejudice, including recognizing one's own ethnocentrism, stereotypes and prejudice.
- SLO #6. Recognize the complexity of social, cultural, and international diversity and the principles of equity, justice and inclusion in their lives.
- explain how issues of diverse populations are interwoven with social and political institutions.

PSYC 371 Life Span Developmental Psychology

Upon completion of this course, the student will be able to:

- SLO #1. Differentiate between scientifically derived knowledge and myth and conjecture about the topics of life span developmental psychology and demonstrate understanding of developmental psychological theory and scientific method.
- compare and contrast the scientific method to other approaches to understanding human development.
compare and contrast the major theoretical orientations in life span developmental psychology, demonstrate knowledge of basic psychological terminology regarding behavior, cognition, and emotion, and be able to express this clearly when writing or speaking about life span developmental psychology.

SLO #2: Evaluate psychological data, draw reasonable conclusions, recognize the ethical implications of these conclusions, and apply these conclusions to personal, community, and scientific problems.

reach and clearly express logical conclusions based on data derived from inquiry in the field of developmental psychology

recognize the ethical implications of psychological research and the responsibility to pursue and use knowledge wisely.

SLO #3: Compare and contrast the major theoretical orientations in life span developmental psychology, demonstrate knowledge of basic psychological terminology regarding behavior, cognition, and emotion, and be able to express this clearly when writing or speaking about life span developmental psychology.

synthesize and/or apply knowledge of concepts, theory, and research findings surveyed within the field of life span developmental psychology.

SLO #4: Integrate content knowledge, cognitive and affective skills and technical proficiency in completing exams, term papers, presentations and other class assignments. These skills include: ambiguity tolerance, learning, memory, logical thinking, problem-solving, decision-making, and critical thinking.

SLO #5: Recognize the complexity of social, cultural, and international diversity and the principles of equity, justice and inclusion in their lives.

demonstrate understanding of individual and sociocultural differences with respect to the topics addressed in life span developmental psychology.

SLO #6: Apply life span developmental psychological principles to the development of interpersonal, occupational and social skills and life-long personal growth.

demonstrate the application of life span developmental psychological principles to personal, interpersonal, occupational, and social contexts.

PSYC 495 Independent Studies in Psychology

Units: 1 - 3
Hours: 54 - 162 hours LAB
Prerequisite: None.
Transferable: CSU
Catalog Date: June 1, 2020

An independent studies project involves an individual student or small group of students in study, research, or activities beyond the scope of regularly offered courses. See the current catalog section of “Special Studies” for full details of Independent Studies.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO #1: Actively engage in intellectual inquiry beyond that required in order to pass a course of study (College Wide Learning Outcome – Area 4).

- Discuss and outline a proposal of study (that can be accomplished within one semester term) with a supervising instructor qualified within the discipline.

- Design an independent study (to be completed individually or by collaboration of a small group) to foster special knowledge, skills, and experience that are not available in any one regularly scheduled course.

- Use information resources to gather discipline-specific information.

- SLO #2: Utilize modes of analysis and critical thinking to apply theoretical perspectives and/or concepts in the major discipline of study to significant problems and/or educational activities (College Wide Learning Outcome – Area 3).

- Analyze and apply the knowledge, skills and experience that are involved in the independent study to theoretical perspectives and/or concepts in the major discipline of study.

- Explain the importance of the major discipline of study in the broader picture of society.

- SLO #3: Communicate a complex understanding of content matter of the major discipline of study (College Wide Outcome – Area 3).

- Demonstrate competence in the skills essential to mastery of the major discipline of study that are necessary to accomplish the independent study.

- SLO #4: Identify personal goals and pursue these goals effectively (College Wide Outcome – Area 4).
Utilize skills from the "academic tool kit" including time management, study skills, etc., to accomplish the independent study within one semester term.
Radio, Television and Film Production  
| Cosumnes River College

This instructional program is designed to train students for skills needed in jobs requiring basic knowledge in Radio, Television or Film Production. Training includes classes in radio, television, film, broadcasting, broadcast and print journalism, editing, and design. Students will be prepared for entry-level jobs in education, government, broadcasting, advertising and public relations, as well as having a base for transfer to a four-year institution.

Dean

 (916) 691-7170

 BedforB@crc.losrios.edu

Associate Degree

A.A. in Radio Production

This Program concentrates on the audio portion of broadcasting, with emphasis on performing, editing, production and knowledge of radio programming. Students will learn to prepare both professional live and pre-recorded radio programs for the campus internet radio station. This option can lead to an entry-level position with a commercial radio station.

Highlights include:

* Internship opportunities at local radio stations
* Practical experience at the campus radio station, internet broadcasting and podcasting on the campus radio station.

Note to Transfer Students:
If you are interested in transferring to a four-year college or university to pursue a bachelor's degree in this major, it is critical that you meet with a CRC counselor to select and plan the courses for your major. Schools vary widely in terms of the required preparation. The courses that CRC requires for an Associate’s degree in this major may be different from the requirements needed for the Bachelor’s degree.

Catalog Data: June 1, 2020

Degree Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>RTVF 300</td>
<td>Mass Media and Society</td>
<td>3</td>
</tr>
<tr>
<td>RTVF 306</td>
<td>Introduction to Media Aesthetics and Cinematic Arts</td>
<td>3</td>
</tr>
<tr>
<td>RTVF 312</td>
<td>Beginning Radio Production</td>
<td>3</td>
</tr>
<tr>
<td>RTVF 315</td>
<td>Voice and Diction for Broadcasting</td>
<td>3</td>
</tr>
<tr>
<td>RTVF 316</td>
<td>Introduction to Radio Workshop</td>
<td>3</td>
</tr>
<tr>
<td>RTVF 319</td>
<td>Beginning Audio Production</td>
<td>3</td>
</tr>
<tr>
<td>RTVF 370</td>
<td>Broadcast Writing &amp; Announcing (3)</td>
<td>3</td>
</tr>
<tr>
<td>COMM 301</td>
<td>Introduction to Public Speaking</td>
<td>3</td>
</tr>
<tr>
<td>A minimum of 6 units from the following:</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>COMM 311</td>
<td>Argumentation and Debate (3)</td>
<td></td>
</tr>
<tr>
<td>COURSE CODE</td>
<td>COURSE TITLE</td>
<td>UNITS</td>
</tr>
<tr>
<td>-------------</td>
<td>--------------------------------------------------------</td>
<td>-------</td>
</tr>
<tr>
<td>RTVF 302</td>
<td>Introduction to Digital Design &amp; Storytelling (3)</td>
<td></td>
</tr>
<tr>
<td>RTVF 330</td>
<td>Beginning Single Camera Production (3)</td>
<td></td>
</tr>
<tr>
<td>RTVF 354</td>
<td>Audio Editing for Film &amp; Video Post Production (3)</td>
<td></td>
</tr>
<tr>
<td>RTVF 368</td>
<td>Scriptwriting for Film, Video &amp; Multimedia (3)</td>
<td></td>
</tr>
<tr>
<td>RTVF 376</td>
<td>Advertising (3)</td>
<td></td>
</tr>
<tr>
<td>RTVF 498</td>
<td>Work Experience in Radio, Television and Film (1 - 4)</td>
<td></td>
</tr>
<tr>
<td>Total Units:</td>
<td></td>
<td>30</td>
</tr>
</tbody>
</table>

The Radio Production Associate in Arts (A.A.) degree may be obtained by completion of the required program, plus general education requirements, plus sufficient electives to meet a 60-unit total. See CRC graduation requirements.

**Student Learning Outcomes**

Upon completion of this program, the student will be able to:

- Write in clear, concise English in the production of radio copy. (PSLO-1)
- Demonstrate knowledge of the history, processes and current structure of the electronic media. (PSLO-2)
- Use radio, communication information and entertainment to serve diverse audiences in culturally responsive ways (PSLO-3)
- Demonstrate sensitivity to variations and processes of media and the attitudes held by races, religions, political and social groups. (PSLO-4)
- Understand how to plan, produce, write and direct radio projects using analog and digital technology. (PSLO-5)
- Demonstrate an achievement of professional-level skills in radio production. (PSLO-6)

**Career Information**

Disc Jockey; Announcer; Sportscaster; Studio Technician; Newscaster; Audio Technician; Radio Producer; Promotions Coordinator Some career options may require more than two years of college study. Classes beyond the associate degree may be required to fulfill some career options or for preparation for transfer to a university program.

**Certificate of Achievement**

**Radio Production Certificate**

This program is designed to provide skills in radio production through the preparation of programming for the campus radio station and through podcasting. This option can lead to entry level jobs in radio stations, audio production companies and Cable TV business or serve as preparation for transfer to a four-year institution.

**Catalog Date:** June 1, 2020

**Certificate Requirements**

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>RTVF 300</td>
<td>Mass Media and Society</td>
<td>3</td>
</tr>
<tr>
<td>RTVF 312</td>
<td>Beginning Radio Production</td>
<td>3</td>
</tr>
<tr>
<td>RTVF 315</td>
<td>Voice and Diction for Broadcasting</td>
<td>3</td>
</tr>
<tr>
<td>RTVF 316</td>
<td>Introduction to Radio Workshop</td>
<td>3</td>
</tr>
<tr>
<td>RTVF 319</td>
<td>Beginning Audio Production</td>
<td>3</td>
</tr>
<tr>
<td>A minimum of 3 units from the following:</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>JOUR 300</td>
<td>Newswriting and Reporting (3)</td>
<td></td>
</tr>
<tr>
<td>COURSE CODE</td>
<td>COURSE TITLE</td>
<td>UNITS</td>
</tr>
<tr>
<td>-------------</td>
<td>-------------------------------------------------------</td>
<td>-------</td>
</tr>
<tr>
<td>RTVF 302</td>
<td>Introduction to Digital Design &amp; Storytelling (3)</td>
<td></td>
</tr>
<tr>
<td>RTVF 306</td>
<td>Introduction to Media Aesthetics and Cinematic Arts (3)</td>
<td></td>
</tr>
<tr>
<td>RTVF 330</td>
<td>Beginning Single Camera Production (3)</td>
<td></td>
</tr>
<tr>
<td>RTVF 354</td>
<td>Audio Editing for Film &amp; Video Post Production (3)</td>
<td></td>
</tr>
<tr>
<td>RTVF 368</td>
<td>Scriptwriting for Film, Video &amp; Multimedia (3)</td>
<td></td>
</tr>
<tr>
<td>RTVF 370</td>
<td>Broadcast Writing &amp; Announcing (3)</td>
<td></td>
</tr>
<tr>
<td><strong>Total Units:</strong></td>
<td></td>
<td><strong>18</strong></td>
</tr>
</tbody>
</table>

**Student Learning Outcomes**

Upon completion of this program, the student will be able to:

- Demonstrate an advanced understanding of the fundamentals of radio production. (PSLO #1)
- Articulate, critique, recognize and demonstrate commercial radio station operations.
- Demonstrate proper microphone placement for public address or recording.
- Perform basic studio and non-studio audio recording tasks. (PSLO #2)
- Demonstrate analog and digital techniques used in audio production.

**Career Information**

Disc Jockey; Announcer; Sportscaster; Studio Technician; Newscaster; Audio Technician; Radio Producer; Promotions Coordinator.
Radio, Television and Film Production
| Cosumnes River College

This instructional program is designed to train students for skills needed in jobs requiring basic knowledge in Radio, Television or Film Production. Training includes classes in radio, television, film, broadcasting, broadcast and print journalism, editing, and design. Students will be prepared for entry-level jobs in education, government, broadcasting, advertising and public relations, as well as having a base for transfer to a four-year institution.

Dean

 (916) 691-7170

 BedforB@crc.losrios.edu

Associate Degree for Transfer

A.S.-T. in Film, Television and Electronic Media

The Associate in Science in Film, Television and Electronic Media for Transfer degree provides students with a major that fulfills the general requirements of the California State University for transfer to baccalaureate degree programs in film, television and electronic media. Students with this degree will receive priority admission with junior status to the California State University System. The Associate in Science Degree in Film, Television and Electronic Media for Transfer is comprised of lower division coursework typically required by CSU institutions.

Students must complete the following Associate Degree for Transfer requirements (Pursuant to SB1440, §66746):

• 60 semester or 90 quarter CSU-transferable units
• the California State University-General Education-Breadth pattern (CSU GE-Breadth); OR the Intersegmental General Education Transfer Curriculum (IGETC) pattern
• a minimum of 18 semester or 27 quarter units in the major or area of emphasis as determined by the community college district
• obtain a minimum grade point average (GPA) of 2.0
• earn a grade of C or better in all courses required for the major or area of emphasis

Upon successful completion of the Associate in Science Degree in Film, Television and Electronic Media for Transfer degree requirements, students will be guaranteed admission to the CSU system with junior status and will not have to repeat lower division coursework. Each California State University may have slightly different requirements for transfer so it is critical for students to work with their counselors to develop individual academic plans.

Catalog Date: June 1, 2020

Degree Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>RTVF 300</td>
<td>Mass Media and Society</td>
<td>3</td>
</tr>
<tr>
<td>RTVF 306</td>
<td>Introduction to Media Aesthetics and Cinematic Arts</td>
<td>3</td>
</tr>
</tbody>
</table>

List A, Area 1: Select one audio course (3 units):

RTVF 312    Beginning Radio Production (3) 3

or RTVF 319 Beginning Audio Production (3) 3

List A, Area 2: Select one video or film production course (3 units):

RTVF 330    Beginning Single Camera Production (3) 3
<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>RTVF 295</td>
<td>Independent Studies in Radio, Television, and Film</td>
<td>or RTVF 331 Beginning Television Studio Production (3)</td>
</tr>
<tr>
<td>RTVF 350</td>
<td>Intermediate Film / Digital Cinema Production (3)</td>
<td></td>
</tr>
<tr>
<td>RTVF 315</td>
<td>Voice and Diction for Broadcasting (3)</td>
<td></td>
</tr>
<tr>
<td>RTVF 360</td>
<td>Introduction to Motion Graphics: Adobe After Effects (3)</td>
<td></td>
</tr>
<tr>
<td>RTVF 362</td>
<td>Digital Non-Linear Video Editing (3)</td>
<td></td>
</tr>
</tbody>
</table>

List B: Select one (3 units):

- RTVF 350 Intermediate Film / Digital Cinema Production (3)

List C: Select one course (3 units):

- RTVF 315 Voice and Diction for Broadcasting (3)
- RTVF 360 Introduction to Motion Graphics: Adobe After Effects (3)
- RTVF 362 Digital Non-Linear Video Editing (3)

Total Units: 18

1 Or any course not used above. RTVF 330 is a prerequisite to this course and must be taken first.

2 Or any course not used above.

The Associate in Science in Film, Television and Electronic Media for Transfer (AS-T) degree may be obtained by completion of 60 transferable, semester units with a minimum 2.0 GPA, including (a) the major or area of emphasis described in the Required Program, and (b) either the Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education-Breadth Requirements.

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- Write in clear, concise English. (SLO-1)
- Research critically, filter the results and present them in a cogent manner. (SLO-2)
- Resolve and execute standard pre-production skills including planning, script, script breakdown, budgeting, storyboard creation, and crew and equipment selection. (SLO-3)
- Utilize basic field production equipment correctly, safely and creatively, including cameras, lights and audio.
- Operate essential post production equipment for audio and film/video editing and distribution in a variety of contemporary and emerging methods.
- Demonstrate a hands-on ability to perform the professional level critical thinking needed for successful teamwork in media. (SLO-4)
- Using audio, communicate information and entertainment to serve diverse audiences in culturally responsive ways (SLO-5)
- Analyze, interpret, and exercise critical judgment in the evaluation of media productions.

Career Information

Career Opportunities upon successful completion of a baccalaureate degree in film, television or electronic media include but are not limited to positions as: Radio Personality; Camera Operator; Cinematographer; Director of Photography; Lighting Director; Computer Graphic Artist; Non-Linear Video Editor; Audio Engineer; Radio Producer; Broadcast Technician; Gaffer; Production Coordinator; Production Assistant; TV, Film, DVD, or Internet Producer/Director; and Personal or Corporate Video.

Radio, Television, and Film (RTVF)

RTVF 295 Independent Studies in Radio, Television, and Film
An independent studies project involves an individual student or small group of students in study, research, or activities beyond the scope of regularly offered courses. See the current catalog section of "Special Studies" for full details of Independent Studies.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO #1: Actively engage in intellectual inquiry beyond that required in order to pass a course of study (College Wide Learning Outcome – Area 4).
- Discuss and outline a proposal of study (that can be accomplished within one semester term) with a supervising instructor qualified within the discipline.
- Design an independent study (to be completed individually or by collaboration of a small group) to foster special knowledge, skills, and experience that are not available in any one regularly scheduled course.
- Use information resources to gather discipline-specific information.
- SLO #2: Utilize modes of analysis and critical thinking to apply theoretical perspectives and/or concepts in the major discipline of study to significant problems and/or educational activities (College Wide Learning Outcome – Area 3).
- Analyze and apply the knowledge, skills and experience that are involved in the independent study to theoretical perspectives and/or concepts in the major discipline of study.
- Explain the importance of the major discipline of study in the broader picture of society.
- SLO #3: Communicate a complex understanding of content matter of the major discipline of study (College Wide Outcome – Area 3).
- Demonstrate competence in the skills essential to mastery of the major discipline of study that are necessary to accomplish the independent study.
- SLO #4: Identify personal goals and pursue these goals effectively (College Wide Outcome – Area 4).
- Utilize skills from the "academic tool kit" including time management, study skills, etc., to accomplish the independent study within one semester term.

RTVF 300 Mass Media and Society

Survey of the mass media: history, philosophy, structure and trends, as well as theories which help to explain effects and the importance as a social institution. Exploration of economics, technology, law, ethics, and social issues, including cultural and ethnic diversity. This course is the same as JOUR 310, and only one may be taken for credit. (C-ID JOUR 100)

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- apply the basic vocabulary and concepts of mass communication verbally and in clear, concise English (SLO #1 GE Vb a).
- define the various roles of mass media professionals.
- compare and contrast the origins, development, functions and effects of various mass media.
- research critically, filter the results and present them in a cogent manner (SLO #2).
- evaluate the possible causes and suggest solutions to introductory problems of a conceptual nature using the methods appropriate to the study of Mass communication (SLO #3/ GE Vb b).
- analyze the economics of the mass media.
- assess the impact of media messages on various audiences.
- recognize the use and misuse of social and behavioral science concepts in society including politics and the media (SLO #4/ GE Vb c).
- identify basic media theories and their application to contemporary media use and behavior.
- predict future roles and developments in mass media.
- analyze, interpret, and exercise critical judgment in the evaluation of media productions (SLO #5).
- create a simple content analysis of a media product.
- demonstrate that with the power of a communicator, comes moral and ethical responsibility (SLO #6).
- explain and analyze the legal and ethical rights, regulations and responsibilities of the media in America.

RTVF 302 Introduction to Digital Design & Storytelling

| Units: | 3 |
| Hours: | 54 hours LEC |
| Prerequisite: | None. |
| Transferable: | CSU |
| General Education: | AA/AS Area I |
| Catalog Date: | June 1, 2020 |

The course explores computer-based images, text, graphics, narration, video and music in today's visual and social media. Students will analyze media literacy, audience, narrative elements, themes and the review of visual media through the lens of story structure.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO #1: Analyze media literacy.
- Determine applicable uses for graphic, audio and video files in storytelling.
- SLO #2: Communicate through technology with an ever-expanding community, gather information, and produce content and create a narrative.
- The ability to understand the process of creating a narrative through the use of production of visual images and sound
- SLO #3: Express an analyses and interpretation of media applications and concepts.
- SLO #4: Use vocabulary appropriate to the field.
- SLO #5: Analyze, interpret, and exercise critical judgment in the evaluation of media forms from different cultures.

RTVF 304 Introduction to Multimedia

| Units: | 3 |
| Hours: | 36 hours LEC; 54 hours LAB |
| Prerequisite: | None. |
| Advisory: | CISC 302 or JOUR 330 |
| Transferable: | CSU |
| Catalog Date: | June 1, 2020 |

This course is designed to familiarize students with designing and producing multimedia presentations. Emphasis will be given to developing skills in producing photographic, graphic, video and audio materials used for the World Wide Web and multimedia presentations. The course presents a description and history of computer-interactive multimedia. Students explore current uses of these technologies and receive instruction in practical application. Each student conceives, writes, and designs a high-level multimedia program, using a user-friendly system. Some applications for multimedia include: professional presentations, specialized instruction research, Internet web pages, job training, interactive newsletters, computer games and point-of-purchase marketing.

Student Learning Outcomes

Upon completion of this course, the student will be able to:
RTVF 305 Film History

An introduction to the art of motion pictures, using both lectures and films. Students will briefly study the history of motion pictures and will view, evaluate, and critique films which are landmarks in the art of movie making. This course is the same as FMS 305, and only one may be taken for credit.

Upon completion of this course, the student will be able to:

- analyze, interpret, and exercise critical judgment in the evaluation of film and media forms and cultures (SLO-1).
- analyze film critically through stylistic, narrative, and thematic analyzes.
- critique and understand films as art, literature, and communication.
- recognize, articulate, and judge the visual, verbal, and audio conventions through which images, words, and sounds make meaning in film and media texts (SLO-2).
- critique the stylistic, narrative, and thematic concerns in major works of film art.
- identify, understand, and evaluate the language of film narration, editing, and cinematography.
- develop and apply the technical language of film art and industry in evaluating film production and direction.
- demonstrate an understanding of the professional, technical, and formal choices that realize, develop, or challenge existing practices and traditions in film (SLO-3).
- employ basic critical approaches (formalistic, psychological, socio-political, and generic) in analyzing films and their cultural implications.
- evaluate the role of technologies in the development of film art.
- assess what type of information is needed for a research question, problem, or issue and identify, evaluate and effectively apply this information in scholarly or visual projects (SLO-4).
- describe the history, development, genre, and movements of the film medium and recognize the contributions of national, minority, diasporic, and subaltern filmmakers (SLO-5).
- classify and critique the periods, movements, major figures, landmark films, genres, and codes of film.
- compare and contrast the work of different directors and the concerns of different national cinema.
- recognize and evaluate the contributions of women and minorities to film.
This course introduces the close analysis of film and television texts to students. It examines the broad questions of form and content, aesthetics and meaning, and history and culture. Students explore the diverse possibilities presented by the cinematic art form through an examination of a wide variety of productions, national cinemas, and film movements. Topics include modes of production, narrative and non-narrative forms, visual design, editing, sound, genre, ideology and critical analysis.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- Critically analyze film and television as a technology, business, cultural production/cultural artifact, entertainment medium and art form. (SLO #1).
- Demonstrate the ability to critically analyze, interpret, and write about film and electronic media using film-specific language.
- Demonstrate visual literacy through the application of the analytical tools of categories, theories and ideologies to understand the cinematic arts' complex role and function in society.
- Recognize, describe and analyze formal aesthetic elements of the cinematic arts. (i.e.: Cinematography, Editing, Mise-en-scene, Sound) (SLO #2)
- Prepare analytical essays regarding the technical, aesthetic, and cultural aspects of the cinematic arts. (SLO #3)

**RTVF 310 History of American Radio 1920-1950**

An introductory study of radio as a cultural medium in American society from the 1920's to the 1950's. Examples from popular programs in comedy, news, sports, mystery and adventure, serials, music and drama are included. Formerly known as CMED 310.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- understand the unique qualities and contribution of radio from the 1920's to the 1950's (70% accuracy).
- identify the characteristics of radio's most popular programs and personalities (70% accuracy).
- analyze the sound-silence-music-dialogue combination used on certain radio programs to stimulate imaginative listener response.

**RTVF 312 Beginning Radio Production**

This is an introductory course in theory and application of audio production techniques for radio. Students will gain a basic understanding of audio equipment in both live and pre-recorded broadcasting. This includes recording equipment, mixers, digital audio production, radio program formats, broadcast writing and announcing skills. This course should be taken prior to Radio Workshop, RTVF 316.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:
Student Learning Outcomes

Upon completion of this course, the student will be able to:

- Demonstrate improvement in personal speech production within broadcasting (SLO #1).
- Achieve effective, vivid, and expressive vocal variation.
- Develop a pleasant vocal quality by eliminating such defects as breathiness, harshness, vocal fry, nasality, throatiness and/or hoarseness.
- Develop control over the elements of pitch, rate, volume, accent, and inflection/intonation (SLO #2).
- Identify, evaluate and apply appropriate articulation techniques.
- Demonstrate proper microphone placement for public address or recording (SLO #3).
- Demonstrate critical listening skills of message content as well as the technical quality in recording.
- Prepare scripts and written materials for oral presentations.

RTVF 316 Introduction to Radio Workshop

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO #1 Demonstrate an advanced understanding of the fundamentals of radio production.
- Articulate, comprehend, recognize and demonstrate commercial radio station operations.
- Demonstrate analog and digital techniques used in audio production.
- Demonstrate critical thinking skills and conceptual problem-solving skills to create a portfolio of work in audio production.
- Discuss, analyze and write about audio productions.

RTVF 319 Beginning Audio Production

Units: 3
Hours: 36 hours LEC; 54 hours LAB
Prerequisite: None.
Transferable: CSU
Catalog Date: June 1, 2020

This course serves as an introduction to the theory and practice of audio production for radio, television, film and digital recording applications. Students will learn the fundamentals of sound design and aesthetics, microphone use, and digital recording equipment. Students gain hands on experience recording, editing, mixing and mastering audio. Upon completion, students will have basic knowledge of applied audio concepts, production workflow, equipment functions, and audio editing software.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- understand basic physics of sound terminology; the sound wave, frequency/pitch, amplitude/loudness, phase, and timbre (SLO #1)
- comprehend acoustics; microphone classification, placement and use; theory and practical use of consoles, computers and software; analog/digital recording and storage devices; patching; editing; time code; signal processors; loudspeakers
- perform complex audio production techniques (SLO #2)
- describe audio production software interface
- demonstrate refined techniques for audio production using Pro Tools or other appropriate audio software
- understand audio used in studio and on-location production for radio, television and film
- create sound effects and original sound clips for dynamic media.
- collect, create, analyze, and evaluate digital audio clips.
- articulate the process of waveform editing.
- outline the basic process for digitizing audio clips.
- understand audio processes for voice recording, multimedia production, sound design
- outline the basic process for digitizing audio clips
- complete applied projects to assess the student’s knowledge of recording, editing, mixing, and balancing
- evaluate and conduct both destructive and nondestructive waveform editing procedures
- explore the emotional and physical perception of music, voice and sound and the aesthetics of audio mixing
- demonstrate appropriate workplace behavior in a studio setting (SLO #3)

RTVF 330 Beginning Single Camera Production

Units: 3
Hours: 36 hours LEC; 54 hours LAB
Prerequisite: None.
Transferable: CSU
C-ID: C-ID FTVE 130
Catalog Date: June 1, 2020
This course provides an introduction to the theory, terminology, and operation of single camera video production, including composition and editing techniques, camera operation, portable lighting, video recorder operation, audio control and basic editing. This course focuses on the aesthetics and fundamentals of scripting, producing, directing on location, post production, and exhibition/distribution.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- demonstrate both the technical and aesthetic aspects of video field production and knowledge of basic production techniques (SLO 1)
- operate and set up portable video and sound equipment including camera and microphones and complete a basic edit of the material
- incorporate professional pre-production planning including proper use of forms for scripting, budgeting, script breakdown and lists
- operate video field recording equipment correctly to acquire quality video and audio products (SLO 2)
- conceive and execute appropriate approaches to editing field footage into cohesive projects (SLO 3)
- analyze professional and student work and evaluate proper technique and areas for improvement
- apply post production theory (i.e. continuity and dynamic editing) plus basic operation for nonlinear editing including ingest, editing operation and distribution
- demonstrate the skills needed for successful teamwork in television, film or other media employment (SLO 4)
- demonstrate through projects that with the power of a communicator, comes moral and ethical responsibility (SLO 5)
- assemble a final individual project suitable for review and evaluation during a department showcase.

RTVF 331 Beginning Television Studio Production

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- write in clear, concise English. (SLO-1)
- write original scripts, program proposals and reviews of professional and student work.
- improve writing proficiency over time.
- conceive and execute standard pre-production skills including planning, scripting, budgeting, and crew and equipment selection. (SLO-2)
- categorize and explain different scripting formats and show run downs.
- plan group projects exploring how productions are developed.
- utilize basic video production equipment correctly, safely and creatively, including cameras, lights and audio, and control room equipment such as audio mixers, switchers, video recording, character generation and teleprompter. (SLO-3)
- describe essential post production equipment for audio and video editing. (SLO-4)
- analyze, interpret, and exercise critical judgment in the evaluation of media productions. (SLO-5)
- demonstrate a hands-on ability to perform appropriate critical thinking needed for successful teamwork in television, film or media employment. (SLO-6)
Within this course, students plan the total operational process for actual television programs (on air or closed-circuit), as well as participate in and take responsibility for various aspects of the finished program, such as camera operation, audio, switching, lighting, sets, graphics, editing and directing.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- write in clear, concise English (SLO-1).
- write clear and correct sentences using correct capitalization, spelling and punctuation suitable for use in a business environment.
- recognize and correct major writing errors to eliminate fragments, run-on sentences, subject-verb agreement, pronoun agreement and references.
- utilize appropriate presentation of written materials to demonstrate an awareness of the effects of style, design and packaging in working with business professionals.
- write increasingly complex scripts and program proposals for consideration as possible programs for production.
- write in-depth reviews of professional and student work.
- improve writing proficiency over time.
- resolve and execute standard pre-production skills including planning, scripting, budgeting, and crew and equipment selection. (SLO-2)
- categorize and explain different scripting formats and show rundowns.
- plan group projects exploring how productions are developed in a professional way.
- utilize all levels of video production equipment (consumer/professional) correctly, safely and creatively, including cameras, lights and audio, and control room equipment such as audio mixers, switchers, video recording, character generation and teleprompter. (SLO-3)
- operate equipment safely according to professional standards.
- utilize studio cameras, tripods, microphones, lights, dimmer boards, character generator, switcher/special effects generator with digital video effects (DVE).
- explore increasingly complex approaches to program production including alternative angles, lighting, increased use of graphics and effects, and crew utilization and control.
- operate an audio mixer correctly, setting levels, balancing multiple inputs, and meeting professional standards for quality.
- participate as crew member in multiple student productions intended for broadcast on cable television.
- operate essential post production equipment for audio and video editing. (SLO-4)
- utilize non-linear editing equipment to produce individual and/or group projects incorporating digital capture into a computer, editing audio and video with graphics and exporting projects for use in student programming and other distribution methods.
- analyze, interpret, and exercise critical judgment in the evaluation of media productions. (SLO-5)
- critique student production technique and process in written and verbal form.
- describe advanced television production techniques and crew responsibilities, including anticipating common errors and how to avoid them.
- criticize evaluate and react to student productions, explaining whether projects meet their anticipated goals.
- demonstrate a hands-on ability to perform the professional level critical thinking needed for successful teamwork in television, film or other media employment. (SLO-6)
- integrate theoretical program production application into practice with increasing understanding of appropriate professional conduct.
RTVF 341 Television Production Workshop II

Within this course, students gain additional experience in creating television programming for cable TV, internet or DVD distribution. Besides production experience, they may take more active roles as producers, directors and production managers. Participation as production crew positions and with field remotes are required.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- write in clear, concise English. (SLO-1)
- write clear and correct sentences using correct capitalization, spelling and punctuation suitable for use in a business environment.
- recognize and correct major writing errors to eliminate fragments, run-on sentences, subject-verb agreement, pronoun agreement and references.
- utilize appropriate presentation of written materials to demonstrate higher levels of effective communication for use in video and multimedia.
- write increasingly complex scripts and program proposals demonstrating increased ability to combine writing and visual presentation techniques and audience effect.
- improve writing proficiency over time.
- resolve and execute standard pre-production skills including planning, scripting, budgeting, and crew and equipment selection. (SLO-2)
- categorize and explain different show rundowns and broadcast approaches including fictional narrative, documentary and alternative approaches.
- plan group projects exploring how productions are developed in a professional way.
- utilize all levels of video production equipment (consumer/professional) correctly, safely and creatively, including cameras, lights and audio, and control room equipment such as audio mixers, switchers, video recording, character generation and teleprompter. (SLO-3)
- operate equipment safely according to professional standards.
- explore increasingly complex approaches to program production including both visual and audio aspects of communication.
- operate essential post production equipment for audio and video editing. (SLO-4)
- utilize non-linear editing equipment to produce individual and/or group projects incorporating digital capture into a computer, editing audio and video with graphics and exporting projects for use in student programming and other distribution methods.
- incorporate advanced editing techniques, possibly including compositing, chroma key, and integrated graphics and animation from alternate computer software applications.
- analyze interpret, and exercise critical judgment in the evaluation of media productions. (SLO-5)
- critique student production technique and process in written and verbal form.
- criticize evaluate and react to student and professional productions, explaining whether projects likely met their anticipated goals.
- demonstrate a hands-on ability to perform the professional level critical thinking needed for successful teamwork in television, film or other media employment. (SLO-6)
- integrate theoretical program production application into practice with increasing understanding of appropriate professional conduct.

RTVF 342 Television Production Workshop III

Units: 2
Hours: 108 hours LAB
Prerequisite: RTVF 340 with a grade of "C" or better
Transferable: CSU
Catalog Date: June 1, 2020
This course is designed for the production of new types of video programming for cable, business, industry and special groups - religious, ethnic, minorities, children, and women.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- write in clear, concise English. (SLO-1)
- write clear and correct sentences using correct capitalization, spelling and punctuation suitable for use in broadcasting.
- recognize and correct major writing errors to eliminate fragments, run-on sentences, subject-verb agreement, pronoun agreement and references.
- utilize appropriate presentation of written materials to demonstrate increasing skill in using technology to communicate ideas.
- write increasingly complex script focusing on special populations.
- improve broadcast writing proficiency over time.
- resolve and execute standard pre-production skills including planning, scripting, budgeting, and crew and equipment selection. (SLO-2)
- categorize and explain different show rundowns and broadcast approaches including fictional narrative, documentary and alternative approaches.
- plan group projects exploring how productions are developed in a professional way.
- utilize all levels of video production equipment (consumer/professional) correctly, safely and creatively, including cameras, lights and audio, and control room equipment such as audio mixers, switchers, video recording, character generation and teleprompter. (SLO-3)
- operate equipment safely according to professional standards.
- explore increasingly complex approaches to program production including both visual and audio aspects of communication.
- operate essential post production equipment for audio and video editing. (SLO-4)
- utilize non-linear editing equipment to produce individual and/or group projects incorporating digital capture into a computer, editing audio and video with graphics and exporting projects for use in student programming and other distribution methods.
- incorporate advanced editing techniques, possibly including compositing, chroma key, and integrated graphics and animation from alternate computer software applications.
- analyze interpret, and exercise critical judgment in the evaluation of media productions. (SLO-5)
- critique student production technique and process in written and verbal form.
- criticize evaluate and react to student and professional productions, explaining whether projects likely met their anticipated goals.
- demonstrate a hands-on ability to perform the professional level critical thinking needed for successful teamwork in television, film or other media employment. (SLO-6)
- integrate theoretical program production application into practice with increasing understanding of appropriate professional conduct.

RTVF 343 Television Production Workshop IV

This course is designed for students preparing for industry jobs as producers, directors and production managers. Students provide focused attention in the process of pre-production, production and post-production. Participation as production crew positions and with field remotes is required.
Upon completion of this course, the student will be able to:

- write in clear, concise English. (SLO-1)
- write clear and correct sentences using correct capitalization, spelling and punctuation suitable for professional broadcasting.
- recognize and correct major broadcast style writing error, including pronunciation notes, split page script formatting, and broadcast attribution for both audio and text generation.
- utilize appropriate presentation of written materials to demonstrate an awareness of the effects of style, design and packaging creating profession video projects for broadcast.
- write increasingly complex scripts and program proposals for possible inclusion in a job portfolio.
- improve writing proficiency over time.
- resolve and execute standard pre-production skills including planning, scripting, budgeting, and crew and equipment selection. (SLO-2)
- categorize and explain different show rundowns and broadcast approaches including fictional narrative, documentary and alternative approaches.
- plan group projects exploring how productions are developed in a professional way.
- utilize all levels of video production equipment (consumer/professional) correctly, safely and creatively, including cameras, lights and audio, and control room equipment such as audio mixers, switchers, video recording, character generation and teleprompter. (SLO-3)
- operate equipment safely according to professional standards.
- explore increasingly complex approaches to program production including both visual and audio aspects of communication.
- operate essential post production equipment for audio and video editing. (SLO-4)
- utilize non-linear editing equipment to produce individual and/or group projects incorporating digital capture into a computer, editing audio and video with graphics and exporting projects for use in student programming and other distribution methods.
- incorporate advanced editing techniques, possibly including compositing, chroma key, and integrated graphics and animation from alternate computer software applications.
- analyze interpret, and exercise critical judgment in the evaluation of media productions. (SLO-5)
- critique student production technique and process in written and verbal form.
- criticize evaluate and react to student and professional productions, explaining whether projects likely met their anticipated goals.
- demonstrate a hands-on ability to perform the professional level critical thinking needed for successful teamwork in television, film or other media employment. (SLO-6)
- integrate theoretical program production application into practice with increasing understanding of appropriate professional conduct.

### RTVF 350 Intermediate Film / Digital Cinema Production

**Units:** 3  
**Hours:** 36 hours LEC; 54 hours LAB  
**Prerequisite:** RTVF 330 with a grade of "C" or better  
**Transferable:** CSU  
**Catalog Date:** June 1, 2020

This course provides a hands-on project-based opportunity for students to create single-camera projects using a Hollywood-style field production. Students focus on producing and directing skills as well as understanding the roles of field production crews. Development of narrative and documentary ideas for field production using both guerrilla and conventional set techniques are emphasized. Topics include scriptwriting, cinematography, directing, and non-linear editing. Off-campus field trips or production opportunities outside of class time may be required. This course may be taken twice for credit.

### Student Learning Outcomes

Upon completion of this course, the student will be able to:

- write in clear, concise English. (SLO-1)
Student Learning Outcomes

Upon completion of this course, the student will be able to:

- write clear and correct sentences using correct capitalization, spelling and punctuation suitable for use in a business environment.
- recognize and correct major writing errors to eliminate fragments, run-on sentences, subject-verb agreement, pronoun agreement and references.
- utilize appropriate presentation of written materials to demonstrate an awareness of the effects of style, design and packaging in working with business professionals.
- write project proposals, scripts, and evaluations of student and professional work.
- resolve and execute standard pre-production skills including planning, scripting, budgeting, and crew and equipment selection. (SLO-2)
- demonstrate proper use of standard film production forms, terms and techniques.
- evaluate scheduling, planning and budgeting using standards designed to promote project success.
- utilize basic film and video production equipment correctly, safely and creatively including cameras, lights and audio. (SLO-3)
- practice appropriate safety techniques in film production.
- demonstrate a capacity to critically evaluate changing production situations and adapt to newly defined production parameters.
- operate essential post production equipment for audio and video editing and distribution in a variety of contemporary and emerging methods. (SLO-4)
- demonstrate the ability to use non-linear editing equipment for import, editing of audio and video and export.
- evaluate a variety of contemporary distribution formats and opportunities.
- analyze, interpret, and exercise critical judgment in the evaluation of media productions. (SLO-5)
- demonstrate through projects that with the power of a communicator, comes moral and ethical responsibility. (SLO-6)
- demonstrate a hands-on ability to perform the professional level critical thinking needed for successful teamwork in television, film or other media employment. (SLO-7)
- demonstrate an understanding of the professional, technical, and formal choices that realize, develop, or challenge existing practices and traditions in film. (SLO-8)
- describe a variety of methods for creative story-telling in a variety of genre.
- experiment with non-traditional shots, angles and approaches to the visual image
- produce projects that demonstrate an understanding of camera coverage, frame composition and mise-en-scene, camera perspective and blocking, editorial rhythm, pace, structure and style. (SLO-10)
- create personal, individual projects by design through delivery.
- identify job titles, roles and effectively participate in teams to create group-oriented projects from design to delivery.

RTVF 354 Audio Editing for Film & Video Post Production

3 Units: 36 hours LEC; 54 hours LAB
None.
RTVF 362; For best success, students taking Audio Editing for Film and Video using the Soundtrack Pro software, should complete RTVF 362 before taking this course.
CSU
June 1, 2020

This hands-on course provides understanding of how to edit audio and video files, repair field recordings, perform multi-track arranging and mixing, synchronize audio and video, analyze and fix common audio problems, and perform other creative sound design techniques. This course focuses on practical, professional techniques used to add music and sound effects to video and multimedia projects. This course is particularly designed for students who want to learn more about the basics of audio content creation, editing, and mixing in Soundtrack Pro as part of the Apple Final Cut Pro Studio. Students may choose to pay an additional fee and take an Apple Certified End User exam at the conclusion of this course.
• use and define the terms and procedures used in the process of audio production and editing for film and video on a computer. (SLO-1)
• operate essential post-production equipment for audio and video editing and distribution in a variety of contemporary and emerging methods. (SLO-2)
• incorporate improved utilization of audio editing tools in the Final Cut Pro Studio.
• plan, design, and revise projects using Apple’s Final Cut Pro and Soundtrack Pro.
• assemble projects by using prerecorded music, dialog and sound effects, or by creating original sound and music files.
• explain and use Automated Dialog Replacement, editing dialog and other advanced mixing techniques.
• analyze, interpret, and exercise critical judgment in the evaluation of media productions. (SLO-3)
• evaluate the aesthetics of projects and choose methods for improvement.
• demonstrate a hands-on ability to perform the professional level critical thinking needed for successful teamwork in television, film or other media employment. (SLO-4)
• plan and construct a final project utilizing the process demonstrated and export for use in film, a DVD, the Internet, or other multimedia production.

RTVF 360 Introduction to Motion Graphics: Adobe After Effects

Units: 3
Hours: 36 hours LEC; 54 hours LAB
Prerequisite: None.
Transferable: CSU
Catalog Date: June 1, 2020

This course is an introductory motion graphics course for students interested in digital video, multimedia, 3-D computer animation, and emerging broadcast technologies. Students will gain hands-on experience with picture and video manipulation, 3-D composing, paint and draw applications for film, broadcast, multimedia and the Internet.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• write in clear, concise English. (SLO-1)
• write clear and correct sentences using correct capitalization, spelling and punctuation suitable for use in a business environment.
• recognize and correct major writing errors to eliminate fragments, run-on sentences, subject-verb agreement, pronoun agreement and references.
• create digital media projects that demonstrate effective use of established design principles for typography, color, images, animation, sound and video (SLO-2)
• plan, design and revise projects using Adobe After Effects.
• assemble animation projects using filters, transitions and 3-D motion.
• explain and use key frames, motion paths, layered elements and primary tools within Adobe After Effects.
• describe and apply the basic principles and processes used in traditional and digital graphic and multimedia design. (SLO-3)
• use and define the terms and procedures used in the production of motion graphics on a computer.
• differentiate between pixel based objects and vector based objects and create 2-D elements for use in motion graphic animation.
• operate essential post production equipment for audio and video editing and distribution in a variety of contemporary and emerging methods. (SLO-4)
• plan and construct a final project utilizing the process demonstrated and export the animation as video, for a DVD / CD-ROM or for the Internet or other emerging technologies.
• analyze, interpret, and exercise critical judgment in the evaluation of media productions. (SLO-5)
• evaluate the esthetics of projects and choose methods for improvement.
• demonstrate through projects that with the power of a communicator, comes moral and ethical responsibility. (SLO-6)

• demonstrate a hands-on ability to perform the professional level critical thinking needed for successful teamwork in television, film or other media employment. (SLO-7)

RTVF 361 Intermediate Motion Graphics: Adobe After Effects

Units: 3
Hours: 36 hours LEC; 54 hours LAB
Prerequisite: RTVF 360 with a grade of "C" or better
Transferable: CSU
Catalog Date: June 1, 2020

The course presents an intermediate level exploration of the theory and practice of animation for video, film and the Internet. Students study the contemporary uses of the techniques of computer animation. Intermediate level skills are developed in Adobe After Effects including advanced techniques of graphic motion over time. Techniques for creating 3-D graphics are explored in depth. Exposure to additional computer applications may include Apple's Motion, Animation Master or others.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• write in clear, concise English. (SLO 1)
• write clear and correct sentences using correct capitalization, spelling and punctuation suitable for use in a business environment.
• recognize and correct major writing errors to eliminate fragments, run-on sentences, subject-verb agreement, pronoun agreement and references.
• utilize appropriate presentation of written materials to demonstrate an awareness of the effects of style, design and packaging in working with business professionals.
• describe and apply the basic principles and processes used in traditional and digital graphic and multimedia design. (SLO 2)
• Analyze, describe and name the aesthetic value of motion graphics in communication for film, video, commercials, and the Internet.
• operate Adobe's After Effects software for advanced compositing of graphics in motion over video and moving backgrounds. Students will produce projects in other software applications to create 3D models with extrusion to be used with elements exported into Adobe's After Effects.
• formulate and construct layers video projects and prepare their computer projects for export to video tape, CD or DVD and the Internet.
• explain and demonstrate a professional production approach and analysis of personal projects, other student work, and professional video projects. (SLO 3)
• Operate 2-D and 3-D software correctly to create professional quality animations and video projects. (SLO 4)
• analyze, interpret, and exercise critical judgment in the evaluation of media productions. (SLO 5)
• evaluate their projects and contrast the quality of their work against the work of professionals and other students.
• Produce a variety of individual projects utilizing correct design and implementation of professional theory and technique. (SLO 6)
• assemble a finished animation/project, export to a computer file and print to tape as necessary following both written and verbal instructions.
• demonstrate a hands-on ability to perform the professional level critical thinking needed for successful teamwork in television, film or other media employment. (SLO 7)

RTVF 362 Digital Non-Linear Video Editing
This course will provide an overview of the theory and practice of nonlinear editing for video and film utilizing nonlinear digital editing workstations. Student will examine the technical and aesthetic requirements of editing through the use of professional film and video dailies. Projects will explore computer graphics, computer animation, audio/visual applications and digital video.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- demonstrate both the technical and aesthetic aspects of non-linear editing and demonstrate knowledge of basic production techniques. (SLO 1)
- demonstrate sound and picture continuity and multiple track manipulation including transitions and multi-cam editing function.
- modify audio and video clips available in class to learn desktop non-linear video editing techniques including the use of timecode, on-line and off-line uses, and problems of RGB to NTSC transference.
- design and construct projects with character generation, transitions and typical Hollywood style construction.
- operate hardware and software building professional sound projects. (SLO 2)
- utilize or create basic art/objects and import, modify pictures from the Internet.
- compare and contrast theories about the future for video in support of multimedia, Internet applications and professional video including the commercial, corporate and mass media audience.
- operate additional hardware including digital cameras, DVD players, VCR’s, computer projections systems, and external digital storage devices like portable hard drives or Flash drives.
- produce a final individual project utilizing correct design and implementation of professional theory and technique (SLO 3)
- demonstrate how to move video from the computer back to video tape or as Quicktime movies for CD-ROM, DVD or the Internet.
- critique professional and student work and evaluate proper technique and areas for improvement.
- describe television technology and technique in spoken and written English (SLO 4)
- define basic concepts of digital video including sampling rates, frame rates, compression, color and sound manipulation.
- analyze terms and procedures typical in audio/video production and desktop editing.

RTVF 365 Intermediate Film & Video Editing

Upon completion of this course, the student will be able to:

- write in clear, concise English. (SLO #1, pSLO-1)
- write clear and correct sentences using correct capitalization, spelling and punctuation suitable for use in a business environment.
- recognize and correct major writing errors to eliminate fragments, run-on sentences, subject-verb agreement, pronoun agreement and references.
RTVF 368 Scriptwriting for Film, Video & Multimedia

Students will learn the mechanics of scriptwriting and formatting used for film and television as well as the writer's role in pre-production and production. Additionally, students are introduced to non-linear writing for new interactive multimedia technologies.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO #1: Describe what a motion picture or television treatment is and why treatments are important.
- Construct and pitch an idea and selling that idea, citing project cost, target audience, and why the project would be a success.
- SLO #2: Produce an interactive multimedia product illustrating the use of a back-story for leading characters in scripts.
- SLO #3: Work creatively with character, conflict, plot, theme, setting, dialogue, subtext, style, tone, genre, scene, sequence, act, climax, protagonist, antagonism, and other particular elements of the well-crafted screenplay.
- Convey story ideas both orally and in writing with clarity, conviction and style.
- Understand the role of screenwriters and others in the industry, and how to present screenplays and story ideas to industry gatekeepers.
- SLO #4: Use vocabulary appropriate to the field.
- SLO #5: Analyze, interpret, and exercise critical judgment in the evaluation of media forms from different cultures.

RTVF 370 Broadcast Writing & Announcing

Students learn fundamental techniques of broadcasting with an emphasis upon speaking and writing. Students practice with specified formats in the television studio and radio workshop. Lab experiences and review of microphone use and performance in front of the camera are included. A variety of non-news writing styles are explored.
Upon completion of this course, the student will be able to:

- write in clear, concise English (SLO-1).
- write clear and correct sentences using correct capitalization, spelling and punctuation suitable for use in a professional environment.
- recognize and correct major writing errors to eliminate fragments, run-on sentences, subject-verb agreement, pronoun agreement and references.
- utilize appropriate presentation of written materials to demonstrate an awareness of the effects of style, design and packaging in working with broadcasting or industry professionals.
- write increasingly complex scripts and program proposals for consideration as possible programs for production.
- write in-depth reviews of professional and student work.
- improve writing proficiency over time.
- resolve and execute standard pre-production skills including planning, scripting, budgeting, and crew and equipment selection. (SLO-2)
- categorize and explain different scripting formats and show rundowns.
- plan group projects exploring how productions are developed in a professional way.
- utilize production equipment (consumer/professional) correctly, safely and creatively, including an exposure to cameras, microphones, and lighting. (SLO-3)
- demonstrate proper microphone placement.
- examine a variety of performance techniques and styles for both sound and video.
- practice appropriate warm-up techniques and drills in preparation for recording sessions.
- Demonstrate an understanding of how to prepare and perform scene and monologues.
- analyze, interpret, and exercise critical judgment in the evaluation of media productions. (SLO-4)
- critique student production technique and process in written and verbal form.
- criticize, evaluate and react to student productions, explaining whether projects meet their anticipated goals.
- demonstrate a hands-on ability to perform the professional level critical thinking needed for successful teamwork in television, film or other media employment. (SLO-5)
- integrate theoretical program production application into practice with increasing understanding of appropriate professional conduct.

### RTVF 371 Hollywood TV and Film Studios: A Behind the Scenes Experience

| Units: | 1 |
| Hours: | 18 hours LEC |
| Prerequisites: | RTVF 330 or 331 with a grade of "C" or better |
| Transferable: | CSU |
| Catalog Date: | June 1, 2020 |

This course provides an overview and introduction to video and film production techniques utilized by professionals in and around Hollywood, CA. Students will learn about the operation of motion picture and television studios from behind the scenes. A variety of topics including preproduction, production and post-production techniques, set design and lighting, and the history of Hollywood-style production will be included. Guest speakers will provide a professional perspective on entry-level job skills and analysis of current workforce development.

### Student Learning Outcomes

Upon completion of this course, the student will be able to:

- analyze, interpret, and exercise critical judgment in the evaluation of media productions. (SLO-1, PSLO-6)
- analyze the relationships among working professionals in the technical and creative job categories of production.
- develop an appreciation of the standards of professionalism in the workplace.
- demonstrate a hands-on ability to perform the professional level critical thinking needed for successful teamwork in television, film or other media employment. (SLO-2, PLSO-8)
- recognize various film, video or digital production techniques currently in use or under development
- inventory entry-level job skills for employment at a major professional production facility.
- compare and contrast major forces driving the entertainment industry from a cultural and economic perspective.

RTVF 376 Advertising

Same As: MKT 314
Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Transferable: CSU
Catalog Date: June 1, 2020

This course is an introduction to the field of advertising, its history, purpose, institutions, and functions. Studies are made of the various media used in general advertising, as well as the effective use of these media. Students will produce ads and advertising campaigns. This course is the same as MKT 314, and only one may be taken for credit.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO 1: DEMONSTRATE THE ABILITY TO THINK CRITICALLY AND ANALYZE PROBLEMS.
- Establish criteria for planning, advertising, and selecting appropriate media.
- Evaluate state and federal laws applicable in the field of advertising.
- SLO 2: DEMONSTRATE SKILL AND COMPREHENSION IN ADVERTISING FORMATS (AS INDICATED BY COURSE OUTCOMES).
- Demonstrate an awareness of the importance of advertising in our economy and society.
- Establish criteria for recognizing and analyzing various forms of advertising.

RTVF 378 Acting for the Camera

Same As: TA 356
Units: 3
Hours: 36 hours LEC; 54 hours LAB
Prerequisite: RTVF 370 or TA 350 with a grade of "C" or better
Transferable: CSU; UC
General Education: CSU Area C1
Catalog Date: June 1, 2020

This is an introductory course in the theory and techniques of acting for film and video, comparing the differences between stage acting and acting for the camera. Scenes and commercials are enacted and played back on videotape for class critiquing. Students experience single camera and multiple-camera studio production and performance techniques. This course is the same as TA 356, and only one may be taken for credit.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- write in clear, concise English (SLO-1).
- analyze, interpret, and exercise critical judgment in the evaluation of media productions (SLO-2).
- analyze a scene from an observer’s point of view and identify strengths and weaknesses of that presentation from a fundamental technique view point.
- formulate alternative solutions to theatrical production situations as an on-camera participant in theatre productions (SLO-3).
- demonstrate a firm foundation in the basic fundamentals of the craft of acting for the camera.
• investigate the technical and stylistic differences between stage acting and acting for the camera.
• demonstrate acting skills and talents in a video studio setting, and in a single camera out-of-order shoot.
• demonstrate understanding of performance technique using microphones.
• audition and/or perform in community, educational, or professional productions (SLO-4).
• demonstrate through projects that with the power of a communicator, comes moral and ethical responsibility (SLO-5).
• demonstrate a hands-on ability to perform the professional level critical thinking needed for successful teamwork in television, film or other media employment (SLO-6).
• demonstrate performance techniques for work in professional commercials, industrial films, theatrical films, cable and broadcast video.
• describe the steps involved in entering the business of acting for films and video.

RTVF 380 Broadcast Journalism

Units: 3
Hours: 36 hours LEC; 54 hours LAB
Prerequisite: None.
Advisory: JOUR 300, RTVF 362, and RTVF 370; and the ability to type.
Transferable: CSU
Catalog Date: June 1, 2020

The student will gain a general knowledge of the field of radio/television news writing and production. Through theoretical and practical application, the student will understand and practice writing, filming, editing, and broadcasting radio and television news.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• write in clear, concise English. (SLO #1)
• write clear and correct sentences using correct capitalization, spelling and punctuation suitable for use in a business environment.
• recognize and correct major writing errors to eliminate fragments, run-on sentences, subject-verb agreement, pronoun agreement and references.
• utilize appropriate presentation of written materials to demonstrate an awareness of the effects of style, design and packaging in working with business professionals.
• research critically, filter the results and present them in a cogent manner. (SLO #2)
• investigate and gather information for use in public presentation using library, Internet, and personal interviews.
• structure and craft messages in ways appropriate for specific audiences, including through a variety of technical skills for use in multi-media, Internet, television, film or radio delivery. (SLO #3)
• identify the varied responsibilities of Radio-TV-Internet News personnel.
• explain functional aspects of the broadcast newsroom, including duties of the assignment editor, writer, anchor, reporter, sportscaster, producer and technical staff.
• produce examples of professional-level work including writing, announcing, on-air performance and demonstrate the ability to work as a member of a team. (SLO #4)
• demonstrate through projects that with the power of a communicator, comes moral and ethical responsibility. (SLO #5)
• recognize and overcome biases, prejudices and limited viewpoints (including his or her own) so that he or she can communicate effectively in a diverse world.
• analyze and observe local and network news reports and broadcasts for effectiveness and style.

RTVF 495 Independent Studies in Radio, Television, and Film
An independent studies project involves an individual student or small group of students in study, research, or activities beyond the scope of regularly offered courses. See the current catalog section of "Special Studies" for full details of Independent Studies.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- **SLO #1**: Actively engage in intellectual inquiry beyond that required in order to pass a course of study (College Wide Learning Outcome – Area 4).
- Discuss and outline a proposal of study (that can be accomplished within one semester term) with a supervising instructor qualified within the discipline.
- Design an independent study (to be completed individually or by collaboration of a small group) to foster special knowledge, skills, and experience that are not available in any one regularly scheduled course.
- Use information resources to gather discipline-specific information.
- **SLO #2**: Utilize modes of analysis and critical thinking to apply theoretical perspectives and/or concepts in the major discipline of study to significant problems and/or educational activities (College Wide Learning Outcome – Area 3).
- Analyze and apply the knowledge, skills and experience that are involved in the independent study to theoretical perspectives and/or concepts in the major discipline of study.
- Explain the importance of the major discipline of study in the broader picture of society.
- **SLO #3**: Communicate a complex understanding of content matter of the major discipline of study (College Wide Outcome – Area 3).
- Demonstrate competence in the skills essential to mastery of the major discipline of study that are necessary to accomplish the independent study.
- **SLO #4**: Identify personal goals and pursue these goals effectively (College Wide Outcome – Area 4).
- Utilize skills from the “academic tool kit” including time management, study skills, etc., to accomplish the independent study within one semester term.

RTVF 498 Work Experience in Radio, Television and Film

This course provides students with opportunities to develop marketable skills in preparation for employment in their major field of study or advancement within their career. It is designed for students interested in work experience and/or internships in transfer level degree occupational programs. Course content includes understanding the application of education to the workforce; completion of required forms which document the student's progress and hours spent at the work site; and developing workplace skills and competencies. Appropriate level learning objectives are established by the student and the employer. During the semester, the student is required to participate in a weekly orientation and 75 hours of related paid work experience, or 60 hours of unpaid work experience for one unit. An additional 75 or 60 hours of related work experience is required for each additional unit. Work Experience may be taken for a total of 16 units when there are new or expanded learning objectives. Only one Work Experience course may be taken per semester.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- **DEMONSTRATE AN UNDERSTANDING AND APPLICATION OF PROFESSIONAL WORKPLACE BEHAVIOR IN A FIELD OF STUDY RELATED ONE’S CAREER(SLO 1)**
- Understand the effects time, stress, and organizational management have on performance.
- Demonstrate an understanding of consistently practicing ethics and confidentiality in a workplace.
- Examine the career/life planning process and relate its relevancy to the student.
- Demonstrate an understanding of basic communication tools and their appropriate use.
- Demonstrate an understanding of workplace etiquette.
- DESCRIBE THE CAREER/LIFE PLANNING PROCESS AND RELATE ITS RELEVANCY TO ONE'S CAREER (SLO 2)
- Link personal goals to long term achievement.
- Display an understanding of creating a professional first impression.
- Understand how networking is a powerful job search tool.
- Understand necessary elements of a résumé.
- Understand the importance of interview preparation.
- Identify how continual learning increases career success.

- DEMONSTRATE APPLICATION OF INDUSTRY KNOWLEDGE AND THEORETICAL CONCEPTS AS WRITTEN IN LEARNING OBJECTIVES IN PARTNERSHIP WITH THE EMPLOYER WORK SITE SUPERVISOR (SLO 3)
Real Estate | Cosumnes River College

CRC offers, in addition to a Real Estate A.A. Degree, a variety of courses available which satisfy State of California prerequisites for Real Estate Salesperson and Real Estate Broker examinations.

Dean

(916) 691-7226

PowellJ@crc.losrios.edu

Associate Degree

A.A. in Real Estate

CRC offers, in addition to a Real Estate AA Degree, a variety of courses available which satisfy State of California prerequisites for Real Estate Salesperson and Real Estate Broker examinations.

Highlights include:

* Instruction by trained, working real estate professionals
* Preparation for State of California real estate license examinations
* Training in one of the most lucrative careers in today’s world
* A lab with tutorial assistance

APPLICANTS FOR THE REAL ESTATE SALESPERSON EXAM:

To qualify to take an examination for a Real Estate Salesperson License, an applicant must submit evidence (transcripts) of having completed a college-level course in Real Estate Principles.

In addition to Real Estate Principles the applicant must also (either when qualifying for the examination, when applying for the original license or within eighteen months after license issuance) submit evidence of having completed TWO additional basic real estate courses from the following CRC course offerings. (It is recommended that Real Estate Practice be one of the courses selected.)

- Accounting 301 (1A)
- Business Law 340 (18A)
- Introduction to Escrow Procedures
- Legal Aspects of Real Estate
- Real Property Management
- Real Estate Appraisal
- Real Estate Economics
- Real Estate Finance
- Real Estate Practice

APPLICANTS FOR THE REAL ESTATE BROKER EXAMINATION:

An applicant for the Broker examination must have completed eight college-level courses, in addition to the experience/educational requirements. These eight courses should include the following CRC course offerings:

- Real Estate Principles
- Real Estate Practice
- Legal Aspects of Real Estate
- Real Estate Finance
- Real Estate Appraisal
- Real Estate Economics or Accounting 301 (1A)
- and two courses from the following group: *
  - Business Law 340 (18A)
  - Real Property Management
  - Introduction to Escrow Procedures
  - Advanced Appraisal

* If applicant completes both Accounting and Real Estate Economics, only one additional course is required.
Note to Transfer Students:
If you are interested in transferring to a four-year college or university to pursue a bachelor's degree in this major, it is critical that you meet with a CRC counselor to select and plan the courses for your major. Schools vary widely in terms of the required preparation. The courses that CRC requires for an Associate's degree in this major may be different from the requirements needed for the Bachelor's degree.

Catalog Date: June 1, 2020

Degree Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>BUSINESS CORE:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ACCT 301</td>
<td>Financial Accounting</td>
<td>4</td>
</tr>
<tr>
<td>BUS 310</td>
<td>Business Communications</td>
<td>3</td>
</tr>
<tr>
<td>BUS 330</td>
<td>Managing Diversity in the Workplace</td>
<td>3</td>
</tr>
<tr>
<td>BUS 340</td>
<td>Business Law</td>
<td>3</td>
</tr>
<tr>
<td>BUS 300</td>
<td>Introduction to Business</td>
<td>3</td>
</tr>
<tr>
<td>BUSTEC 302</td>
<td>Computer-Keyboarding</td>
<td>2</td>
</tr>
<tr>
<td>MKT 300</td>
<td>Principles of Marketing</td>
<td>3</td>
</tr>
<tr>
<td>ECON 302</td>
<td>Principles of Macroeconomics (3)</td>
<td>3</td>
</tr>
<tr>
<td>or BUS 320</td>
<td>Concepts in Personal Finance (3)</td>
<td></td>
</tr>
<tr>
<td>or ECON 320</td>
<td>Concepts in Personal Finance (3)</td>
<td></td>
</tr>
<tr>
<td>or ECON 100</td>
<td>Introduction to Economics (3)</td>
<td></td>
</tr>
</tbody>
</table>

**Computer science courses within Business Core:** [ CISC 310] or [CISC 302/JOUR 333 + 2 units from the listed CISC/CISA courses]:

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>CISC 310</td>
<td>Introduction to Computer Information Science (3)</td>
<td>2 - 4</td>
</tr>
<tr>
<td>or [[ CISC 302]</td>
<td>Computer Familiarization (2)</td>
<td></td>
</tr>
<tr>
<td>or JOUR 330 ]</td>
<td>Computer Familiarization (2)</td>
<td></td>
</tr>
<tr>
<td>and [[[ CISA 340]</td>
<td>Presentation Graphics (2)</td>
<td></td>
</tr>
<tr>
<td>or CISA 320 ]</td>
<td>Introduction to Database Management (1)</td>
<td></td>
</tr>
<tr>
<td>or CISA 315 ]</td>
<td>Introduction to Electronic Spreadsheets (2)</td>
<td></td>
</tr>
<tr>
<td>or CISA 305 ]]</td>
<td>Beginning Word Processing (2)</td>
<td></td>
</tr>
</tbody>
</table>

**REAL ESTATE FOCUS:**

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>RE 300</td>
<td>California Real Estate Principles</td>
<td>3</td>
</tr>
<tr>
<td>RE 110</td>
<td>Legal Aspects of Real Estate</td>
<td>3</td>
</tr>
<tr>
<td>RE 120</td>
<td>Real Estate Practice</td>
<td>3</td>
</tr>
<tr>
<td>RE 130</td>
<td>Real Estate Finance</td>
<td>3</td>
</tr>
<tr>
<td>RE 140</td>
<td>Real Estate Appraisal</td>
<td>3</td>
</tr>
<tr>
<td>RE 190</td>
<td>Real Property Management</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Units: 44 - 46
The Real Estate Associate in Arts (A.A.) degree may be obtained by completion of the required program, plus general education requirements, plus sufficient electives to meet a 60-unit total. See CRC graduation requirements.

Career Information

Real Estate Agent; Real Estate Broker; Real Estate Appraiser Some career options may require more than two years of college study.

Certificates of Achievement

Real Estate Broker Certificate

CRC offers courses which satisfy State of California prerequisites for Real Estate Broker examinations.

Highlights include:

* Instruction by trained, working real estate professionals
* Preparation for State of California real estate license examinations
* Training in one of the most lucrative careers in today's world
* A lab with tutorial assistance

APPLICANTS FOR THE REAL ESTATE BROKER EXAMINATION

An applicant for the Broker examination must have completed eight college-level courses, in addition to the experience/educational requirements. These eight courses should include the following CRC course offerings:

- Real Estate Principles
- Real Estate Practice
- Legal Aspects of Real Estate
- Real Estate Finance
- Real Estate Appraisal
- Real Estate Economics or Accounting 301 (1A)
- and two courses from the following group: *
  - Business Law 340 (1BA)
  - Real Property Management
  - Introduction to Escrow Procedures
  - Advanced Appraisal

* If applicant completes both Accounting and Real Estate Economics, only one additional course is required.

Catalog Date: June 1, 2020

Certificate Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>RE 300</td>
<td>California Real Estate Principles</td>
<td>3</td>
</tr>
<tr>
<td>RE 110</td>
<td>Legal Aspects of Real Estate</td>
<td>3</td>
</tr>
<tr>
<td>RE 120</td>
<td>Real Estate Practice</td>
<td>3</td>
</tr>
<tr>
<td>RE 130</td>
<td>Real Estate Finance</td>
<td>3</td>
</tr>
<tr>
<td>RE 140</td>
<td>Real Estate Appraisal</td>
<td>3</td>
</tr>
<tr>
<td>RE 150</td>
<td>Real Estate Economics (3)</td>
<td>3 - 4</td>
</tr>
<tr>
<td>or ACCT 301</td>
<td>Financial Accounting (4)</td>
<td></td>
</tr>
<tr>
<td>RE 190</td>
<td>Real Property Management</td>
<td>3</td>
</tr>
<tr>
<td>A minimum of 3 units from the following:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>RE 141</td>
<td>Advanced Appraisal (3)</td>
<td></td>
</tr>
<tr>
<td>RE 160</td>
<td>Introduction to Escrow Procedures (3)</td>
<td></td>
</tr>
<tr>
<td>RE 161</td>
<td>Advanced Escrow Procedures (3)</td>
<td></td>
</tr>
<tr>
<td>BUS 340</td>
<td>Business Law (3)</td>
<td></td>
</tr>
<tr>
<td>Total Units:</td>
<td></td>
<td>24 - 25</td>
</tr>
</tbody>
</table>
Real Estate Sales Certificate
CRC offers, in addition to a Real Estate AA Degree, a variety of courses available which satisfy State of California prerequisites for Real Estate Salesperson and Real Estate Broker examinations.

Highlights include:
* Instruction by trained, working real estate professionals
* Preparation for State of California real estate license examinations
* Training in one of the most lucrative careers in today's world
* A lab with tutorial assistance

APPLICANTS FOR THE REAL ESTATE SALESPERSON EXAM
To qualify to take an examination for a Real Estate Salesperson License, an applicant must submit evidence (transcripts) of having completed a college-level course in Real Estate Principles.

In addition to Real Estate Principles the applicant must also (either when qualifying for the examination, when applying for the original license or within eighteen months after license issuance) submit evidence of having completed TWO additional basic real estate courses from the following CRC course offerings. (It is recommended that Real Estate Practice be one of the courses selected.)
• Accounting 301 (1A)
• Business Law 340 (18A)
• Introduction to Escrow Procedures
• Legal Aspects of Real Estate
• Real Property Management
• Real Estate Appraisal
• Real Estate Economics
• Real Estate Finance
• Real Estate Practice

Certificate Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>RE 300</td>
<td>California Real Estate Principles</td>
<td>3</td>
</tr>
<tr>
<td>RE 120</td>
<td>Real Estate Practice</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>A minimum of 3 units from the following:</td>
<td>3</td>
</tr>
<tr>
<td>RE 110</td>
<td>Legal Aspects of Real Estate (3)</td>
<td></td>
</tr>
<tr>
<td>RE 130</td>
<td>Real Estate Finance (3)</td>
<td></td>
</tr>
<tr>
<td>RE 140</td>
<td>Real Estate Appraisal (3)</td>
<td></td>
</tr>
<tr>
<td>RE 190</td>
<td>Real Property Management (3)</td>
<td></td>
</tr>
</tbody>
</table>

Total Units: 9

Real Estate (RE)

RE 110 Legal Aspects of Real Estate

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Catalog Date: June 1, 2020

This course is a study of California real estate laws. Topics include: the sources of law and the judicial system; agency; duties and responsibilities of licensees; contracts and their application to real estate; property ownership and management; real estate security devices; property rights, liens and homesteads; landlord-tenant law, land use controls, and title insurance and escrow. Completion of the course applies toward the California Department of Real Estate education requirements for the broker's examination.

Student Learning Outcomes

Upon completion of this course, the student will be able to:
RE 120 Real Estate Practice

Upon completion of this course, the student will be able to:

- SLO 1: DEMONSTRATE SKILL AND COMPREHENSION IN RESPECTIVE SUBJECT AREAS AS INDICATED BY COURSE OUTCOMES.
  - Demonstrate an understanding of real estate practices and transactions.
- SLO 2: EXPRESS IDEAS AND FACTS CLEARLY AND COMPLETELY.
  - Demonstrate a basic understanding of the fundamental concepts and practices of real estate with an emphasis on residential property.
  - Define the technical terminology involved in the real estate field.
  - Describe the necessary background and qualifications for the California Real estate Broker's license examination.

RE 130 Real Estate Finance

Upon completion of this course, the student will be able to:

- SLO 1: DEMONSTRATE SKILL AND COMPREHENSION IN RESPECTIVE SUBJECT AREAS AS INDICATED BY COURSE OUTCOMES PERTAINING TO REAL ESTATE FINANCE.
  - Demonstrate understanding of the workings of the real estate finance system.
  - Identify sources of funds and the various entities which affect qualifications therefore and availability thereof.
  - Demonstrate skills in the theoretical applications of real estate financing.
- SLO 2: DEMONSTRATE THE ABILITY TO THINK CRITICALLY AND ANALYZE PROBLEMS.
Demonstrate ability to analyze various aspects of real estate finance including loan processing, appraisal for lenders, foreclosure, secondary markets, construction loans, mathematics of real estate finance and creative techniques.

RE 140 Real Estate Appraisal

- **Units:** 3
- **Hours:** 54 hours LEC
- **Prerequisite:** None.
- **Catalog Date:** June 1, 2020

This course covers the purposes of appraisals; the appraisal process; and the different approaches, methods and techniques used to determine the value of various types of property. The course emphasizes residential single family properties and applies toward the educational requirement for the Real Estate Broker's License, and Licensed and General Appraiser's License.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- **SLO 1:** DEMONSTRATE SKILL AND COMPREHENSION IN RESPECTIVE SUBJECT AREAS AS INDICATED BY COURSE OUTCOMES PERTAINING TO REAL ESTATE APPRAISAL.
  - Demonstrate understanding of various methods of analyzing market data, building cost data, depreciation, and income and expense data.
  - Demonstrate the necessary background for passing the Appraisal license examination.
  - Demonstrate knowledge of the appraisal process, the nature of problems that may be encountered, and the tools and procedures necessary to solve these problems.

RE 141 Advanced Appraisal

- **Units:** 3
- **Hours:** 54 hours LEC
- **Prerequisite:** RE 140 with a grade of "C" or better
- **Catalog Date:** June 1, 2020

This course discusses advanced appraisal concepts with an emphasis on market and income analysis, capitalization techniques, rate derivation, compound interest tables, cost and sales comparison approaches; and the appraisal of specific income properties such as apartments, office buildings, shopping centers and industrial properties.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- **SLO 1:** DEMONSTRATE SKILL AND COMPREHENSION IN RESPECTIVE SUBJECT AREAS AS INDICATED BY COURSE OUTCOMES PERTAINING TO THE ADVANCED APPRAISAL PROCESS.
  - Understand the various methods of adjusting comparable sales to indicate the value of the appraised property, including the reason for and the ability to adjust for nonstandard financing, where appropriate.
  - Identify the primary motivation for purchasing real property, recognize the relationship between the various rates of return, see the interrelationships among present and future worth functions; develop and property use capitalization rates; and computer an overall capitalization rate and properly apply it to net operating income.
  - Describe several methods for capitalizing income; determine which of the residual techniques of capitalization is most applicable in determining and estimate of value under circumstances; understand the comparative strengths and weaknesses of each of the residual techniques.

- **SLO 2:** DEMONSTRATE THE ABILITY TO THINK CRITICALLY AND ANALYZE PROBLEMS.
  - Distinguish among leased fee, leasehold estate, and fee simple interest and understand how to value a leased fee interest, a leasehold estate, and a sandwich lease.

- **SLO 3:** EXPRESS IDEAS AND FACTS CLEARLY AND COMPLETELY.
  - Determine appropriate time to use the depreciated cost approach; distinguish between economic life and physical life; and compute cost and depreciation using different methods.
Identify why typical management is assumed in conducting market value appraisals; distinguish between potential gross income and effective gross income; understand the need to undertake a comprehensive lease analysis, recognize different conditions that can distort rental income and expenses; reconstruct an owner’s operating expense statement; discern the difference between capital and operating expenditures; and understand the proper ways of setting up allowances for replacements.

**RE 150 Real Estate Economics**

| Units: | 3 |
| Hours: | 54 hours LEC |
| Prerequisite: | None. |
| Catalog Date: | June 1, 2020 |

This course covers nature and classification of real estate and real estate investments, economic development of real property, real estate cycles and market trends. Governmental and private sector influence on the economics of real estate is covered. It is recommended that this course be taken last in the real estate course series.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- **SLO 1: DEMONSTRATE SKILL AND COMPREHENSION IN RESPECTIVE SUBJECT AREAS AS INDICATED BY COURSE OUTCOMES PERTAINING TO REAL ESTATE ECONOMICS.**
- Describe the economic principles that govern real estate markets and buyer/seller behavioral patterns.
- **SLO 2: DEMONSTRATE THE ABILITY TO THINK CRITICALLY AND ANALYZE PROBLEMS.**
- Describe the economic impacts of income and property taxation on market value.
- Logically interpret national, regional, and community trends in terms of their effects on real estate.
- Analyze and apply sound economic principles to income processing through the use of break-even analysis, cash equivalents, capitalization theory, and internal fair rates of return.

**RE 160 Introduction to Escrow Procedures**

| Units: | 3 |
| Hours: | 54 hours LEC |
| Prerequisite: | None. |
| Catalog Date: | June 1, 2020 |

This course covers the functions and responsibilities of the escrow holder, including actual preparation of escrow instructions and documents in a typical real estate transaction. Audit, disbursement, the issuance of closing statements and analysis of title insurance policies are covered.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- **SLO 1: DEMONSTRATE THE ABILITY TO THINK CRITICALLY AND ANALYZE PROBLEMS.**
- Acquire and demonstrate basic understanding of the fundamental principles and procedures involved in ordinary escrow transactions.
- Demonstrate knowledge of the content, purpose and use of the basic forms/formats generally used in the processing of an escrow.
- Analyze the various types of title insurance policies.
- **SLO 2: EXPRESS IDEAS AND FACTS CLEARLY AND COMPLETELY.**
- Explain the procedures used in opening, processing, and closing an escrow.
- Define, understand and use the technical terminology used in the escrow industry.
RE 161 Advanced Escrow Procedures

This course covers unusual and difficult types of escrow, including the evaluation of possible solutions with emphasis on real estate loans, financing instruments and exchanges.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO 1: DEMONSTRATE THE ABILITY TO THINK CRITICALLY AND ANALYZE PROBLEMS.
  - Identify the problems of unusual escrows.
  - Analyze escrow situations and offer solutions to the situations and/or problems.
  - Demonstrate application of escrow procedures in the real estate field.
  - Prepare escrows.
- SLO 2: DEMONSTRATE SKILL AND COMPREHENSION IN RESPECTIVE SUBJECT AREAS AS INDICATED BY COURSE OUTCOMES.
  - Understand escrow procedures for complex real estate transactions.

RE 190 Real Property Management

This course covers the day-to-day operation and management of real property including: marketing procedures, leases, maintenance, accounting and economics, recordkeeping, management forms, legal requirement, laws, human relations, employer responsibilities and management.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO 1: DEMONSTRATE THE ABILITY TO THINK CRITICALLY AND ANALYZE PROBLEMS.
  - Identify and apply the basis of economic management forms used for all management requirements of tenant and owner.
  - Apply knowledge and skill in the legal aspects of rental management.
- SLO 2: DEMONSTRATE SKILL AND COMPREHENSION IN RESPECTIVE SUBJECT AREAS AS INDICATED BY COURSE OUTCOMES PERTAINING TO REAL ESTATE PROPERTY MANAGEMENT.
  - Explain the history of industry in commercial and residential properties.
  - Demonstrate an understanding of the human element in income property management.

RE 295 Independent Studies in Real Estate

An independent studies project involves an individual student or small group of students in study, research, or activities beyond the scope of regularly offered courses. See the current catalog section of “Special Studies” for full details of Independent Studies.

Student Learning Outcomes
Upon completion of this course, the student will be able to:

- SLO #1: Actively engage in intellectual inquiry beyond that required in order to pass a course of study (College Wide Learning Outcome – Area 4).
- Discuss and outline a proposal of study (that can be accomplished within one semester term) with a supervising instructor qualified within the discipline.
- Design an independent study (to be completed individually or by collaboration of a small group) to foster special knowledge, skills, and experience that are not available in any one regularly scheduled course.
- Use information resources to gather discipline-specific information.
- SLO #2: Utilize modes of analysis and critical thinking to apply theoretical perspectives and/or concepts in the major discipline of study to significant problems and/or educational activities (College Wide Learning Outcome – Area 3).
- Analyze and apply the knowledge, skills and experience that are involved in the independent study to theoretical perspectives and/or concepts in the major discipline of study.
- Explain the importance of the major discipline of study in the broader picture of society.
- SLO #3: Communicate a complex understanding of content matter of the major discipline of study (College Wide Outcome – Area 3).
- Demonstrate competence in the skills essential to mastery of the major discipline of study that are necessary to accomplish the independent study.
- SLO #4: Identify personal goals and pursue these goals effectively (College Wide Outcome – Area 4).
- Utilize skills from the “academic tool kit” including time management, study skills, etc., to accomplish the independent study within one semester term.

RE 296 Internship in Real Estate

Units: 3
Hours: 18 hours LEC; 108 hours LAB
Prerequisite: RE 300 with a grade of "C" or better
Catalog Date: June 1, 2020

This course provides students with a supervised, structured, hands-on experience in real estate sales and introduces/develops the skills necessary to assist them in obtaining employment in the real estate industry. Course content will include understanding the benefits and responsibilities of an internship, developing workplace skills identified by local real estate professionals, applying student learning outcomes to work-related activities, and acquiring/enhancing knowledge of the real estate industry through lecture, textbook readings, and guest speakers. In addition to 18 hours of lecture, the student is required to complete 108 hours of work-related internship over the semester.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO #1: Apply principles and information from prior classroom study to the daily activities of a real estate salesperson through supervised on-the-job experience.
- Describe the duties and expectations of a real estate salesperson.
- Explain the process of buying and selling a parcel of real estate.
- Discuss different methods used in the real estate industry for building a clientele.
- Describe the role of financing in the real estate purchasing process.
- Know and explain the different types of disclosures and inspections a buyer and/or lender may require during the purchase and financing of a property.
- Describe the roles and responsibilities of other entities and professionals in the real estate industry.

RE 300 California Real Estate Principles
This fundamental real estate course covers the basic laws and principles of California real estate, giving understanding, background, and terminology necessary for advanced study in specialized courses. This course is required by the California Department of Real Estate prior to taking the real estate salesperson's examination.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- **SLO 1: DEMONSTRATE THE ABILITY TO UNDERSTAND IMPORTANT REAL ESTATE PRINCIPLES, CONCEPTS, AND TERMINOLOGY AND HOW THEY IMPACT THE BUSINESS OF REAL ESTATE.**
  - Understand the various methods of acquiring and transferring real property.
  - Understand and describe the methods available for holding title to real estate, the requirements of a valid deed, and how legal encumbrances (liens, easements, and encroachments) affect the use and value of real property.
  - Describe the necessary background and qualifications for the California Real Estate Salesperson's and Broker's License and understand the requirements of the state licensing examination.
  - Understand the concept of agency, including how agency relationships are formed, duties of agent and principal, and the liability of the parties. Describe the fiduciary responsibilities arising from an agency relationship. Discuss the concept of ethics and its role in the real estate transaction process.
  - Understand the essential elements of a valid real estate contract and describe the common forms used in a real estate transaction, including the listing agreement, purchase contract, and required disclosures.
  - Identify and describe the various approaches to real estate appraisal and which valuation approach is best for a particular situation.
  - Understand the landlord and tenant relationship and the duties owed to each other.
  - Evaluate the consequences of failing to comply with state and federal laws pertaining to fair housing, environmental impact, and subdivisions.

- **SLO 2: DEMONSTRATE THE ABILITY TO THINK CRITICALLY AND ANALYZE PROBLEMS SO AS TO BE ABLE TO APPLY REAL ESTATE PRINCIPLES AND CONCEPTS TO RESOLVE REAL AND HYPOTHETICAL REAL ESTATE ISSUES.**
  - Analyze real estate statutory and case law to understand important legal principles and apply the legal rules to fact patterns to reach defensible legal conclusions.
  - Demonstrate the ability to utilize the internet and other media and web based content to conduct research and complete the real estate transaction process.

RE 495 Independent Studies in Real Estate

An independent studies project involves an individual student or small group of students in study, research, or activities beyond the scope of regularly offered courses. See the current catalog section of "Special Studies" for full details of Independent Studies.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- **SLO #1: Actively engage in intellectual inquiry beyond that required in order to pass a course of study (College Wide Learning Outcome – Area 4).**
  - Discuss and outline a proposal of study (that can be accomplished within one semester term) with a supervising instructor qualified within the discipline.
  - Design an independent study (to be completed individually or by collaboration of a small group) to foster special knowledge, skills, and experience that are not available in any one regularly scheduled course.
RE 498 Work Experience in Real Estate

This course provides students with opportunities to develop marketable skills in preparation for employment in their major field of study or advancement within their career. It is designed for students interested in work experience and/or internships in transfer level degree occupational programs. Course content includes understanding the application of education to the workforce; completion of required forms which document the student's progress and hours spent at the work site; and developing workplace skills and competencies. Appropriate level learning objectives are established by the student and the employer. During the semester, the student is required to participate in a weekly orientation and 75 hours of related paid work experience, or 60 hours of unpaid work experience for one unit. An additional 75 or 60 hours of related work experience is required for each additional unit. Work Experience may be taken for a total of 16 units when there are new or expanded learning objectives. Only one Work Experience course may be taken per semester.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- DEMONSTRATE AN UNDERSTANDING AND APPLICATION OF PROFESSIONAL WORKPLACE BEHAVIOR IN A FIELD OF STUDY RELATED TO ONE’S CAREER.(SLO 1)
  - Understand the effects time, stress, and organizational management have on performance.
  - Demonstrate an understanding of consistently practicing ethics and confidentiality in a workplace.
  - Examine the career/life planning process and relate its relevancy to the student.
  - Demonstrate an understanding of basic communication tools and their appropriate use.
  - Demonstrate an understanding of workplace etiquette.

- DESCRIBE THE CAREER/LIFE PLANNING PROCESS AND RELATE ITS RELEVANCY TO ONE’S CAREER.(SLO 2)
  - Link personal goals to long term achievement.
  - Display an understanding of creating a professional first impression.
  - Understand how networking is a powerful job search tool.
  - Understand necessary elements of a résumé.
  - Understand the importance of interview preparation.
  - Identify how continual learning increases career success.

- DEMONSTRATE APPLICATION OF INDUSTRY KNOWLEDGE AND THEORETICAL CONCEPTS AS WRITTEN IN LEARNING OBJECTIVES IN PARTNERSHIP WITH THE EMPLOYER WORK SITE SUPERVISOR.(SLO 3)
Science | Cosumnes River College

CRC students may choose courses in the various disciplines of science to meet any of several objectives. Courses are designed to: Prepare students for transfer and continuation of studies at other colleges or universities (chemistry, biology, medicine, etc.); meet general education requirements for non-science majors; prepare students for immediate entry into a science-based technology career; and provide for career advancement and continuing education.

Many courses include hands-on practical experience and/or opportunities for work experience in local industry and business.

The student, in consultation with a counselor, should choose science courses to meet his or her program, transfer, or general education requirements. The Counseling Center also has information regarding science requirements for transfer to other four-year institutions.

Dean

Department Chairs  Banafsheh Amini

 (916) 691-7537

 coxr@crrc.losrios.edu (mailto:coxr@crrc.losrios.edu)

Associate Degrees

A.S. in Environmental Studies & Sustainability

The Environmental Studies & Sustainability Associate of Science degree is an interdisciplinary and multidisciplinary program of study that presents a broad overview of ecological issues from a variety of perspectives in the natural, physical, and social sciences. The coursework examines the interplay between natural and social systems, and the ideological foundations of humankind's attitudes and behaviors with respect to their ever-changing environment. This program is designed to prepare students to research, analyze, and propose solutions to the myriad environmental challenges facing the world today.

This degree is designed to correlate with the lower division courses required to transfer into an Environmental Studies program at many four-year institutions as well as provide broad-based environmental education for transfer in related disciplines.

The disciplines of environmental studies and geography are complementary fields, both focused on aspects of human-environment interaction. This complementarity is reflected in the many 4-year institutions that house combined Geography and Environmental Study programs. Students interested in double-majoring in these two closely-related disciplines, and/or simultaneously earning a Certificate in Geographic Information Systems, are encouraged to examine the required coursework and plan their program of study accordingly.

Students should use PROJECT ASSIST (http://www.assist.org) to research lower division major requirements at the transfer institution of their choice and should also work with the program adviser and a counselor to determine the appropriate transfer coursework.

Students interested in pursuing an Environmental Science major should consult with science faculty and counselors to tailor the specific coursework necessary to transfer to the 4-year institution of their choice.

Catalog Date: June 1, 2020

Degree Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>GEOG 302</td>
<td>Environmental Studies &amp; Sustainability</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 350</td>
<td>Environmental Biology (3)</td>
<td>3</td>
</tr>
<tr>
<td>or BIOL 352</td>
<td>Conservation Biology (3)</td>
<td></td>
</tr>
<tr>
<td>ECON 306</td>
<td>Environmental Economics</td>
<td>3</td>
</tr>
<tr>
<td>COURSE CODE</td>
<td>COURSE TITLE</td>
<td>UNITS</td>
</tr>
<tr>
<td>-------------</td>
<td>--------------</td>
<td>-------</td>
</tr>
<tr>
<td><strong>Field/Applied Courses:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A minimum of 3 units from the following:</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>BIOL 390</td>
<td>Natural History Field Study (0.5 - 4)</td>
<td></td>
</tr>
<tr>
<td>GEOG 391</td>
<td>Field Studies in Geography: Mountain Landscapes (1 - 4)</td>
<td></td>
</tr>
<tr>
<td>GEOG 392</td>
<td>Field Studies in Geography: Coastal Landscapes (1 - 4)</td>
<td></td>
</tr>
<tr>
<td>GEOG 393</td>
<td>Field Studies in Geography: Arid Landscapes (1 - 4)</td>
<td></td>
</tr>
<tr>
<td>GEOG 394</td>
<td>Field Studies in Geography: Volcanic Landscapes (1 - 4)</td>
<td></td>
</tr>
<tr>
<td>GEOL 390</td>
<td>Field Studies in Geology (1 - 4)</td>
<td></td>
</tr>
<tr>
<td>GEOG 331</td>
<td>Exploring Maps and Geographic Technologies (3)</td>
<td></td>
</tr>
<tr>
<td>GEOG 335</td>
<td>Introduction to Geographic Information Systems Applications (3)</td>
<td></td>
</tr>
<tr>
<td><strong>Natural Science/Ecology Courses:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A minimum of 3 units from the following:</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>BIOL 300</td>
<td>The Foundations of Biology (3)</td>
<td></td>
</tr>
<tr>
<td>BIOL 307</td>
<td>Biology of Organisms (4)</td>
<td></td>
</tr>
<tr>
<td>BIOL 310</td>
<td>General Biology (4)</td>
<td></td>
</tr>
<tr>
<td>BIOL 400</td>
<td>Principles of Biology (5)</td>
<td></td>
</tr>
<tr>
<td><strong>Chemistry Courses:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A minimum of 4 units from the following:</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>CHEM 305</td>
<td>Introduction to Chemistry (5)</td>
<td></td>
</tr>
<tr>
<td>CHEM 321</td>
<td>Environmental Chemistry (3)</td>
<td></td>
</tr>
<tr>
<td>CHEM 322</td>
<td>Environmental Chemistry Laboratory (1)</td>
<td></td>
</tr>
<tr>
<td>CHEM 400</td>
<td>General Chemistry I (5)</td>
<td></td>
</tr>
<tr>
<td><strong>Earth Science Courses:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A minimum of 3 units from the following:</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>GEOG 300</td>
<td>Physical Geography: Exploring Earth's Environmental Systems (3)</td>
<td></td>
</tr>
<tr>
<td>GEOG 301</td>
<td>Physical Geography Laboratory (1)</td>
<td></td>
</tr>
<tr>
<td>GEOG 305</td>
<td>Global Climate Change (3)</td>
<td></td>
</tr>
<tr>
<td>GEOL 300</td>
<td>Physical Geology (3)</td>
<td></td>
</tr>
<tr>
<td>GEOL 301</td>
<td>Physical Geology Laboratory (1)</td>
<td></td>
</tr>
<tr>
<td><strong>Quantitative Courses:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A minimum of 3 units from the following:</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>ECON 310</td>
<td>Statistics for Business and Economics (3)</td>
<td></td>
</tr>
<tr>
<td>PSYC 330</td>
<td>Introductory Statistics for the Behavioral Sciences (3)</td>
<td></td>
</tr>
<tr>
<td>STAT 300</td>
<td>Introduction to Probability and Statistics (4)</td>
<td></td>
</tr>
<tr>
<td>MATH 350</td>
<td>Calculus for the Life and Social Sciences I (3)</td>
<td></td>
</tr>
<tr>
<td>MATH 400</td>
<td>Calculus I (5)</td>
<td></td>
</tr>
<tr>
<td>COURSE CODE</td>
<td>COURSE TITLE</td>
<td>UNITS</td>
</tr>
<tr>
<td>-------------</td>
<td>--------------------------------------------------</td>
<td>-------</td>
</tr>
<tr>
<td>ECON 304</td>
<td>Principles of Microeconomics</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 310</td>
<td>Human Geography: Exploring Earth's Cultural Landscapes</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total Units:</strong></td>
<td></td>
<td><strong>31</strong></td>
</tr>
</tbody>
</table>

The Environmental Studies & Sustainability Associate in Science (A.S.) degree may be obtained by completion of the required program, plus general education requirements, plus sufficient electives to meet a 60-unit total. See CRC graduation requirements.

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- **PSLO-1**: Articulate an understanding of the natural environment and human societies' relationship to it. This includes the ability to:
  1. Communicate effectively about environmental issues and sustainability, correctly utilizing vocabulary while indicating a complex understanding of disciplines in the program.
  2. Articulate an awareness of the relevance of environmental studies to the student's life and wider community at both local and global scales.
  3. Recognize the importance of interdisciplinary and multidisciplinary approaches to solving environmental problems.

- **PSLO-2**: Evaluate and analyze environmental processes and human impacts on the natural environment. This includes the ability to:
  1. Use logical and quantitative reasoning to solve environmental problems.
  2. Analyze critical environmental problems facing the world today.
  3. Evaluate data and draw reasonable conclusions.
  4. Utilize the scientific method.
  5. Employ information-gathering tools to investigate environmental ideas.

- **PSLO-3**: Recognize the ethical dimensions of decisions and actions and engage in the ethical reasoning necessary to be a responsible local and global citizen. This includes the ability to:
  1. Recognize the ethical implications of research and the responsibility to use knowledge wisely.
  2. Articulate the value of understanding environmental systems.

- **PSLO-4**: Transfer to a 4-year program and further prepare for employment in an environmental career.

Career Information

Natural Resource Management; Forestry; Range Management; Park Ranger; Wildlife Biology; Agriculture; Soil and Water Conservation; Land Use Planning; Waste Management; Environmental Education; Environmental Policy And Planning; Environmental Law; Environmental Consulting; Environmental Lobbying; Environmental Planning; Environmental Protection; Environmental Compliance; Environmental Engineering; Air Quality Control; Landscape Architecture; Urban and Regional Planning; Alternative Energy Development; Risk Analysis; Contaminated Lands Reclamation; Research; Consulting

A.S. in Geography

Geography is the science of place and space. Geographers study the relationships among geographic places, natural systems, society, cultural activities, and the interdependence of all these over space.

There are two main branches of geography: human geography and physical geography. Human geography is concerned with the spatial aspects of human existence – how people and their activities are distributed in space, how people use and perceive space, and how people create and sustain the places that make up Earth's surface. Physical geographers study the physical elements and spatial processes that make up and shape the environment, including energy, air, water, weather, climate, landforms, soils, animals, plants, etc. Many human and physical geographers have skills in cartography and Geographic Information Systems (GIS).
Geographers also study the linkages between human activity and natural systems. Geographers were, in fact, among the first scientists to sound the alarm that human-induced changes to the environment were beginning to threaten the balance of life itself. Geographers today are active in the study of global warming, desertification, deforestation, loss of biodiversity, groundwater pollution, flooding, and more.

The CRC Geography program offers courses that satisfy lower division General Education requirements in both the physical and social sciences. In addition, the program offers an Associate Degree in Geography that provides students with a solid foundation in geography as well as the standard prerequisites for upper-division coursework leading to the baccalaureate degree. Students may also earn a certificate in Geographic Information Systems (GIS). Students planning to transfer to a four-year school with a major in Geography should consult the lower division requirements at the university they plan to attend.

Note to Transfer Students:
If you are interested in transferring to a four-year college or university to pursue a bachelor's degree in this major, it is critical that you meet with a CRC counselor to select and plan the courses for your major. Schools vary widely in terms of the required preparation. The courses that CRC requires for an Associate's degree in this major may be different from the requirements needed for the Bachelor's degree.

Highlights include:
* Comprehensive course offerings including a Physical Laboratory as well as specialized training in Geographic Information Systems (GIS)
* Program's students have won top awards at state-level competitions annually since 1999
* Field study courses to Yosemite, Pt. Reyes, Monterey/Big Sur, Tahoe, and the Eastern Sierra
* Internships available with State of California, County of Sacramento, and Federal Land Management Agencies
* Three courses fulfill the CRC and CSU multicultural requirement
* Day, evening, and online sections

**Catalog Date:** June 1, 2020

**Degree Requirements**

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fall or Spring semester:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GEOG 300</td>
<td>Physical Geography: Exploring Earth's Environmental Systems</td>
<td>3¹</td>
</tr>
<tr>
<td><strong>Fall or Spring semester (best if concurrent with GEOG 300):</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GEOG 301</td>
<td>Physical Geography Laboratory</td>
<td>1</td>
</tr>
<tr>
<td><strong>Fall or Spring semester:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GEOG 310</td>
<td>Human Geography: Exploring Earth's Cultural Landscapes</td>
<td>3</td>
</tr>
<tr>
<td><strong>Fall Semester:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GEOG 331</td>
<td>Exploring Maps and Geographic Technologies (3)</td>
<td>3</td>
</tr>
<tr>
<td><strong>Check with departments for scheduled offering:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PSYC 330</td>
<td>Introductory Statistics for the Behavioral Sciences (3)</td>
<td>3 - 4</td>
</tr>
<tr>
<td>or STAT 300</td>
<td>Introduction to Probability and Statistics (4)</td>
<td></td>
</tr>
<tr>
<td>or ECON 310</td>
<td>Statistics for Business and Economics (3)</td>
<td></td>
</tr>
<tr>
<td><strong>Check with departments for scheduled offering:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A minimum of 6 units from the following:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ANTH 310</td>
<td>Cultural Anthropology (3)</td>
<td></td>
</tr>
<tr>
<td>BIOL 350</td>
<td>Environmental Biology (3)</td>
<td></td>
</tr>
<tr>
<td>or BIOL 310</td>
<td>General Biology (4)</td>
<td></td>
</tr>
<tr>
<td>or BIOL 307</td>
<td>Biology of Organisms (4)</td>
<td></td>
</tr>
<tr>
<td>ECON 304</td>
<td>Principles of Microeconomics (3)</td>
<td></td>
</tr>
<tr>
<td>or ECON 302</td>
<td>Principles of Macroeconomics (3)</td>
<td></td>
</tr>
<tr>
<td>GEOG 302</td>
<td>Environmental Studies &amp; Sustainability (3)</td>
<td></td>
</tr>
<tr>
<td>GEOG 305</td>
<td>Global Climate Change (3)</td>
<td></td>
</tr>
<tr>
<td>COURSE CODE</td>
<td>COURSE TITLE</td>
<td>UNITS</td>
</tr>
<tr>
<td>-------------</td>
<td>-------------------------------------------------------</td>
<td>-------</td>
</tr>
<tr>
<td>GEOG 306</td>
<td>Weather and Climate (3)</td>
<td></td>
</tr>
<tr>
<td>GEOG 320</td>
<td>World Regional Geography (3)</td>
<td></td>
</tr>
<tr>
<td>GEOG 322</td>
<td>Geography of California (3)</td>
<td></td>
</tr>
<tr>
<td>GEOG 335</td>
<td>Introduction to Geographic Information Systems Applications (3)</td>
<td></td>
</tr>
<tr>
<td>GEOG 391</td>
<td>Field Studies in Geography: Mountain Landscapes (1 - 4)</td>
<td></td>
</tr>
<tr>
<td>GEOG 392</td>
<td>Field Studies in Geography: Coastal Landscapes (1 - 4)</td>
<td></td>
</tr>
<tr>
<td>GEOG 393</td>
<td>Field Studies in Geography: Arid Landscapes (1 - 4)</td>
<td></td>
</tr>
<tr>
<td>GEOG 394</td>
<td>Field Studies in Geography: Volcanic Landscapes (1 - 4)</td>
<td></td>
</tr>
<tr>
<td>GEOL 300</td>
<td>Physical Geology (3)</td>
<td></td>
</tr>
<tr>
<td>GEOL 301</td>
<td>Physical Geology Laboratory (1)</td>
<td></td>
</tr>
<tr>
<td>GEOL 330</td>
<td>Introduction to Oceanography (3)</td>
<td></td>
</tr>
<tr>
<td>HIST 371</td>
<td>History of the Americas from the 19th Century Wars of Independence to the Present (3)</td>
<td></td>
</tr>
<tr>
<td>or HIST 370</td>
<td>History of the Americas through the 19th Century Wars of Independence (3)</td>
<td></td>
</tr>
<tr>
<td>or HIST 360</td>
<td>History of African Civilizations (3)</td>
<td></td>
</tr>
<tr>
<td>or HIST 308</td>
<td>History of World Civilizations, 1500 to Present (3)</td>
<td></td>
</tr>
<tr>
<td>or HIST 307</td>
<td>History of World Civilizations to 1500 (3)</td>
<td></td>
</tr>
<tr>
<td>HUM 332</td>
<td>American Humanities (3)</td>
<td></td>
</tr>
<tr>
<td>or HUM 324</td>
<td>Global Islam: Culture and Civilization (3)</td>
<td></td>
</tr>
<tr>
<td>or HUM 320</td>
<td>Asian Humanities (3)</td>
<td></td>
</tr>
<tr>
<td>PHIL 352</td>
<td>Introduction to World Religions (3)</td>
<td></td>
</tr>
<tr>
<td>POLS 310</td>
<td>Introduction to International Relations (3)</td>
<td></td>
</tr>
<tr>
<td>SOC 300</td>
<td>Introductory Sociology (3)</td>
<td></td>
</tr>
<tr>
<td>Total Units:</td>
<td></td>
<td>19 - 20</td>
</tr>
</tbody>
</table>

1A minimum of 60 units is required for the A.S. degree which includes core courses, electives, and general education (GE) graduation requirements. Geography majors are encouraged to complete additional GE requirements from a list of suggested courses on file in the Geography Department and at the Counseling Center. Students should use PROJECT ASSIST (http://www.assist.org) to research lower division major requirements at the transfer institution of their choice and also work with a counselor to determine the most appropriate transfer coursework.

The Geography Associate in Science (A.S.) degree may be obtained by completion of the required program, plus general education requirements, plus sufficient electives to meet a 60-unit total. See CRC graduation requirements.

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- <b>SLO#1: demonstrate understanding of the global natural and cultural environments and the geographic methods by which they are studied</b>
- <b>SLO#2: compare and contrast the general biophysical and socio-cultural differences and similarities among world regions that operate through time and over space</b>
- <b>SLO#3: evaluate and analyze critical geographic issues facing the world today</b>
- <b>SLO#4: recognize the diversity of peoples, places, and events globally as well as within specific geographic regions</b>
SLO#5: interpret maps and mapped data utilizing basic map elements, including scales, common coordinate systems, and map symbols.

SLO#6: use a computer effectively to research, map and analyze geographic information.

SLO#7: compare and contrast common geographic technologies such as geographic information systems (GIS) and the global positioning system (GPS).

SLO#8: communicate geographic information effectively in oral, written, and graphic form.

Career Information

Natural Resource Management; Environmental Conservation; International Development; Urban and Regional Planning; Education (K-12 through University); Tourism; Cartographer; Climatologist; Park Ranger; Transportation Specialist; Real Estate Analyst; International Business; Marketing Analyst; Land Surveyor; Research Scientist; Remote Sensing Specialist; Demographer; GIS Analyst; and many more (please contact the program for additional information). Some career options may require more than two years of college study.

Certificate of Achievement

Sustainability Certificate

This certificate advances student's understanding of the principles of sustainability and sustainable practices with respect to ecosystems, green buildings, business, agriculture, nutrition, natural resource management and conservation, waste management, energy, transportation systems, urban planning and design, and more. Theoretical and practical aspects of sustainability are explored including social, economic, and environmental dimensions.

Catalog Date: June 1, 2020

Certificate Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>GEOG 302</td>
<td>Environmental Studies &amp; Sustainability</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>A minimum of 9 units from the following:</td>
<td>9</td>
</tr>
<tr>
<td>ARCH 342</td>
<td>Introduction to Green Buildings (3)</td>
<td></td>
</tr>
<tr>
<td>BIOL 350</td>
<td>Environmental Biology (3)</td>
<td></td>
</tr>
<tr>
<td>BIOL 352</td>
<td>Conservation Biology (3)</td>
<td></td>
</tr>
<tr>
<td>ECON 306</td>
<td>Environmental Economics (3)</td>
<td></td>
</tr>
<tr>
<td>GEOG 300</td>
<td>Physical Geography: Exploring Earth's Environmental Systems (3)</td>
<td></td>
</tr>
<tr>
<td>GEOG 305</td>
<td>Global Climate Change (3)</td>
<td></td>
</tr>
<tr>
<td>HORT 300</td>
<td>Introduction to Horticulture (3)</td>
<td></td>
</tr>
<tr>
<td>PLTS 310</td>
<td>Soils, Soil Management, and Plant Nutrition (3)</td>
<td></td>
</tr>
<tr>
<td>or HORT 302</td>
<td>Soils, Soil Management, and Plant Nutrition (3)</td>
<td></td>
</tr>
<tr>
<td>HORT 313</td>
<td>Sustainable Agriculture (3)</td>
<td></td>
</tr>
<tr>
<td>NUTRI 303</td>
<td>Plant-Based Nutrition (3)</td>
<td></td>
</tr>
<tr>
<td>NUTRI 331</td>
<td>Plant-Based Food Principles and Preparation (3)</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Total Units:</strong></td>
<td><strong>12</strong></td>
</tr>
</tbody>
</table>

Upon completion of this program, the student will be able to:

- PSLO#1: Communicate effectively about environmental issues and sustainability, utilizing correct vocabulary.
• PSLO#2: Articulate an awareness of the relevance of sustainability to the student’s life and wider community at both local and global scales.

• PSLO#3: Evaluate and analyze environmental problems facing the world today and propose sustainable solutions.

• PSLO#4: Employ information-gathering tools to investigate theoretical and practical aspects of sustainability in the context of energy consumption, transportation systems, food production, water resources, industry, the built environment, and socio-cultural institutions and practices.

Career Information

This certificate prepares students for entry-level sustainability consultant/technician positions in a variety of industries and settings, including private firms, nonprofit organizations, educational institutions, and government agencies at the local, state, and federal levels. Work opportunities for those pursuing additional coursework include positions in environmental economics, sustainable business practices, green building, natural resource management, food systems, energy, transportation, and urban planning.
Social Justice Studies (SJS)

SJS 300 Introduction to Social Justice Studies

Units: 3  
Hours: 54 hours LEC  
Prerequisite: None.  
Advisory: ENGW 100  
Transferable: CSU  
General Education: AA/AS Area V(b) (effective Summer 2020); AA/AS Area VI (effective Summer 2020)  
C-ID: C-ID SJS 110  
Catalog Date: June 1, 2020

This interdisciplinary course introduces students to the theoretical and practical foundations of social justice and the social processes that create and resist oppression. It covers the sociology, history, and psychology of oppressions based upon race, ethnicity, class, gender, sexuality, and other group identities in the United States and abroad and the corresponding social justice movements for liberation. It investigates how creating and undoing asymmetrical power relations are linked to social structures, institutional processes, and culture. Additionally, it provides a basis for a better understanding of socioeconomic, political, and cultural conditions of key social groups in the United States and globally. Topics include theoretical foundations of social justice and oppression, history and politics of group identity, culture and ideologies, forms of oppression, privilege, and forms of resistance. Field trips may be required.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- DEFINE THE FOUNDATIONAL THEORIES WITHIN SOCIAL JUSTICE STUDIES. (SLO 1)
- Critically evaluate the methodologies and ethics of social justice research including the role of bias. (Objective 1a)
- Identify and analyze the foundations of social justice studies in ethical theory. (Objective 1b)
- ASSESS THE STATUS, GROWTH, AND DIVERSITY OF MINORITY GROUPS IN THE UNITED STATES. (SLO 2)
- Explain the histories, experiences, and contributions of groups oppressed because of race, ethnicity, class, gender, and sexuality in the United States. (Objective 2a)
- Identify and analyze the role of culture in oppression and in empowerment, including art, film, literature, or music reflecting different groups. (Objective 2b)
- ANALYZE THE COMPLEX INTERSECTIONS AND RELATIONSHIPS WITHIN AND ACROSS RACE, ETHNICITY, SOCIOECONOMIC CLASS, GENDER, SEXUAL ORIENTATION, AND OTHER IDENTITIES. (SLO 3)
- Identify systematic forms of oppression and analyze the role of privilege and intersectionality for minority groups. (Objective 3a)
- Apply the operation of privilege, oppression, and power asymmetry to major institutions such as education, health care, the economy and the criminal justice system. (Objective 3b)
- IDENTIFY AND UNDERSTAND STRUGGLES OF SOCIAL JUSTICE, LIBERATION, AND DECOLONIZATION FOR RESISTING GROUPS GLOBALLY. (SLO 4)
- Compare social justice movements in the United States to those globally. (Objective 4a)
- Assess the importance of human rights efforts in promoting social justice around the world through non-governmental and grass roots organizations. (Objective 4b)
SJS 310 Introduction to LGBTQ Studies

This interdisciplinary course introduces students to Lesbian, Gay, Bisexual, Transgender, and Queer (LGBTQ+) studies. It explores how LGBTQ+ communities in the U.S. and abroad are impacted by various social, cultural, historical, and political factors that create and resist oppression. It investigates the politics of sexuality and sexual identities as they intersect with race, ethnicity, class, and gender. It evaluates how sexual and gender prejudices function alongside racism, sexism, and classism. Additionally, it provides a historical understanding of how queer activism and resistance movements in the U.S. and globally have responded to oppression and violence against LGBTQ communities. This course also includes contemporary LGBTQ+ issues in family, education, religion, and the law.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- ANALYZE THE VARIOUS WAYS PEOPLE IDENTIFY THEIR SEXUAL ORIENTATION AND/OR THEIR GENDER IDENTITY AND EXPRESSION. (SLO 1)
- Examine sexual orientation and gender identity within Native American, African American, Latinx, Asian American, Pacific Islander, and recent immigrant communities in the United States and abroad. (Objective 1a)
- Assess theories about sexual orientation and gender identity and expression within the context of feminist theory, gender theory, and queer theory. (Objective 1b)
- EXPLORE THE INTERSECTIONS AND INTERRELATIONSHIPS BETWEEN SYSTEMIC FORMS OF OPPRESSION AGAINST LGBTQ COMMUNITIES AND THEIR INTERSECTING IDENTITIES WITHIN THE CONTEXT OF LGBTQ POLITICAL STRUGGLES IN THE UNITED STATES AND GLOBALLY. (SLO 2)
- Assess the impact of hate crimes on LGBTQ individuals, the LGBTQ individuals, the community at large, and public policy. (Objective 2a)
- Identify key historical movements and describe its contribution to domestic and international LGBTQ struggles for full human rights. (Objective 2b)
- ASSESS THE CONTINUOUS EVOLUTION OF LEGAL POLICIES AND SOCIETAL VIEWS OF LGBTQ PEOPLE ON A GLOBAL LEVEL. (SLO 3)
- Research the history of public health policy in the United States as well as internationally to explore the ways that LGBTQ people have consistently suffered under policies structured by sexual and gendered prejudices. (Objective 3a)
- Explore the impact of our education system on the ability of LGBTQ individuals and communities to achieve social justice and equity. (Objective 3b)
- EXAMINE THE EVOLUTION OF LGBTQ CULTURE IN LITERATURE, THE MEDIA, AND THE ARTS. (SLO 4)
- Identify strategies LGBTQ artists use to draw the relationship between art and political resistance (Objective 4a).
The Social Science department offers classes in law and society and special studies in the areas of Mexican-American, Asian, and Native American experiences.

Dean

 (916) 691-7142
 WilliaL3@crc.losrios.edu

Associate Degree

A.A. in Social Science

The Social Science department offers classes in law and society and special studies in the areas of Mexican-American, Asian, and Native American experiences. These classes provide an excellent background for further study.

The program includes 21 units of coursework in the following areas: anthropology, economics, geography, history, philosophy, political science, psychology, social science, or sociology.

This degree enables the student to experience a wide range of diverse social science disciplines. To verify the transferability of specific courses and their university application, please consult your CRC counselor. Students who wish to transfer to a four-year college or university should plan their programs to meet general education and lower division major requirements. All students are encouraged to consult with a counselor.

Highlights include:
* Opportunities to build a foundation for interdisciplinary studies
* Overview of theoretical, methodological, analytical, and cultural principles

Note to Transfer Students:
If you are interested in transferring to a four-year college or university to pursue a bachelor's degree in this major, it is critical that you meet with a CRC counselor to select and plan the courses for your major. Schools vary widely in terms of the required preparation. The courses that CRC requires for an Associate's degree in this major may be different from the requirements needed for the Bachelor's degree.

Catalog Date: June 1, 2020

Degree Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>A minimum of 21 units from the following:</td>
<td>21</td>
</tr>
<tr>
<td></td>
<td>Twenty-one (21) units must be completed in at least three different subject areas from those listed: Anthropology, Economics, Geography 310, History, Political Science, Philosophy 360, Psychology, Social Science, Sociology.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total Units:</td>
<td>21</td>
</tr>
</tbody>
</table>

The Social Science Associate in Arts (A.A.) degree may be obtained by completion of the required program, plus general education requirements, plus sufficient electives to meet a 60-unit total. See CRC graduation requirements.

Student Learning Outcomes
Upon completion of this course, the student will be able to:

- Identify and comprehend an individual's relationship to structures in the larger society.
- Apply effective critical thinking skills to interpret sociological phenomena.
- Assess the significance of important social movements in American society.
- Define and identify various theoretical perspectives across the discipline of Sociology.
- Comprehend how social practices facilitate the functioning of social structures as they are responsible for maintaining the society as a whole.
- Analyze, interpret, and critically think about sociological ascriptions to race, gender, ethnicity, class, sexual orientation, political affiliation, and other sociological concepts.

Career Information

Instructor: Social Worker; Researcher; Criminal Justice; Social Services; Business and Corporate employment. Some career options may require more than two years of college study.

Social Science (SOCSC)

SOCSC 360 Law and Society

This course is an introduction to the American legal system emphasizing the nature, purpose, sources and functioning of American law but including some comparative analysis of other historical and contemporary legal systems. It stresses the evolution of legal concepts as a reflection of the social environment and the role of the judiciary. A theoretical rather than practical viewpoint is used through analysis of selected cases and legislation in the areas of individualism, socioeconomic groups, the family, the economy, crime, criminal procedure and punishment, church and state separation, the environment, and torts. This course should not be taken for any major for which BUS 340 is required, as it is not comparable. This course is the same as BUS 345, and only one may be taken for credit. See “Cross-Listed Courses” in the catalog.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO 1: DEMONSTRATE SKILL AND COMPREHENSION IN RESPECTIVE SUBJECT AREAS AS INDICATED BY COURSE OUTCOMES PERTAINING TO BUSINESS LAW.
- Develop an understanding of the law as an evolutionary, stabilizing, and reforming factor in human affairs with, however, certain limitations as an instrument of social control.
- Develop an understanding of the magnitude and vitality of the law and the ways in which history, economics, sociology, psychology, and technology have influenced and have been influenced by the law.
- Develop an understanding of the basic organization and operation of the American judicial system.
- Develop an understanding of the Anglo-American Common Law System; its historical origin; some of its fundamental concepts; and the complexities inherent in such a multifaceted institution.
- Develop an understanding of the nature and purpose of law in society.
- SLO 2: DEMONSTRATE THE ABILITY TO THINK CRITICALLY AND ANALYZE PROBLEMS.
- Develop an understanding of the role of logic, critical analysis, imagination, and creativity in the study and application of the law and the legal process.

SOCSC 495 Independent Studies in Social Science

Upon completion of this program, the student will be able to:

- Identify and comprehend an individual's relationship to structures in the larger society.
- Apply effective critical thinking skills to interpret sociological phenomena.
An independent studies project involves an individual student or small group of students in study, research, or activities beyond the scope of regularly offered courses. See the current catalog section of "Special Studies" for full details of Independent Studies.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- **SLO #1**: Actively engage in intellectual inquiry beyond that required in order to pass a course of study (College Wide Learning Outcome – Area 4).
- Discuss and outline a proposal of study (that can be accomplished within one semester term) with a supervising instructor qualified within the discipline.
- Design an independent study (to be completed individually or by collaboration of a small group) to foster special knowledge, skills, and experience that are not available in any one regularly scheduled course.
- Use information resources to gather discipline-specific information.
- **SLO #2**: Utilize modes of analysis and critical thinking to apply theoretical perspectives and/or concepts in the major discipline of study to significant problems and/or educational activities (College Wide Learning Outcome – Area 3).
- Analyze and apply the knowledge, skills and experience that are involved in the independent study to theoretical perspectives and/or concepts in the major discipline of study.
- Explain the importance of the major discipline of study in the broader picture of society.
- **SLO #3**: Communicate a complex understanding of content matter of the major discipline of study (College Wide Outcome – Area 3).
- Demonstrate competence in the skills essential to mastery of the major discipline of study that are necessary to accomplish the independent study.
- **SLO #4**: Identify personal goals and pursue these goals effectively (College Wide Outcome – Area 4).
- Utilize skills from the "academic tool kit" including time management, study skills, etc., to accomplish the independent study within one semester term.

**Units:** 1 - 3  
**Hours:** 54 - 162 hours LAB  
**Prerequisite:** None.  
**Transferable:** CSU  
**Catalog Date:** June 1, 2020
Sociology | Cosumnes River College

Cosumnes River College offers courses and a degree in the study of human behavior in society. The discipline is concerned with the study of systems and how individuals work and interact within them.

Dean
(916) 691-7142
WilliaL3@crc.losrios.edu

Associate Degree for Transfer

A.A.-T. in Sociology

Cosumnes River College Sociology Associate in Arts for Transfer Program is designed to facilitate successful transfer to baccalaureate sociology degree programs. This degree provides students with the lower division breadth and depth of the field of sociology. Additionally, this degree exposes students to the core principles and practices in the field. Students will learn to: identify and comprehend their individual relationship to structures in the larger society; apply effective critical thinking skills to interpret sociological phenomena; assess the significance of important social movements in American society; define and identify various theoretical perspectives across the discipline of sociology; and analyze, interpret, and critically think about sociological ascriptions to race, gender, ethnicity, class, sexual orientation, political affiliation, and other sociological concepts.

Catalog Date: June 1, 2020

Degree Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>SOC 300</td>
<td>Introductory Sociology</td>
<td>3</td>
</tr>
<tr>
<td>SOC 301</td>
<td>Social Problems</td>
<td>3</td>
</tr>
<tr>
<td>SOC 302</td>
<td>Introduction to Social Research Methods</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 330</td>
<td>Introductory Statistics for the Behavioral Sciences (3)</td>
<td>3 - 4</td>
</tr>
<tr>
<td>or STAT 300</td>
<td>Introduction to Probability and Statistics (4)</td>
<td></td>
</tr>
</tbody>
</table>

A minimum of 6 units from the following:

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>SOC 305</td>
<td>Critical Thinking in the Social Sciences (3)</td>
<td></td>
</tr>
<tr>
<td>SOC 310</td>
<td>Marriage and the Family (3)</td>
<td></td>
</tr>
<tr>
<td>SOC 321</td>
<td>Race, Ethnicity and Inequality in the United States (3)</td>
<td></td>
</tr>
<tr>
<td>SOC 341</td>
<td>Sex and Gender in the U.S. (3)</td>
<td></td>
</tr>
</tbody>
</table>

Total Units: 18 - 19

The Associate in Arts in Sociology for Transfer (AA-T) degree may be obtained by completion of 60 transferable, semester units with a minimum 2.0 GPA, including (a) the major or area of emphasis described in the Required Program, and (b) either the Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education-Breadth Requirements.

Student Learning Outcomes
Upon completion of this program, the student will be able to:

- (PSLO1) Identify and comprehend their individual relationship to structures in the larger society.
- Individuals will comprehend the magnitude of their influence on social structures in society, and the social structures that influence them.
- Demonstrate an awareness of the sociological resources available within the structures of society.
- Effectively utilize social structures as resources in society to facilitate their own movement and/or progress in society.
- (PSLO2) Apply effective critical thinking skills to interpret sociological phenomena.
- Apply sociological approaches to assess a social context.
- Distinguish between macro-level and micro-level orientations of assessment of given social contexts.
- Investigate and determine which social contexts require objective or subjective analysis.
- (PSLO3) Assess the significance of important social movements in American society.
- Demonstrate an awareness of the consistent goals, perspectives, and factors leading to social movements.
- Assess the significance of social movements of marginalized people in society.
- Explain the outcomes of social movements in American society.
- (PSLO4) Define and identify various theoretical perspectives across the discipline of Sociology.
- Discuss and Explain Social Conflict Approach.
- Discuss and Explain Symbolic Interactionist Approach.
- Discuss and Explain Structural Functionalist Approach.
- (PSLO5) Comprehend how social practices facilitate the functioning of social structures as they are responsible for maintaining the society as a whole.
- Examine and assess the effects of sociocultural customs and traditions on social structures and institutions.
- Analyze and evaluate values and norms present in the behavior of individuals and groups occupying society's social structures and institutions.
- Investigate the relationship between religion, language, customs and traditions, and how they facilitate comprehension of values and influence social practices.
- (PSLO6) Analyze, interpret, and critically think about sociological ascriptions to race, gender, ethnicity, class, sexual orientation, political affiliation, and other sociological concepts.
- Discuss and explain how ascriptions to sociological concepts affects and shapes individuals and groups' life chances and opportunities.
- Demonstrate content knowledge of how and why particular ideas are ascribed to sociological concepts.
- Explain and assess the socialization that individuals and groups undergo due to ideas ascribed to sociological concepts.

Career Information

Sociologists with advanced degrees and professional certificates have a broad range of employment opportunities including, but not limited to, teacher, social worker, probation officer, employment counselor, urban planner, and data analyst. NOTE TO TRANSFER STUDENTS: The Associate Degree for Transfer program is designed for students who plan to transfer to a campus of the California State University (CSU). Other than the required core, the courses you choose to complete this degree will depend to some extent on the selected CSU for transfer. In addition, some CSU-GE Breadth or IGETC requirements can also be completed using courses required for this associate degree for transfer major (known as "double-counting"). The Associate Degree for Transfer may not provide adequate preparation for upper-division transfer admissions; it is critical that you meet with a CRC counselor to select and plan the courses for the major, as programs vary widely in terms of the required preparation.

Sociology (SOC)

SOC 300 Introductory Sociology
This course is a study of human behavior in society, including social groups, culture, personality, social stratification, social change, collective behavior and social institutions.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO1: Develop the ability to analyze everyday experience from a sociological perspective.
  - Objective 1a: Understand how social forces influence people.
  - Objective 1b: Apply sociological imagination to recognize inequality of race, gender and class.
  - Objective 1c: Evaluate how institutions and organizations impact individuals.
- SLO 2: Demonstrate an understanding of the scientific nature of social research.
  - Objective 1a: Understand the components of research.
  - Objective 1b: Develop an ability to interpret facts through critical thinking and the use of the inquiry method.
  - Objective 1c: Recognize the various methods of research.
  - Objective 1d: Compare and contrast the three sociological theories.

SOC 301 Social Problems

This course is a survey of social problems in American society. It will examine their causes and evaluate proposed solutions. A special emphasis will be placed on local issues.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO1: Demonstrate an ability to analyze contemporary social problems which exists in society.
  - Objectives 1a: Identify objective and subjective criterion for defining social problem.
  - Objective 1b: Articulate how sociological concepts can be used to explain social problems.
  - Objective 1c: Understand charts, diagrams and statistics of a given problem.
- SLO2: Recognize how social problems are analyzed at a macro and micro-level
  - Objective 2a: Master the three sociological paradigms used in the analysis of social problems.
  - Objective 2b: Describe how various theories address the social problem.
  - Objective 2c: Evaluate the validity of conclusions of the social problems by the three paradigms.

SOC 302 Introduction to Social Research Methods
This course examines theoretical and ethical principles in social science research with an applied emphasis on research design, utilization of qualitative and quantitative techniques, data coding, data cleaning and organization, descriptive and inferential analysis, and the writing of research reports. Students will be introduced to the application of statistical software for quantitative areas of course work.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO 1: Develop the ability to analyze and apply scientific research methods from a sociological perspective.
  
- Objective 1a: Recognize the various methods of research.
  
- Objective 1b: Apply scientific steps to construct a hypothesis, select a methodology, and collect and analyze data.
  
- Objective 1c: Differentiate between qualitative methods and quantitative methods as research tools and assess projects that might benefit from a mixed modality approach.
  
- SLO 2: Demonstrate an understanding and ability to assess the scientific nature of social research.
  
- Objective 2a: Utilize statistical software to organize, clean, and run descriptive and inferential analysis of data.
  
- Objective 2b: Demonstrate an ability to apply critical thinking skills to evaluate literature reviews and research databases to find common themes in research design and reporting.
  
- Objective 2c: Integrate research into a report with a project description, methodology, analysis, conclusions, and future areas of research
  
- Objective 2d: Identify ethical issues in research

SOC 305 Critical Thinking in the Social Sciences

This course examines the definitional and contextual nature of social issues. It develops a "critical thinking" approach which integrates interdisciplinary principles and incorporates a comparative framework utilizing literary criticism, logic, argumentation, and persuasion to analyze and compare the content and validity of social problems. This course specifically explores how the media and scientific community collect, interpret, and report social data. Combining critical thinking techniques with the sociological perspective will help students to question the "taken-for-granted" assumptions that surround social phenomena and influence human behavior.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- Demonstrate an ability to identify and apply the principles and logic of social science research methods (SLO1).
  
- Recognize and analyze the process by which social issues are constructed as "problems" by the media, politicians and social elites (SLO2).
  
- Demonstrate an ability to apply critical thinking skills to assess the logic of an argument (SLO3).
  
- Objective 3a: Identify the issue of an article or piece of information.
  
- Objective 3b: Identify the conclusion statement of an author's written piece or a speaker's presentation.
  
- Objective 3c: Identify and criticize the reasons provided by an author or speaker.
• Objective 3d: Evaluate faulty reasoning, insufficient evidence, and unsupported conclusions used in the analysis and reporting of social problems.

• Objective 3e: Understand the use of statistics, tables, and charts in the presentation of an argument.

• Objective 3f: Contrast ideographic (full description) & nomothetic (generalized understanding) approaches to knowledge used by scientists, politicians & the media.

• Investigate and critically analyze information presented in everyday publications and media venues for their strengths and weaknesses (SLO4).

• Apply library research methods and computer skills in the collection, analysis, and reporting of social data (SLO5).

• Objective 5a: Compare and contrast the use of ‘expert opinion’, primary and secondary sources, and the influence of special interest groups in recognizing and giving credence to evidence reported about social problems.

• Demonstrate improved writing and analytical skills within the social sciences (with a minimum of 8,000 words in written assignments) [SLO6].

SOC 310 Marriage and the Family

This course will examine the social, psychological, cross-cultural, political, historical and economic factors relating to the changing family, marriage, remarriage and significant relationships. The intersection of race, ethnicity, class, age, gender, and sexuality will be explored.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• SLO 1: DEMONSTRATE AN UNDERSTANDING OF SOCIOLOGICAL THEORIES RELATING TO THE SOCIAL INSTITUTION OF THE FAMILY.
  
  Objective 1a: Examine cross-cultural, historical, political, and economic factors in the development of the family form and function.

  Objective 1b: Examine the racial and ethnic variations of the American family.

  Objective 1c: Examine the intersection of class, age, and gender in the family.

  Objective 1d: Examine sexuality and the emergence of new family forms.

• SLO2: EXAMINE THE INFLUENCE OF CHANGING GENDER ROLES IN MARRIAGE AND FAMILY.
  
  Objective 2a: Identify the expressive and instrumental roles of men and women and demonstrate an understanding of their historical change.

  Objective 2b: Assess the impact of evolving social structures such as economy, education, religion and politics and their impact on gender roles.

  Objective 2c: Understand the socialization process in the family and the various form of parenting.

• SLO3: APPRAISE AREAS OF CONFLICT AND CONFLICT RESOLUTION IN INTIMATE RELATIONSHIPS.
  
  Objective 3a: Identify reasons for conflict.

  Objective 3b: Examine methods of conflict resolution.

  Objective 3c: Apply Sociological Imagination in interpreting reasons for divorce and rise in remarriages.

  Objective 3d: Discuss the socio-economic and political implications of divorce and remarriages on men, women and children.

SOC 321 Race, Ethnicity and Inequality in the United States
This course is a social profile of major American minority groups. It examines the problems of minority assimilation into an "open" society and culture.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- SLO 1: Explain how an individual's race or ethnicity can affect the quality of their interactions in social structures throughout the larger society.
- Objective 1A: Explain how race and ethnicity can impact an individual's experience with structural assimilation.
- SLO 2: Define and identify various sociological theoretical perspectives in regard to the experiences of racial and ethnic groups.
- Objective 2A: Explain assimilation theories, which help us to understand the ideal social conditions under which different ethnic groups can become part of American society.
- Objective 2B: Explain Social Conflict Theory and the sub-theories of internal colonialism, separatism, and secessionism, and cultural pluralism which help us understand the impact of these processes in American society.
- SLO 3 Analyze how prejudice, discrimination, and racism have both historically and contemporarily disadvantaged minority groups in American society and simultaneously advantaged the majority group in American society.
- Objective 3A: Explain the terms genocide, forced removal, slavery, segregation, social distance, cultural assimilation, primary structural assimilation, and secondary structural assimilation.
- Objective 3B: Describe the various ways that people show combinations of prejudice and discrimination according to Robert Merton, such as Active Bigot, Timid Bigot, All-Weather Liberal, and Fair-Weather Liberal
- Objective 3C: Examine both inter and intra-group social conflict.
- SLO 4: Explain the historical legacies of racial and ethnic inequalities and inequities and how these have led to contemporary social issues.
- Objective 4A: Describe the effects of stigma, the social construction of race, and stereotypes.
- SLO 5: Assess the significance of racial and ethnic groups' social movements in American society.
- Objective 5A: Explain the Civil Rights Movements of African Americans, Native Americans (AIM), Hispanic or Latino (Chicano Movement), and Asian Americans.
- Objective 5B: Examine the impact of these movements on the social perceptions of different groups in U.S. society. Students will understand race as a social construction of reality.

**SOC 341 Sex and Gender in the U.S.**

This course provides a study of the changing roles of women and men in the US. Theories of women's and men's gender role socialization, gender related inequalities, health and body issues, and a current examination of the women's and men's movements will be explored.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- SLO 1: Articulate the general principles of biological, psychological, anthropological, and sociological theories to the study of sex and gender.
SOC 495 Independent Studies in Sociology

Units: 1 - 3
Hours: 54 - 162 hours LAB
Prerequisite: None.
Transferable: CSU
Catalog Date: June 1, 2020

An independent studies project involves an individual student or small group of students in study, research, or activities beyond the scope of regularly offered courses. See the current catalog section of "Special Studies" for full details of Independent Studies.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO #1: Actively engage in intellectual inquiry beyond that required in order to pass a course of study (College Wide Learning Outcome – Area 4).
- Discuss and outline a proposal of study (that can be accomplished within one semester term) with a supervising instructor qualified within the discipline.
- Design an independent study (to be completed individually or by collaboration of a small group) to foster special knowledge, skills, and experience that are not available in any one regularly scheduled course.
- Use information resources to gather discipline-specific information.
- SLO #2: Utilize modes of analysis and critical thinking to apply theoretical perspectives and/or concepts in the major discipline of study to significant problems and/or educational activities (College Wide Learning Outcome – Area 3).
- Analyze and apply the knowledge, skills and experience that are involved in the independent study to theoretical perspectives and/or concepts in the major discipline of study.
- Explain the importance of the major discipline of study in the broader picture of society.
- SLO #3: Communicate a complex understanding of content matter of the major discipline of study (College Wide Outcome – Area 3).
- Demonstrate competence in the skills essential to mastery of the major discipline of study that are necessary to accomplish the independent study.
- SLO #4: Identify personal goals and pursue these goals effectively (College Wide Outcome – Area 4).
- Utilize skills from the "academic tool kit" including time management, study skills, etc., to accomplish the independent study within one semester term.
Spanish | Cosumnes River College

CRC offers the basic grammar and conversation courses in Spanish. Students will be able to understand the spoken language, to speak with reasonable fluency, and to write at their speaking level.

Dean

 (916) 691-7740

CasareA@crc.losrios.edu (mailto:CasareA@crc.losrios.edu)

Associate Degrees for Transfer

A.A.-T. in Spanish

The Associate in Arts in Spanish for Transfer Degree (AA-T) is designed to provide a seamless transfer pathway for students interested in pursuing at least one Spanish degree option in the California State University (CSU) system. Students must complete the core curriculum and electives to meet a total of 60 transferable units with a minimum 2.0 GPA, which includes the CSU General Education Breadth or the Intersegmental General Education Transfer Curriculum (IGETC) pattern. Students must also earn a grade of C or better in all the courses for the major as described in the Required Program. Upon successful completion of the degree requirements, students will be guaranteed admission to the CSU system with junior status and will not have to repeat lower division coursework. Students are encouraged to meet with a counselor to develop their educational plans as degree options and general education requirements vary for each university.

Catalog Date: June 1, 2020

Degree Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>A minimum of 3 units from the following:</td>
<td>3(^1)</td>
</tr>
<tr>
<td>SPAN 426</td>
<td>Introduction to Mexican American Literature (3)</td>
<td></td>
</tr>
<tr>
<td>SPAN 427</td>
<td>Introduction to Spanish American Literature (3)</td>
<td></td>
</tr>
<tr>
<td>HIST 373</td>
<td>History of Mexico (3)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Subtotal Units:</td>
<td>3</td>
</tr>
</tbody>
</table>

OPTION I - Non-Native Spanish Speaker

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPAN 401</td>
<td>Elementary Spanish</td>
<td>4</td>
</tr>
<tr>
<td>SPAN 402</td>
<td>Elementary Spanish</td>
<td>4</td>
</tr>
<tr>
<td>SPAN 411</td>
<td>Intermediate Spanish</td>
<td>4</td>
</tr>
<tr>
<td>SPAN 412</td>
<td>Intermediate Spanish</td>
<td>4</td>
</tr>
<tr>
<td>COURSE CODE</td>
<td>COURSE TITLE</td>
<td>UNITS</td>
</tr>
<tr>
<td>-------------</td>
<td>--------------</td>
<td>-------</td>
</tr>
<tr>
<td>OPTION I - Non-Native Spanish Speaker Units:</td>
<td></td>
<td>16</td>
</tr>
<tr>
<td></td>
<td>Total Units:</td>
<td>19</td>
</tr>
</tbody>
</table>

**OPTION II - Native Spanish Speaker**

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPAN 413</td>
<td>Spanish for Native Speakers I</td>
<td>4</td>
</tr>
<tr>
<td>SPAN 415</td>
<td>Spanish for Native Speakers II</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>A minimum of 8 units from the following:</td>
<td>8</td>
</tr>
<tr>
<td>SPAN 426, 427, and/or HIST 373, if not already used.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SPAN 425</td>
<td>Advanced Reading and Conversation (3)</td>
<td></td>
</tr>
<tr>
<td>HUM 331</td>
<td>Latin American Humanities (3)</td>
<td></td>
</tr>
<tr>
<td>ENGLT 336</td>
<td>Race and Ethnicity in Contemporary American Literature (3)</td>
<td></td>
</tr>
<tr>
<td>HIST 371</td>
<td>History of the Americas from the 19th Century Wars of Independence to the Present (3)</td>
<td></td>
</tr>
<tr>
<td>OPTION II - Native Spanish Speaker Units:</td>
<td></td>
<td>16</td>
</tr>
<tr>
<td></td>
<td>Total Units:</td>
<td>19</td>
</tr>
</tbody>
</table>

1SPAN 426 and 427 have a prerequisite of SPAN 412 or 415, so many of the "Option" courses will need to be completed before these courses.

The Associate in Arts in Spanish for Transfer (AA-T) degree may be obtained by completion of 60 transferable, semester units with a minimum 2.0 GPA, including (a) the major or area of emphasis described in the Required Program, and (b) either the Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education-Breadth Requirements.

**Student Learning Outcomes**

Upon completion of this program, the student will be able to:

- utilize correct grammatical structures of standard Spanish.
- read Spanish proficiently as found, for example, in Spanish language newspapers, magazines, short stories, essays, and selections of poetry written by Spanish, Spanish-American, and Chicano authors.
- demonstrate appropriate writing and composition skills using Spanish.
- discuss and critique Spanish-American literature in a historical context.
- demonstrate proficiency in these areas: comprehension, speaking, reading, writing, and understanding the peoples and cultures of Spanish-speaking countries.

**Career Information**
The AA-T in Spanish can provide students with the foundational knowledge necessary for transfer to a 4-year Bachelor of Arts (BA) degree program. Career opportunities for students who have earned BA or BS degrees in Spanish include but are not limited to: Airlines/Travel, Banking, Bilingual Education, Bilingual Telecommunications, Emergency Services, Foreign Service, Foreign Language Teacher, Import & Export, Intelligence/Military Service, International Business, IRS/State Franchise Tax Board, Business & Commerce, Law Enforcement/Correctional Officer, Social Security Officer, Social Service, Translating & Interpreting, and Tourism. Some careers may require additional training.

NOTE TO TRANSFER STUDENTS: The Associate Degree for Transfer program is designed for students who plan to transfer to a campus of the California State University (CSU). Other than the required core, the courses you choose to complete this degree will depend to some extent on the selected CSU for transfer. In addition, some CSU-GE Breadth or IGETC requirements can also be completed using courses required for this associate degree for transfer major (known as “double-counting”). Meeting with a counselor to determine the most appropriate course choices will facilitate efficient completion of your transfer requirements. For students wishing to transfer to other universities (UC System, private, or out-of-state), the Associate Degree for Transfer may not provide adequate preparation for upper-division transfer admissions; it is critical that you meet with a CRC counselor to select and plan the courses for the major, as programs vary widely in terms of the required preparation.

Associate Degrees

A.A. in Spanish

CRC offers the basic grammar and conversation courses in Spanish. Students will be able to understand the spoken language, to speak with reasonable fluency, and to write at their speaking level.

Highlights include:
* Courses in Spanish
* Multimedia, interactive language lab with Internet capabilities
* Internationally trained faculty and staff
* Oral Proficiency Certification in Spanish

This degree is designed to meet common lower division requirements for a major in Spanish in a four-year university. This will include the fundamentals of language learning, listening, speaking, reading, writing, and culture.

Note to Transfer Students:
If you are interested in transferring to a four-year college or university to pursue a bachelor’s degree in this major, it is critical that you meet with a CRC counselor to select and plan the courses for your major. Schools vary widely in terms of the required preparation. The courses that CRC requires for an Associate’s degree in this major may be different from the requirements needed for the Bachelor’s degree.

Native speakers of the language who have high school - equivalent reading and writing skills in their native language should enroll in the 413 level course (or above) in their native language.

Catalog Date: June 1, 2020

Degree Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>CORE SEQUENCE = (401 + 402 + 411 + 412) or (413 + 415):</td>
<td></td>
<td></td>
</tr>
<tr>
<td>[[[ SPAN 401</td>
<td>Elementary Spanish (4)</td>
<td>8 - 16</td>
</tr>
<tr>
<td>and SPAN 402 ]</td>
<td>Elementary Spanish (4)</td>
<td></td>
</tr>
<tr>
<td>and SPAN 411 ]</td>
<td>Intermediate Spanish (4)</td>
<td></td>
</tr>
<tr>
<td>and SPAN 412 ]</td>
<td>Intermediate Spanish (4)</td>
<td></td>
</tr>
<tr>
<td>or [ SPAN 413</td>
<td>Spanish for Native Speakers I (4)</td>
<td></td>
</tr>
<tr>
<td>and SPAN 415 ]</td>
<td>Spanish for Native Speakers II (4)</td>
<td></td>
</tr>
</tbody>
</table>

RESTRICTED ELECTIVES:

A minimum of 10 units from the following:

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPAN 311</td>
<td>Conversational Spanish, Intermediate (2)</td>
</tr>
<tr>
<td>SPAN 312</td>
<td>Conversational Spanish, Intermediate (2)</td>
</tr>
<tr>
<td>SPAN 425</td>
<td>Advanced Reading and Conversation (3)</td>
</tr>
<tr>
<td>SPAN 426</td>
<td>Introduction to Mexican American Literature (3)</td>
</tr>
<tr>
<td>SPAN 427</td>
<td>Introduction to Spanish American Literature (3)</td>
</tr>
<tr>
<td>SPAN 434</td>
<td>Spanish for the Professions - Intermediate (3)</td>
</tr>
<tr>
<td>COURSE CODE</td>
<td>COURSE TITLE</td>
</tr>
<tr>
<td>-------------</td>
<td>------------------------------------</td>
</tr>
<tr>
<td></td>
<td>Total Units:</td>
</tr>
</tbody>
</table>

The Spanish Associate in Arts (A.A.) degree may be obtained by completion of the required program, plus general education requirements, plus sufficient electives to meet a 60-unit total. See CRC graduation requirements.

**Career Information**

Airlines/Travel; Banking; Bilingual Education/Teacher's Aide; Bilingual Telecommunications; Emergency Services; Foreign Service; Foreign Language Teacher; Import & Export; Intelligence/Military Service; International Business; IRS/State Franchise Tax Board; Overseas Employment; Business & Commerce; Law Enforcement/Correctional Officer; Social Security Officer; Social Service; Translating & Interpreting; Tourism Some career options may require more than two years of college study.

### Spanish (SPAN)

#### SPAN 101 Conversational Spanish, Elementary

<table>
<thead>
<tr>
<th>Units:</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hours:</td>
<td>36 hours LEC; 54 hours LAB</td>
</tr>
<tr>
<td>Prerequisites:</td>
<td>None.</td>
</tr>
<tr>
<td>General Education:</td>
<td>AA/AS Area I</td>
</tr>
<tr>
<td>Catalog Date:</td>
<td>June 1, 2020</td>
</tr>
</tbody>
</table>

This is a first semester introduction to the Spanish language. It is designed for beginning students with little or no previous exposure to the language. It is characterized by an emerging ability to understand and produce appropriate responses in high frequency situations utilizing learned materials. Speaking and writing will be comprehensible to a sympathetic listener. Verbal and written expression is limited to short, culturally appropriate communication. Students will acquire a knowledge of the geography, culture and people of regions where Spanish is spoken and of Spanish-speakers' contributions to North American and world cultures. This class consists of two hours lecture and one hour of laboratory work conducted in the classroom each week and two hours of laboratory work conducted in the Language Laboratory each week.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- SLO-1: Demonstrate increasing comprehension of language use.
- Understand and produce appropriate responses in familiar situations, such as those pertaining to classroom, family, home, travel, etc.
- SLO-2: Analyze and discuss various topics from newspapers and magazine articles.
- Create a series of basic oral presentations where the student compares and contrasts a given topic.
- SLO-3: Experience a culturally rich environment. Demonstrate knowledge of geography.
- Understand the culture of the regions where Spanish is spoken.
- SLO-4: Analyze different linguistic patterns from other Spanish speaking countries, such as gestures, the use of tú vs usted and cultural values.
- Interact with community members where the language is spoken at community activities and events.

#### SPAN 102 Conversational Spanish, Elementary

<table>
<thead>
<tr>
<th>Units:</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hours:</td>
<td>36 hours LEC; 54 hours LAB</td>
</tr>
<tr>
<td>Prerequisites:</td>
<td>SPAN 101 with a grade of &quot;C&quot; or better</td>
</tr>
<tr>
<td>General Education:</td>
<td>AA/AS Area I</td>
</tr>
<tr>
<td>Catalog Date:</td>
<td>June 1, 2020</td>
</tr>
</tbody>
</table>
This is second semester Elementary Spanish. It is designed for students who have completed SPAN 101 or two years of high school Spanish. It provides refinement of skills begun in SPAN 101. Students will gain increased accuracy and ability to understand and produce appropriate responses in high frequency situations utilizing learned materials. Speaking and writing will be comprehensible to a sympathetic listener. Verbal and written expression will be limited to short, culturally appropriate communication on a broader scale than at the SPAN 101 level. Students will acquire a knowledge of the geography, culture and people of regions where Spanish is spoken and of Spanish-speakers' contribution to North American and world cultures. This class consists of two hours lecture and one hour of laboratory work conducted in the classroom each week and two hours of laboratory work conducted in the Language Laboratory each week.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO-1: Develop the ability to communicate creatively in a real-world setting.
- Create short dialogs from learned materials.
- SLO-2: Demonstrate increased conceptual understanding and more sustained control of learned high frequency expressions and phrases in conversation.
- Follow a series of basic oral instructions requiring non-verbal response, such as commands and directions.
- SLO-3: Formulate and analyze various topics from newspaper and magazine articles.
- Discuss different topics, such as educational plans, political issues in Latin America, cultural values, and to learn about the contributions of other people from other cultures to American life.
- SLO-4: Demonstrate knowledge of geography and an understanding of the culture of the regions where Spanish is spoken.

SPAN 311 Conversational Spanish, Intermediate

| Units: | 2 |
| Hours: | 18 hours LEC; 54 hours LAB |
| Prerequisite: | SPAN 102 or 401 with a grade of "C" or better; or two years of high school Spanish |
| Transferable: | CSU |
| Catalog Date: | June 1, 2020 |

This is a conversational course designed for students who have completed SPAN 102 or two years of high school Spanish. Refining skills obtained in previous coursework, students will continue to build their communication skills including listening, reading and speech. Students will develop the ability to respond in an unrehearsed manner on concrete topics in known situations. Students will be exposed to the geography, culture and people of regions where Spanish is spoken and to Spanish-speakers' contributions to North American and world cultures. This course will consist of one hour of lecture and two hours of laboratory work conducted in the classroom each week and one hour of laboratory work conducted in the Language Laboratory each week.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- DEMONSTRATE INCREASING COMPREHENSION OF LANGUAGE USE. SLO#1
  - Using listening comprehension skills identify the main ideas of natural, spoken conversation using an increasing vocabulary and idioms.
- DEVELOP LANGUAGE SKILLS TO COMMUNICATE EFFECTIVELY. SLO#2
  - Utilize sustained control of high-frequency expressions and phrases learned in the beginning levels in conversation.
  - Ask and answer simple questions on every day topics.
- RECOGNIZE AND APPRECIATE PATTERNS OF CULTURE IN SPANISH SPEAKING REGIONS. SLO#3
  - Identify physical and cultural geography of Spanish speaking countries.

SPAN 312 Conversational Spanish, Intermediate

| Units: | 2 |
| Hours: | 18 hours LEC; 54 hours LAB |
| Prerequisite: | SPAN 311 or 402 with a grade of "C" or better; or three years of high school Spanish |
| Transferable: | CSU |
| Catalog Date: | June 1, 2020 |
This is second semester Intermediate Spanish. This is a conversation course designed for students who have completed SPAN 311 or SPAN 402 or three years of high school Spanish. Continuing to refine skills obtained in previous coursework, students will continue to build their communication skills including listening, reading and speech. Students will develop the ability to respond in an unrehearsed manner on concrete topics in known situations. Students will be exposed to the geography, culture and people of regions where Spanish is spoken and to Spanish-speakers’ contributions to North American and world cultures. This course will consist of one hour of lecture and three hours of laboratory work conducted in the classroom and one hour of laboratory work conducted in the Language Laboratory each week.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- DEMONSTRATE INCREASING COMPREHENSION OF LANGUAGE USE. SLO#1
  - Demonstrate listening comprehension with an increased understanding of ideas presented in native-spoken conversation.
- DEVELOP LANGUAGE SKILLS TO COMMUNICATE EFFECTIVELY. SLO#2
  - Demonstrate sustained control of high-frequency expressions and phrases used in the intermediate levels of conversation.
  - Produce language that communicates information.
  - Ask and answer questions on every day topics.
- RECOGNIZE AND APPRECIATE PATTERNS OF CULTURE IN SPANISH SPEAKING REGIONS. SLO#3
  - Demonstrate knowledge of physical and cultural geography of Spanish speaking countries.

SPAN 401 Elementary Spanish

Units: 4
Hours: 54 hours LEC; 54 hours LAB
Prerequisite: None.
Transferable: CSU; UC (Corresponds to two years of high school study)
General Education: AA/AS Area I; CSU Area C2; IGETC Area 6
C-ID: C-ID SPAN 100
Catalog Date: June 1, 2020

This is the first semester introduction to the Spanish language. It is designed for beginning students with little or no previous exposure to the language. It is characterized by an emerging ability to understand and produce appropriate responses in high frequency situations utilizing learned materials. Speaking and writing will be comprehensible to a sympathetic listener. Verbal and written expression is limited to short, culturally appropriate communication. Students will acquire a knowledge of the geography, culture and people of regions where Spanish is spoken and of Spanish-speakers’ contributions to North American and world cultures.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- PRODUCE AND COMPREHEND BASIC COURTESIES AND SIMPLE CONVERSATIONS ON STUDENT LIFE IN SPANISH. SLO#1
  - Understand short spoken dialogue and answer simple questions, such as telling time, greetings, days of the week, academic subjects, identifying people, and sports.
  - Communicate minimally with learned material. The student can respond orally using core vocabulary phrases and expressions.
  - Demonstrate knowledge of geography and an understanding of the culture of the regions where Spanish is spoken.
  - Incorporate basic learned materials, such as phrases, paraphrastic expressions, reflexive and preterite verbs, in daily life situations.
- DEMONSTRATE ABILITY TO COMMUNICATE IN WRITING USING LEARNED GRAMMATICAL FORMS. SLO#2
  - List and describe material read or heard. Supply specific biographical information. Write simple sentences about travel, family, classroom, pastimes and weather.
- ANALYZE AND INTERPRET WRITTEN MATERIAL. SLO#3
  - Comprehend a reading selection based on familiar topics, such as travel, family, classroom and academic life, pastime, and weather.
- DISTINGUISH CULTURAL ELEMENTS OF THE SPANISH-SPEAKING WORLD. SLO#4
Recognize the fundamental cultural values in a variety of situations, such as gestures and the use of tú and usted.

## SPAN 402 Elementary Spanish

| Units: | 4 |
| Hours: | 54 hours LEC; 54 hours LAB |
| Prerequisite: | SPAN 401 with a grade of "C" or better |
| Transferable: | CSU; UC (SPAN 402 and 413 combined: maximum transfer credit is one course) |
| General Education: | AA/AS Area I; CSU Area C2; IGETC Area 6 |
| C-ID: | C-ID SPAN 110 |
| Catalog Date: | June 1, 2020 |

This is second semester Elementary Spanish. It is designed for students who have completed SPAN 401 or two years of high school Spanish. It provides refinement of skills begun in SPAN 401. Students will gain increased accuracy and ability to understand and produce appropriate responses in high-frequency situations utilizing learned materials. Speaking and writing will be comprehensible to a sympathetic listener. Verbal and written expression will be limited to short, culturally appropriate communication on a broader scale than at the SPAN 401 level. Students will acquire a knowledge of the geography, culture and people of regions where Spanish is spoken and of Spanish-speakers' contribution to North American and world cultures.

### Student Learning Outcomes

Upon completion of this course, the student will be able to:

- DEMONSTRATE INCREASED CONCEPTUAL UNDERSTANDING AND MORE SUSTAINED CONTROL OF LEARNED HIGH FREQUENCY EXPRESSIONS AND PHRASES IN CONVERSATION (SLO#1).
- Create and dramatize short dialogs which include routine questions, talk about future plans, including weekends and evenings, and give simple instructions, compare and contrast. Produce speech intelligible to a sympathetic listener using broader vocabulary than in SPAN 401.
- DEMONSTRATE ABILITY TO COMMUNICATE IN WRITING USING LEARNED GRAMMATICAL FORMS (SLO#2).
- Create compositions that include listing, writing simple messages and supplying basic biographical information using simple sentences. Writing will be intelligible to a sympathetic listener used to communicate with non-native speakers and demonstrate emerging creativity. It will consist of short responses and questions using basic but broader vocabulary than that used at the SPAN 401 level and will do so with increasing accuracy.
- DISTINGUISH AND EXAMINE CULTURAL ELEMENTS OF THE SPANISH-SPEAKING WORLD (SLO #3).
- Recognize characteristics of the regions where Spanish is spoken, including architecture, music, dance, literary figures, recording artists and other cultural activities, which are part of the culture.

## SPAN 411 Intermediate Spanish

| Units: | 4 |
| Hours: | 54 hours LEC; 54 hours LAB |
| Prerequisite: | SPAN 402 with a grade of "C" or better |
| Transferable: | CSU; UC |
| General Education: | AA/AS Area I; CSU Area C2; IGETC Area 3B; IGETC Area 6 |
| C-ID: | C-ID SPAN 200 |
| Catalog Date: | June 1, 2020 |

This is first semester Intermediate Spanish. It is designed for students who have completed SPAN 402 or three years of high school Spanish. It provides refinement of skills attained in SPAN 402. Students will work toward the ability to create with the language without relying on learned responses, to understand main ideas in routine speech and to understand main ideas in written texts. Listening and reading comprehension continue to develop; speaking and writing will be comprehensible to a somewhat sympathetic native speaker. Students will develop the ability to respond in an unrehearsed manner on concrete topics in known situations. Written expression will meet limited personal needs and culturally appropriate language at a higher level of accuracy than found in SPAN 402. The student will continue acquisition of knowledge of geography, culture and people of regions where Spanish is spoken and of Spanish-speakers' contributions to North American and world cultures.

### Student Learning Outcomes

Upon completion of this course, the student will be able to:

- PRODUCE AND COMPREHEND BASIC COURTESIES AND SIMPLE CONVERSATIONS ON STUDENT LIFE IN SPANISH (SLO#1).
- Understand short, spoken dialogue and answer simple questions, such as telling time, greetings, days of the week, academic subjects, identifying people, and sports.
• Communicate minimally with learned material by responding orally using core vocabulary phrases and expressions.
• Demonstrate knowledge of geography and an understanding of the culture of the regions where Spanish is spoken.
• Incorporate basic learned materials, such as phrases and expressions, in daily life situations.
• Demonstrate sustained control of high-frequency expression and phrases learned at the moderate-beginning level in conversation and writing.

DEMONSTRATE ABILITY TO COMMUNICATE IN WRITING USING LEARNED GRAMMATICAL FORMS (SLO#2).
• Write down simple sentences about travel, family, classroom, pastimes and weather.
• Demonstrate listening comprehension by getting the main ideas of natural, spoken conversation using a 1000-3000-word vocabulary.
• Identify the gist of general topics in brief passages of contemporary prose.
• Create conversations and compositions with the language by combining learned elements in a reactive mode.
• Sustain and close simple, basic communicative tasks.

ANALYZE AND INTERPRET WRITTEN MATERIAL (SLO#3).
• Comprehend a reading selection based on familiar topics, such as travel, family, classroom and academic life, pastimes, and weather.
• Demonstrate knowledge of geography and an understanding of the culture of the regions where Spanish is spoken, including art, architecture, music, dance, literary figures, recording artists, and other activities which are part of the culture.

DISTINGUISH CULTURAL ELEMENTS OF THE SPANISH-SPEAKING WORLD (SLO#4).
• Recognize the fundamental cultural values in a variety of situations, such as gestures and the use of tú and usted.

SPAN 412 Intermediate Spanish

Units: 4
Hours: 54 hours LEC; 54 hours LAB
Prerequisites: SPAN 411 with a grade of "C" or better
Transferable: CSU; UC
General Education: AA/AS Area I; CSU Area C2; IGETC Area 3B; IGETC Area 6
C-ID: C-ID SPAN 210
Catalog Date: June 1, 2020

This is second semester Intermediate Spanish. It is designed for students who have completed SPAN 411 or four years of high school Spanish. It provides continued development of skills attained in SPAN 411. The focus will be the development of written narratives and expository prose combined with increased cultural awareness. Emphasis will be on culturally authentic reading and writing through the introduction of basic literary analysis. Students will develop the ability to handle complicated situations using past and future time frames. Students will continue acquisition of knowledge of geography, culture and people of regions where Spanish is spoken and of Spanish-speakers’ contributions to North American and world cultures.

Student Learning Outcomes

Upon completion of this course, the student will be able to:
• Communicate in writing using learned grammatical forms. (SLO 1, P-SLO 2)
• Write expressively with a high degree of accuracy in word choice and grammatical construction from essays and articles.
• Analyze some of the literary works and compare some of the authors and their work.
• Develop listening and reading comprehension skills by selecting topics related to the learned materials. (SLO2, P-SLO 1)
• Read and discuss a variety of written works.
• Discussions may be on cultural, social and political events.
• Use a more sophisticated and varied vocabulary than during the previous course level. (SLO 3, P-SLO 2)
• Communicate in complex situations about topics beyond immediate and personal needs.
• Narrate and describe in the present and past tenses.
• Extend his/her knowledge of the geography and culture of Spanish-speaking regions. These topics may include art, music, architecture, literary figures, and other cultural activities of those regions. (SLO 4, P-SLO 3)
- Analyze the culture of the target language by doing Internet research in Spanish.
- Compare and contrast different Spanish speaking countries' culture and customs.

SPAN 413 Spanish for Native Speakers I

<table>
<thead>
<tr>
<th>Units</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hours</td>
<td>72 hours LEC</td>
</tr>
<tr>
<td>Prerequisite</td>
<td>Spanish native speaker proficiency or the equivalent intermediate level as assessed by the instructor.</td>
</tr>
<tr>
<td>Transferable</td>
<td>CSU; UC (SPAN 402 and 413 combined: maximum transfer credit is one course)</td>
</tr>
<tr>
<td>General Education</td>
<td>AA/AS Area I; CSU Area C2; IGETC Area 3B; IGETC Area 6</td>
</tr>
<tr>
<td>C-ID</td>
<td>C-ID SPAN 220</td>
</tr>
<tr>
<td>Catalog Date</td>
<td>June 1, 2020</td>
</tr>
</tbody>
</table>

This course offers the fundamentals of spoken and written Spanish for the native speaker of Spanish. It covers the structure of the language, oral communication, fundamentals of grammar and composition. Focus is placed primarily in the indicative tenses. The course also covers diacritical marks, like the accent mark, and their uses. In addition, the course introduces the student to the geography and culture of the Spanish speaking world. This course is conducted in Spanish.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- **SLO #1**: Demonstrate proficiency in the five skills as mandated by the competency guidelines of the American Council on the Teaching of Foreign Languages (ACTFL): comprehension, speaking, reading, writing, and an understanding of the people and culture of the Spanish-speaking countries.
- Recognize and compose with the indicative tenses: present, preterit, imperfect and future.
- Utilize correct grammatical structures of standard Spanish.
- Demonstrate critical thinking through contrastive and inductive analysis and techniques to develop logical and coherent thought and expression in written and oral language.
- Read Spanish proficiently as found, for example, in Spanish language newspapers, magazines, short stories, essays, and selections of poetry written by Spanish, Spanish-American, and Chicano authors.
- Identify the countries and the capitals of countries where Spanish is the official language.
- Speak standard Spanish with greater precision using varied grammatical patterns of enriched vocabulary.
- Identify and use diacritical marks: the accent, dieresis, tilde, question and exclamation marks.
- Name and write, with correct spelling, the forms of articles, adjectives, pronouns and nouns.
- Identify and demonstrate the correct use of direct object nouns and pronouns, and reflexive pronouns.
- Identify and demonstrate the use of gender and number in nouns and articles.
- Identify which verb forms and vocabulary words belongs to standard Spanish, colloquial Spanish, and local colloquial Spanish, influenced in lexicon and syntax by the English language and common to Spanish speakers with no formal education in the language.
- Compose sentences in Spanish using correct punctuation and capitalization.
- **SLO #2**: Analyze and critique, from a student's own experience and knowledge, aspects of the Spanish-speaking culture that differ significantly from contemporary United States culture.
- Research and identify names of some major landmarks and regions in Spanish-speaking nations, names of persons and events of historical and cultural importance.

SPAN 415 Spanish for Native Speakers II
This course is a continuation of Spanish 413. It offers the fundamentals of spoken and written Spanish for the native speaker of Spanish. It covers the structure of the language, oral communication, fundamentals of grammar and composition. Focus is placed primarily on the conditional and subjunctive forms, the future tense, and the compound tenses. The course also covers diacritical marks, like the accent mark, and their uses. In addition, the course introduces the student to the geography and culture of the Spanish speaking world. This course is conducted in Spanish.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- (SLO1) Demonstrate proficiency in the five skills as mandated by the competency guidelines of the American Council on the Teaching of Foreign Languages (ACTFL): comprehension, speaking, reading, writing, and an understanding of the people and culture of the Spanish-speaking countries
- Recognize and demonstrate the correct use of the indicative tenses: present, preterite, imperfect and future
- Recognize and demonstrate the correct use the conditional form, the subjunctive form and the compound tenses
- Recognize and demonstrate the correct use of the direct object, the indirect object, and reflexive pronouns
- Read Spanish proficiently as found, for example, in Spanish language newspapers, magazines, short stories, essays, and selections of poetry written by Spanish, Spanish-American, and Chicano authors like Ernesto Cardenal, Octavio Paz, Gabriel García Márquez, Tomás Rivera, Elena Poniatowska, Ana Castillo, Otto René Castillo, Roque Dalton, Gioconda Belli, and others
- Identify names of some major landmarks and regions in Spanish-speaking nations, names of persons and events of historical and cultural importance, holidays in the Spanish speaking world, etc.
- Identify and employ diacritical marks: the accent, dieresis, tilde, question and exclamation marks
- Produce sentences, paragraphs and essays in Spanish using correct punctuation and capitalization
- Analyze from their own experience and knowledge aspects of the Spanish-speaking culture that differ significantly from contemporary United States culture
- (SLO2) Students will improve their language skills above the prerequisite course, and will continue to expand their knowledge between standard and popular Spanish, using varied grammatical patterns and an enriched vocabulary
- Identify and differentiate which verb forms and vocabulary words belongs to standard Spanish, colloquial Spanish, and local colloquial Spanish, influenced in lexicon and syntax by the English language and common to Spanish speakers with no formal education in the language

SPAN 423 Contrastive Grammar of English-Spanish I

This course presents part one of the essential elements of Spanish grammar side by side with their grammatical equivalent in English. It allows native Spanish-speakers and advanced Spanish learners to compare and contrast the grammars of both languages at a glance. It focuses upon the development of analytical abilities by presenting the interlingual differences between Spanish and English in a simple and direct way. Students will be provided with numerous exercises, through which the nature of such differences can be readily perceived and acted upon. This course will begin with an overview of grammatical terminology and sentence structure in both languages.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO 1: DEMONSTRATE KNOWLEDGE AND UNDERSTANDING OF BASIC SENTENCE STRUCTURE IN ENGLISH AND SPANISH.
- Identify the five sentence types: 1) positive sentence; 2) negative sentence; 3) yes/no question; 4) negative yes/no question; and 5) content question.
Compose grammatically correct sentences utilizing basic and intermediate structures of English and Spanish in writing.

SLO 2: ANALYZE SPANISH AND ENGLISH GRAMMAR FROM A CONTRASTIVE PERSPECTIVE.

Recognize and interpret intermediate structures of English and Spanish grammar in text and speech.

Compare and contrast the five sentence types in Spanish and English.

Examine and demonstrate the differences between and the correct use of the indicative tenses in English and Spanish.

Contrast usage of Imperfect and Preterite tenses in Spanish and compare to their equivalent usage in English.

SLO 3: IDENTIFY INDIVIDUAL PATTERNS OF GRAMMAR ERRORS WHEN USING THE TARGET LANGUAGE IN ORDER TO LATER AVOID THEM SUCCESSFULLY.

SPAN 424 Contrastive Grammar of English-Spanish II

| Units: | 1.5 |
| Hours: | 27 hours LEC |
| Prerequisite: | SPAN 423 with a grade of "C" or better; or Spanish native speaker proficiency or equivalent advanced intermediate level as assessed by the instructor. |
| Transferable: | CSU |
| Catalog Date: | June 1, 2020 |

This course presents part two of the essential elements of Spanish grammar side by side with their grammatical equivalent in English. It allows native Spanish-speakers and advanced Spanish learners to compare and contrast the grammars of both languages at a glance. It focuses upon the development of analytical abilities by presenting the interlingual differences between Spanish and English in a simple and direct way. Students will be provided with numerous exercises, through which the nature of such differences can be readily perceived and acted upon.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO 1: DEMONSTRATE KNOWLEDGE AND UNDERSTANDING OF BASIC SENTENCE STRUCTURE IN ENGLISH AND SPANISH AT ALL LEVELS OF GRAMMATICAL COMPLEXITY.

- Identify the five sentence types: 1) positive sentence; 2) negative sentence; 3) yes/no question; 4) negative yes/no question; and 5) content question.

- Compose grammatically correct sentences utilizing intermediate and advanced structures of English and Spanish in speech and writing.

- SLO 2: ANALYZE SPANISH AND ENGLISH GRAMMAR FROM A CONTRASTIVE PERSPECTIVE.

- Recognize and interpret intermediate and advanced structures of English and Spanish grammar in text and speech.

- Compare and contrast word order or “syntax” in Spanish and English in the five sentence types: 1) positive sentence; 2) negative sentence; 3) yes/no question; 4) negative yes/no question; and 5) content question.

- Examine and demonstrate the differences between and the correct use of the subjunctive form and the compound tenses in English and Spanish.

- Contrast Spanish and English conditional sentences and unreal comparisons.

- SLO 3: IDENTIFY INDIVIDUAL PATTERNS OF GRAMMAR ERRORS WHEN USING THE TARGET LANGUAGE IN ORDER TO LATER AVOID THEM SUCCESSFULLY.

SPAN 425 Advanced Reading and Conversation

| Units: | 3 |
| Hours: | 54 hours LEC |
| Prerequisite: | SPAN 412 or 415 with a grade of "C" or better |
| Transferable: | CSU; UC |
| General Education: | AA/AS Area I; CSU Area C2; IGETC Area 3B |
| Catalog Date: | June 1, 2020 |

This class focuses on building advanced reading and conversational skills in Spanish. The emphasis is on developing critical thinking skills and academic writing proficiency through a functional grammar approach. Readings and activities provide the appropriate vocabulary, linguistic structures, and writing strategies to allow for building on vocabulary, grammar review, and meaningful dialogue.
Upon completion of this course, the student will be able to:

- Demonstrate increasing comprehension of language use (SLO#1).
- Improve pronunciation, aural comprehension, reading and writing skills through practical use.
- Analyze the functions of the elements of the sentence (i.e. grammar and syntax)
- Write short narratives and expository prose combined with increased culture awareness (SLO#2).
- Develop the ability to communicate creatively in real-world setting.
- Identify and describe the geography, culture and people of regions where Spanish is spoken and of Spanish-speakers’ contributions to the world cultures.

**SPAN 426 Introduction to Mexican American Literature**

<table>
<thead>
<tr>
<th>Units:</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hours:</td>
<td>54 hours LEC</td>
</tr>
<tr>
<td>Prerequisite:</td>
<td>SPAN 412 or 415 with a grade of &quot;C&quot; or better, or placement through the assessment process.</td>
</tr>
<tr>
<td>Transferable:</td>
<td>CSU; UC</td>
</tr>
<tr>
<td>General Education:</td>
<td>AA/AS Area I; CSU Area C2; IGETC Area 3B</td>
</tr>
<tr>
<td>Catalog Date:</td>
<td>June 1, 2020</td>
</tr>
</tbody>
</table>

This course is an introductory survey to the four genres of Mexican-American literature: Poetry, Narrative, Theatre, and the Essay, and the culture which produced it. Emphasis will be given to 20th century writers and works. This course is conducted in English and Spanish.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- SLO1: RECOGNIZE AND DESCRIBE THE FOUR TRADITIONAL LITERARY GENRES AND IDENTIFY REPRESENTATIVE MEXICAN-AMERICAN (CHICANO) AUTHORS AND THEIR WORKS.
- Name and identify representative Mexican-American (Chicano) authors and their works.
- Recognize the different Mexican-American (Chicano) literary genres.
- Describe the characteristics of each Mexican-American (Chicano) literary genre.

- SLO2: ANALYZE AND DEMONSTRATE THE SPECIFIC CHARACTERISTICS OF MEXICAN-AMERICAN (CHICANO) LITERARY WORKS AND THEIR RELATIONSHIP TO MEXICAN-AMERICAN (CHICANO) CULTURE AND SOCIETY.
- Analyze specific Mexican-American (Chicano) literary works.
- Criticize specific Mexican-American (Chicano) literary works.
- Formulate questions about the relationship between society and Mexican-American (Chicano) literature.

**SPAN 427 Introduction to Spanish American Literature**

<table>
<thead>
<tr>
<th>Units:</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hours:</td>
<td>54 hours LEC</td>
</tr>
<tr>
<td>Prerequisite:</td>
<td>SPAN 412 or 415 with a grade of &quot;C&quot; or better, or placement through the assessment process.</td>
</tr>
<tr>
<td>Transferable:</td>
<td>CSU; UC</td>
</tr>
<tr>
<td>General Education:</td>
<td>AA/AS Area I; CSU Area C2; IGETC Area 3B</td>
</tr>
<tr>
<td>Catalog Date:</td>
<td>June 1, 2020</td>
</tr>
</tbody>
</table>

This course is an introductory survey to the four genres of Spanish-American literature: Poetry, Narrative, Theatre, and the Essay, and the culture which produced it. Post-independence writers and their works will be emphasized. This course is conducted in Spanish.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:
• SLO #1: RECOGNIZE, DESCRIBE AND ANALYZE THE FOUR TRADITIONAL LITERARY GENRES AND IDENTIFY REPRESENTATIVE SPANISH-AMERICAN AUTHORS AND THEIR WORKS.

• Name, identify and critique representative Spanish-American authors, their literary works and the socio-historical context of their literary productions.

• Criticize specific Spanish-American literary works.

• Recognize the different Spanish-American literary genres.

• Describe the characteristics of each Spanish-American literary genre.

• SLO #2: ANALYZE AND DEMONSTRATE THE SPECIFIC CHARACTERISTICS OF SPANISH-AMERICAN LITERARY WORKS AND THEIR RELATIONSHIP TO LATIN-AMERICAN CULTURE AND SOCIETY.

• Formulate questions about the relationship between society and Spanish-American literature.

• Compose narratives analyzing the relationships between specific literary productions and their socio-historical context.

SPAN 434 Spanish for the Professions - Intermediate

This is an intermediate course designed for persons in law enforcement, business and finance, social services and the medical professions. The emphasis of the course is on acquiring verbal facility in interviewing, collecting data, giving instructions and general courtesies. The course will help students acquire language proficiency while reviewing and broadening the grammar foundation attained in elementary Spanish. It will introduce specific vocabulary necessary for professionals to communicate successfully in a professional situation. Cultural and behavioral attitudes appropriate for relating to persons of Hispanic heritage will be suggested.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• UNDERSTAND AND PRODUCE APPROPRIATE RESPONSES IN FAMILIAR SITUATIONS IN THE PROFESSIONAL SETTING (SLO1).

• Demonstrate ability to communicate effectively in a professional situation.

• Demonstrate knowledge and understanding of the Spanish speaking culture.

• Demonstrate ability to interview, collect data, give instructions and sustain a logical dialogue with one another or a native speaker.

SPAN 495 Independent Studies in Spanish

An independent studies project involves an individual student or small group of students in study, research, or activities beyond the scope of regularly offered courses. See the current catalog section of "Special Studies" for full details of Independent Studies.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• SLO #1: Actively engage in intellectual inquiry beyond that required in order to pass a course of study (College Wide Learning Outcome – Area 4).

• Discuss and outline a proposal of study (that can be accomplished within one semester term) with a supervising instructor qualified within the discipline.

• Design an independent study (to be completed individually or by collaboration of a small group) to foster special knowledge, skills, and experience that are not available in any one regularly scheduled course.
- Use information resources to gather discipline-specific information.

- SLO #2: Utilize modes of analysis and critical thinking to apply theoretical perspectives and/or concepts in the major discipline of study to significant problems and/or educational activities (College Wide Learning Outcome – Area 3).

- Analyze and apply the knowledge, skills and experience that are involved in the independent study to theoretical perspectives and/or concepts in the major discipline of study.

- Explain the importance of the major discipline of study in the broader picture of society.

- SLO #3: Communicate a complex understanding of content matter of the major discipline of study (College Wide Outcome – Area 3).

- Demonstrate competence in the skills essential to mastery of the major discipline of study that are necessary to accomplish the independent study.

- SLO #4: Identify personal goals and pursue these goals effectively (College Wide Outcome – Area 4).

- Utilize skills from the “academic tool kit” including time management, study skills, etc., to accomplish the independent study within one semester term.
Student Government (SGVT)

SGVT 300 Introduction to Student Government

Units: 2
Hours: 18 hours LEC; 54 hours LAB
Prerequisites: None.
Transferable: CSU
General Education: AA/AS Area III(b)
Catalog Date: June 1, 2020

This course provides a study of the legal, educational and philosophical basis of student government. The course may include travel to other campuses, local, regional and state conferences and provide the opportunity to participate on faculty and administrative committees. Topics are designed to teach leadership skills and to give practical experience in the social and civic responsibilities of student government.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- **ANALYZE GROUP DYNAMICS AND ORGANIZATIONAL BEHAVIOR (SLO-1).**
  - Assess and express organizational behavior that is effective and appropriate for student government tasks and relations, such as goal setting, stress management, motivation, and basic oral and written communication skills of active listening, interpersonal communication, and diversity awareness.
  - Evaluate and develop effective leadership skills which may include personal assessment, delegating, problem solving, budgeting and critical thinking.

- **DEMONSTRATE LEADERSHIP AND ENGAGEMENT IN ACTIVITIES AND EFFECTIVE STUDENT GOVERNANCE (SLO-2).**
  - Analyze and audit the Student Senate budget to demonstrate fiscal responsibility.
  - Plan and organize a variety of campus activities.
  - Identify and use campus resources to complete class projects.
  - Demonstrate a working knowledge of parliamentary procedure.
  - Advocate for fair representation of college students.
  - Demonstrate an understanding of the importance to an organization of clearly articulated vision and tenets.

- **EXAMINE CRITICALLY THE WORKINGS OF A STUDENT GOVERNMENT (SLO-3).**
  - Demonstrate an understanding of Title 5 and student governance at the community college.
• Cite and apply basic principles of the Ralph M. Brown Act.
• Reflect on the effectiveness and appropriateness of personal and group efforts within student government activities.
• PARTICIPATE IN THE COMMUNITY BEYOND THE CAMPUS, DEMONSTRATING AN UNDERSTANDING OF PERSONAL, SOCIAL AND CIVIC RESPONSIBILITIES IN THE LARGER CONTEXT (SLO-4).
• Participate in student government planning, meetings and activities on campus, and/or at the district, state and national levels.

SGVT 315 Dynamics of Leadership

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Transferable: CSU
General Education: AA/AS Area III(b)
Catalog Date: June 1, 2020

This course is designed to introduce students to the fundamental elements of leadership as it pertains to student governmental processes, team and community building. Students will examine contemporary leadership models as well as their own values and beliefs to develop a personal philosophy of leadership. Through activities and projects facilitated by student government, students will learn how to apply theory and experience leadership in the college and community settings. Students interested in broadening their understanding of diverse topics related to self-knowledge, group dynamics and leadership are encouraged to enroll.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• DEFINE AND DEMONSTRATE AN UNDERSTANDING OF FUNDAMENTAL ELEMENTS OF LEADERSHIP (SLO 1)
• Analyze and evaluate diverse leadership theories, styles and philosophies including gender, cultural and ethnic influences.
• Evaluate and articulate personal leadership values and beliefs.
• Correlate leadership theories, styles and approaches within the planning and conduct of organized events facilitated by student government.
• DEVELOP ORGANIZATIONAL AND SITUATIONAL ACUMEN AND LEARN STRATEGIES TO MANAGE AND EFFECT CHANGE (SLO 2)
• Incorporate and apply leadership theories and models to activities facilitated by student government and community life experiences.
• Demonstrate effective critical thinking and ethical decision making skills.
• CLARIFY VALUES AND SELF-KNOWLEDGE OF LEADERSHIP SKILLS AND ABILITIES (SLO 3)
• Critique self-assessment and recommend purposeful feedback of others.
• Construct and articulate a personal philosophy of leadership that includes an understanding of self, others and community.

SGVT 495 Independent Studies in Student Government

Units: 1 - 3
Hours: 54 - 162 hours LAB
Prerequisite: None.
Catalog Date: June 1, 2020

An independent studies project involves an individual student or small group of students in study, research, or activities beyond the scope of regularly offered courses. See the current catalog section of "Special Studies" for full details of Independent Studies.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• SLO #1: Actively engage in intellectual inquiry beyond that required in order to pass a course of study (College Wide Learning Outcome – Area 4).
• Discuss and outline a proposal of study (that can be accomplished within one semester term) with a supervising instructor qualified within the discipline.
Design an independent study (to be completed individually or by collaboration of a small group) to foster special knowledge, skills, and experience that are not available in any one regularly scheduled course.

Use information resources to gather discipline-specific information.

SLO #2: Utilize modes of analysis and critical thinking to apply theoretical perspectives and/or concepts in the major discipline of study to significant problems and/or educational activities (College Wide Learning Outcome – Area 3).

Analyze and apply the knowledge, skills and experience that are involved in the independent study to theoretical perspectives and/or concepts in the major discipline of study.

Explain the importance of the major discipline of study in the broader picture of society.

SLO #3: Communicate a complex understanding of content matter of the major discipline of study (College Wide Outcome – Area 3).

Demonstrate competence in the skills essential to mastery of the major discipline of study that are necessary to accomplish the independent study.

SLO #4: Identify personal goals and pursue these goals effectively (College Wide Outcome – Area 4).

Utilize skills from the “academic tool kit” including time management, study skills, etc., to accomplish the independent study within one semester term.
Television Production  
| Cosumnes River College

This program is designed to provide skills in television and film production through the preparation of projects for campus, Cable TV and Internet viewing. This option can lead to entry-level jobs in television, film, Cable TV, business and industry or for preparation for transfer to a four-year institution.

Dean

 (916) 691-7170

 BedforB@crc.losrios.edu (mailto:BedforB@crc.losrios.edu)

Associate Degree

A.A. in Television Production

This program is designed to provide skills in television and video production through the preparation of projects for campus, Cable TV and Internet viewing. This option can lead to entry-level jobs in television, film, Cable TV, business and industry or for preparation for transfer to a four-year institution.

Highlights include:
* Practical experience working in the campus television studio
* Internship opportunities working in local television stations, post-production facilities, and with independent film-makers
* Complete digital TV studio with multiple cameras, switcher, character generator and teleprompter
* State-of-the-art digital computer lab for graphics and non-linear editing

Note to Transfer Students:
If you are interested in transferring to a four-year college or university to pursue a bachelor’s degree in this major, it is critical that you meet with a CRC counselor to select and plan the courses for your major. Schools vary widely in terms of the required preparation. The courses that CRC requires for an Associate’s degree in this major may be different from the requirements needed for the Bachelor’s degree.

Catalog Date: June 1, 2020

Degree Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>RTVF 300</td>
<td>Mass Media and Society</td>
<td>3</td>
</tr>
<tr>
<td>RTVF 306</td>
<td>Introduction to Media Aesthetics and Cinematic Arts</td>
<td>3</td>
</tr>
<tr>
<td>RTVF 330</td>
<td>Beginning Single Camera Production</td>
<td>3</td>
</tr>
<tr>
<td>RTVF 331</td>
<td>Beginning Television Studio Production</td>
<td>3</td>
</tr>
<tr>
<td>RTVF 340</td>
<td>Television Production Workshop I</td>
<td>2</td>
</tr>
<tr>
<td>RTVF 360</td>
<td>Introduction to Motion Graphics: Adobe After Effects</td>
<td>3</td>
</tr>
<tr>
<td>RTVF 362</td>
<td>Digital Non-Linear Video Editing</td>
<td>3</td>
</tr>
<tr>
<td>RTVF 370</td>
<td>Broadcast Writing &amp; Announcing (3)</td>
<td>3</td>
</tr>
<tr>
<td>or RTVF 380</td>
<td>Broadcast Journalism (3)</td>
<td></td>
</tr>
</tbody>
</table>
## Course Code | Course Title | Units
--- | --- | ---
RTVF 304 | Introduction to Multimedia (3) | 6
RTVF 312 | Beginning Radio Production (3) | 6
RTVF 315 | Voice and Diction for Broadcasting (3) | 6
RTVF 319 | Beginning Audio Production (3) | 6
RTVF 341 | Television Production Workshop II (2) | 6
RTVF 342 | Television Production Workshop III (2) | 6
RTVF 354 | Audio Editing for Film & Video Post Production (3) | 6
RTVF 361 | Intermediate Motion Graphics: Adobe After Effects (3) | 6
RTVF 365 | Intermediate Film & Video Editing (3) | 6
RTVF 371 | Hollywood TV and Film Studios: A Behind the Scenes Experience (1) | 6
RTVF 376 | Advertising (3) | 6
RTVF 498 | Work Experience in Radio, Television and Film (1 - 4) | 6
MKT 310 | Selling Professionally (3) | 6

Total Units: 29

The Television Production Associate in Arts (A.A.) degree may be obtained by completion of the required program, plus general education requirements, plus sufficient electives to meet a 60-unit total. See CRC graduation requirements.

### Student Learning Outcomes

Upon completion of this program, the student will be able to:

- Write in clear, concise English. (PSLO-1)
- Research critically, filter the results and present them in a cogent manner. (PSLO-2)
- Resolve and execute standard pre-production skills including planning, scripting, budgeting, and crew and equipment selection. (PSLO-3)
- Utilize basic video production equipment correctly, safely and creatively, including cameras, lights and audio, and control room equipment such as audio mixers, switchers, video recording, character generation and TelePrompter. (PSLO-4)
- Operate essential post production equipment for audio and video editing and distribution in a variety of contemporary and emerging methods. (PSLO-5)
- Analyze, interpret, and exercise critical judgment in the evaluation of media productions. (PSLO-6)
- Demonstrate through projects that with the power of a communicator, comes moral and ethical responsibility. (PSLO-7)
- Demonstrate a hands-on ability to perform the professional level critical thinking needed for successful teamwork in television, film or other media employment. (PSLO-8)

### Career Information

Camera Operator; Computer Graphic Artist; Non-Linear Video Editor; Technical Director; Audio Engineer; Broadcast Technician; Production Assistant; TV, Film, DVD, or Internet Producer/Director; Personal or Corporate Video Some career options may require more than two years of college study. Classes beyond the associate degree may be required to fulfill some career options or for preparation for transfer to a university program.

### Certificate of Achievement

Television Production Certificate
Designed to provide skills in television production through the preparation of video projects for campus viewing, Cable TV, Internet or DVD. This option can lead to entry level jobs in television, Cable TV, business and industry or as preparation for transfer to a four-year institution.

Catalog Date: June 1, 2020

Certificate Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>RTVF 330</td>
<td>Beginning Single Camera Production</td>
<td>3</td>
</tr>
<tr>
<td>RTVF 331</td>
<td>Beginning Television Studio Production</td>
<td>3</td>
</tr>
<tr>
<td>RTVF 340</td>
<td>Television Production Workshop I</td>
<td>2</td>
</tr>
<tr>
<td>RTVF 360</td>
<td>Introduction to Motion Graphics: Adobe After Effects</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>A minimum of 6 units from the following:</td>
<td></td>
</tr>
<tr>
<td>RTVF 341</td>
<td>Television Production Workshop II (2)</td>
<td></td>
</tr>
<tr>
<td>RTVF 354</td>
<td>Audio Editing for Film &amp; Video Post Production (3)</td>
<td></td>
</tr>
<tr>
<td>RTVF 361</td>
<td>Intermediate Motion Graphics: Adobe After Effects (3)</td>
<td></td>
</tr>
<tr>
<td>RTVF 362</td>
<td>Digital Non-Linear Video Editing (3)</td>
<td></td>
</tr>
<tr>
<td>RTVF 365</td>
<td>Intermediate Film &amp; Video Editing (3)</td>
<td></td>
</tr>
<tr>
<td>RTVF 376</td>
<td>Advertising (3)</td>
<td></td>
</tr>
<tr>
<td>RTVF 498</td>
<td>Work Experience in Radio, Television and Film (1 - 4)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total Units:</td>
<td>17</td>
</tr>
</tbody>
</table>

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- Resolve and execute standard pre-production skills including planning, scripting, budgeting, and crew and equipment selection. (PSLO-1)
- Utilize basic video production equipment correctly, safely and creatively, including cameras, lights and audio, and control room equipment such as audio mixers, switchers, video recording, character generation and TelePrompter. (PSLO-2)
- Operate essential post production equipment for audio and video editing and distribution in a variety of contemporary and emerging methods. (PSLO-3)
- Demonstrate a hands-on ability to perform the professional level critical thinking needed for successful teamwork in television, film or other media employment. (PSLO-4)

Career Information

Camera Operator; Non-Linear Video Editors; Technical Director; Audio Engineer; Broadcast Technician; Production Assistant; TV, Film, DVD, or Internet Producer/Director; Personal or Corporate Video Some career options may require more than two years of college study. Classes beyond the associate degree may be required to fulfill some career options or for preparation for transfer to a university program.
Veterinary Technology | Cosumnes River College

The Cosumnes River College Veterinary Technology program does NOT provide veterinary medical services to the public.

Veterinary Technology program is designed to provide the student with the skills and knowledge necessary to pursue a career as a Registered Veterinary Technician. The program offers a rigorous and rewarding academic curriculum while simultaneously providing ample hands-on experience. The student will gain a working knowledge of animal behavior, restraint, nutrition and nursing. The curriculum will include, but not be restricted to, the performance of veterinary emergency care, anesthesia, dental care, surgical assistance and laboratory procedures.

Registered Veterinary Technicians (RVTs) are trained professionals who work as highly skilled assistants to veterinarians and researchers. RVTs are integral members of the veterinary health care team and are valuable employees in a variety of related fields.

Most states require official licensing of Veterinary Technicians. In California, licensure is accomplished by:

- Graduation from an AVMA Accredited/California Veterinary Medical Board Approved RVT program (or equivalent)
- Achievement of a passing score on the Veterinary Technician National Exam (VTNE)
- Application for a Registered Veterinary Technician license from the California Veterinary Medical Board. (Please visit the California VMB website for details about the licensure process.)

Dean

 (916) 691-7236

 atkinsa@crc.losrios.edu

Associate Degree

A.S. in Veterinary Technology

CRC's Veterinary Technology program is designed to provide the student with the skills and knowledge necessary to pursue a career as a Registered Veterinary Technician. The program offers a rigorous yet rewarding academic curriculum while simultaneously providing ample hands-on experience. The student will gain a working knowledge of animal behavior, restraint, nutrition and nursing. The curriculum will include, but not be restricted to, the performance of emergency care, anesthesia, dental care, surgical assistance and laboratory procedures.

Registered Veterinary Technicians (RVTs) (previously known as Animal Health Technicians) are trained professionals who work as highly skilled assistants to veterinarians and researchers. Their knowledge and skills have led to their being desirable employees in a variety of related fields.

Most states (including California) require official licensing or certification of RVTs. In California, certification is accomplished by:

- completion of an educational curriculum, and
- achievement of a passing score on a state board exam

Highlights include:

* One of only six programs in California that has earned accreditation by the American Veterinary Medical Association
* Acceptance of degree by examining boards in states other than California
* High-quality training recognized by local employers
* Excellent record of students passing state board exams
* On-the-job training and future job placement opportunities
Requirements for Pre-enrollment to the Program
A grade of "C" or better in the following courses is required:
BIOL 400
CHEM 400 or CHEM 305
BIOL 440
Forms are available from the Careers and Technology Division office or apply online at http://crc.losrios.edu/~vettech/app.htm. Only completed application packets will be considered. Completed applications must include all official college transcripts. Transcripts must be submitted as soon as they are available. For the latest admission requirements refer to:
http://crc.losrios.edu/Areas_of_Study/Careers_and_Technology/Veterinary_Technology.htm
Note: The AVMA requires that all applicants for enrollment must have a high school diploma or G.E.D.

Only students who meet the pre-enrollment requirements and follow the pre-enrollment procedures will be considered for the program. Applications must be received for the following fall semester by April 1st.

IMPORTANT NOTE TO STUDENTS
In order to ensure that prerequisites for subsequent courses are met and to allow completion of course work in four semesters, the student must adhere to the following schedule. NOTE: Each VT course is offered only once per year in either the spring or fall semester, as shown in the Required Program section.

* SEMESTER 1 (Fall): VT 100, VT 111
* SEMESTER 2 (Spring): VT 110, VT 113, VT 152, VT 298**
* SEMESTER 3 (Fall): VT 120, VT 122, VT 126, VT 298
* SEMESTER 4 (Spring): VT 123, VT 130, VT 131, VT 134, VT 298

With the exception of VT 110, all courses are pre- or co-requisites for the subsequent semester's courses. Failure to complete a course successfully will therefore delay progress through the program.

**VT 298, Work Experience, can only be taken after successful completion of VT 100 and VT 111. Per AVMA requirements, a minimum of 300 hours is required. At least one unit of VT 298 must be completed prior to beginning the third semester courses.

Additional Program Notes:
All students enrolled in any of the following courses will be required to spend 2-6 hours per week in the care of colony animals. Shifts will be assigned and will include weekends, holidays and semester break: VT 100; VT 111; VT 113; VT 120; VT 126; VT 130; VT 131; VT 152

Failure to complete all required courses for the A.S. degree will make you ineligible to sit for the State Board examination under the AVMA accredited program eligibility guidelines.

Catalog Date: June 1, 2020

Degree Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>VT 100</td>
<td>Introduction to Veterinary Technology</td>
<td>3</td>
</tr>
<tr>
<td>VT 111</td>
<td>Anatomy-Physiology of Animals</td>
<td>4</td>
</tr>
<tr>
<td>VT 152</td>
<td>Introduction to Laboratory Animals and Caged Birds</td>
<td>2</td>
</tr>
<tr>
<td>VT 110</td>
<td>Veterinary Office Practice</td>
<td>3</td>
</tr>
<tr>
<td>VT 113</td>
<td>Clinical Laboratory Techniques for Veterinary Technicians</td>
<td>4</td>
</tr>
<tr>
<td>VT 120</td>
<td>Pharmacology and Anesthesiology for the Veterinary Technician</td>
<td>4</td>
</tr>
<tr>
<td>VT 122</td>
<td>Animal Disease: Pathology</td>
<td>3</td>
</tr>
<tr>
<td>VT 126</td>
<td>Dentistry for the Veterinary Technician</td>
<td>1.5</td>
</tr>
<tr>
<td>VT 123</td>
<td>Large Animal Disease: Pathology</td>
<td>3</td>
</tr>
<tr>
<td>VT 130</td>
<td>Advanced Veterinary Technology</td>
<td>4</td>
</tr>
<tr>
<td>VT 131</td>
<td>Introduction to Diagnostic Imaging</td>
<td>3</td>
</tr>
<tr>
<td>VT 134</td>
<td>Large Animal Nursing</td>
<td>1.5</td>
</tr>
<tr>
<td>VT 298</td>
<td>Work Experience in Veterinary Technology</td>
<td>1 - 4</td>
</tr>
</tbody>
</table>
Students enrolled in VT 100 will be required to spend 2-6 hours per week in the care of colony animals. Shifts will be assigned and will include weekends, holidays, and semester break.

Students enrolled in VT 111 will be required to spend 2-6 hours per week in the care of colony animals. Shifts will be assigned and will include weekends, holidays, and semester break.

Students enrolled in VT 152 will be required to spend 2-6 hours per week in the care of colony animals. Shifts will be assigned and will include weekends, holidays, and semester break.

Students enrolled in VT 113 will be required to spend 2-6 hours per week in the care of colony animals. Shifts will be assigned and will include weekends, holidays, and semester break.

Students enrolled in VT 120 will be required to spend 2-6 hours per week in the care of colony animals. Shifts will be assigned and will include weekends, holidays, and semester break.

Students enrolled in VT 126 will be required to spend 2-6 hours per week in the care of colony animals. Shifts will be assigned and will include weekends, holidays, and semester break.

Students enrolled in VT 130 will be required to spend 2-6 hours per week in the care of colony animals. Shifts will be assigned and will include weekends, holidays, and semester break.

Students enrolled in VT 131 will be required to spend 2-6 hours per week in the care of colony animals. Shifts will be assigned and will include weekends, holidays, and semester break.

Beginning with the entering class of 2010-11, students must complete a minimum of 300 hours of internship/work experience. Students in a paid work experience earn one unit for a minimum of 75 hours. Students in an unpaid work experience earn one unit for a minimum of 60 hours. Work Experience is repeatable when there is new or expanded learning on the job.

_The Veterinary Technology Associate in Science (A.S.) degree may be obtained by completion of the required program, plus general education requirements, plus sufficient electives to meet a 60-unit total. See CRC graduation requirements._

**Enrollment Eligibility**

To be eligible for enrollment in the program, the student must meet the following criteria:

- Completion of BIOL 400 with a grade of "C" or better.*
- Completion of CHEM 400 or CHEM 305 with a grade of "C" or better.
- Completion of BIOL 440 with a grade of "C" or better.
- Completion of a pre-enrollment form including official copies of all college transcripts.
- AVMA requires that all applicants for enrollment must have a high school diploma or G.E.D.
- *Students are advised to check prerequisites for courses when registering.

**Enrollment Process**

Eligible students are selected for the program according to the following steps:

- Admission to the program is based on a random lottery process from among the qualified applicants. Only students who meet the educational and pre-veterinary technology requirements, and follow the pre-enrollment procedures will be considered for the program. Meeting all the requirements does not guarantee acceptance into the program.

**Student Learning Outcomes**

Upon completion of this program, the student will be able to:

- SLO 1: Apply the principles of pharmacology to the practice of veterinary medicine
- Interpret written orders, calculate doses, and correctly fill prescriptions in a veterinary pharmacy.
- Identify the indications and contraindications to the utilization of pharmaceuticals in the practice of veterinary medicine and surgery.
- Administer medications including but not limited to anesthetics, tranquilizers, pain medications, antibiotics, anti-inflammatories, hormones, chemotherapy agents, and other specialty medications to animals using appropriate techniques.
- SLO 2: Assist the veterinarian in the performance of veterinary medicine and surgery.
  - List and identify instrumentation used in a veterinary hospital.
  - Demonstrate the ability to sterilize instrumentation and maintain equipment in a veterinary hospital.
  - Demonstrate correct tissue handling and suturing techniques in a surgical setting.
  - Correctly restrain animals for treatment including companion, non-domestic, and large animals.
  - Perform nursing functions to include, but not limited to: physical examination, intravenous catheter care, basic life support (BLS), urinary catheter care, bandaging, and homeostatic maintenance for animals within a veterinary hospital.
- SLO 3: Apply the principles of radiography to the practice of veterinary medicine.
  - Take radiographs of small and large animals using correct radiographic technique.
  - Demonstrate the ability to develop, critique, radiographs, and correct errors in the performance of veterinary radiography.
  - Compare and contrast imaging modalities such as CAT, MRI, and ultrasound with respect to indications and applications of these techniques.
- SLO 4: Perform clinical laboratory duties within a veterinary hospital
  - Identify common parasite ova and larvae of domestic animals in fecal and blood samples.
  - Perform common laboratory tests utilized to formulate a minimum data base for an animal including, but not limited to the performance of clinical hematology, chemistry, urinalysis, and fecal analysis tests.
  - Formulate a quality control and maintenance program schedule for a clinical in house veterinary laboratory.
- SLO 5: Utilize the principles of dentistry in the practice of veterinary medicine.
  - Demonstrate proper technique in the utilization of dental instruments.
  - Perform non-surgical dental extractions in animals.
  - Communicate to clients techniques utilized in home dental care.
  - Perform a dental prophylaxis procedure in small animals.
- SLO 6: Perform clerical hospital/office duties within a veterinary hospital.
  - Maintain financial and patient records.
  - Operate a veterinary office computer system.
  - Maintain logs required by law including radiographic, laboratory, surgical, anesthesia, and controlled substance logs.
  - Organize and maintain an appointment schedule.
  - Perform an inventory of hospital supplies and medications.
  - Demonstrate telephone answering skills such as greeting clients, answering questions and proper telephone etiquette.
- SLO 7: Provide safe, humane, and effective care for common laboratory animals used in animal research.
  - Administer medications by oral or injectable methods to laboratory animals.
  - Identify common laboratory animal species.
  - Collect laboratory specimens such as blood, urine, and feces.
  - Determine the sex of common laboratory species.
  - Perform and/or supervise basic husbandry practices for common laboratory animal species.
- SLO 8: Provide safe, humane, and effective care for birds, reptiles, amphibians, rabbits, and ferrets.
  - Demonstrate restraint techniques.
  - Administer medications by oral and injectable methods.
  - Perform and/or supervise basic husbandry practices.
  - Collect laboratory specimens such as blood, urine, and feces.

Career Information
Certificate of Achievement

Veterinary Technology Certificate

This certificate is designed for students with three years of verifiable full-time experience working as an unregistered veterinary assistant. Upon completion of this certificate program, and three years clinical experience, the student will be fully eligible to take the State Board examination to become registered as a Veterinary Technician.

CRC's Veterinary Technology program is designed to provide the student with the skills and knowledge necessary to pursue a career as a Registered Veterinary Technician. The program offers a rigorous yet rewarding academic curriculum while simultaneously providing ample hands-on experience. The student will gain a working knowledge of animal behavior, restraint, nutrition and nursing. The curriculum will include, but not be restricted to, the performance of emergency care, anesthesia, dental care, surgical assistance and laboratory procedures.

Registered Veterinary Technicians (RVTs) (previously known as Animal Health Technicians) are trained professionals who work as highly skilled assistants to veterinarians and researchers. Their knowledge and skills have led to their being desirable employees in a variety of related fields.

Most states (including California) require official licensing or certification of RVTs. In California certification is accomplished by:

- completion of an educational curriculum
- achievement of a passing score on a state board exam

Highlights include:
- One of only six programs in California that has earned accreditation by the American Veterinary Medical Association
- Acceptance of degree by examining boards in states other than California
- High-quality training recognized by local employers
- Excellent record of students passing state board exams
- On-the-job training and future job placement opportunities

Requirements for Pre-enrollment to the Program

A grade of "C" or better in the following courses is required:

- BIOL 400
- CHEM 400 or CHEM 305
- BIOL 440

Forms are available from the Careers and Technology Division office or apply on-line at http://crc.losrios.edu/~vettech/app.htm. Only completed application packets will be considered. Completed applications must include all official college transcripts. Transcripts must be submitted as soon as they are available. For the latest admission requirements refer to:

http://crc.losrios.edu/Areas_of_Study/Careers_and_Technology/Veterinary_Technology.htm

Note: The AVMA requires that all applicants for enrollment must have a high school diploma or G.E.D.

Only students who meet the pre-enrollment requirements and follow the pre-enrollment procedures will be considered for the program. Applications must be received for the following fall semester by April 1st. Selection will be based on a random selection process, should the number of qualified applicants exceed available spaces in the program.

IMPORTANT NOTE TO STUDENTS

In order to ensure that prerequisites for subsequent courses are met and to allow completion of course work in four semesters, the student must adhere to the following schedule. NOTE: VT courses are offered only once per year - spring or fall semester.

* SEMESTER 1 (Fall): VT 100, VT 111
* SEMESTER 2 (Spring): VT 110, VT 113, VT 152
* SEMESTER 3 (Fall): VT 120, VT 122, VT 126
* SEMESTER 4 (Spring): VT 123, VT 130, VT 131, VT 134

With the exception of VT 110, all courses are pre- or co-requisites for the subsequent semester's courses. Failure to complete a course successfully will therefore delay progress through the program.

Additional Program Notes:

All students enrolled in any of the following courses will be required to spend 2-6 hours per week in the care of colony animals. Shifts will be assigned and will include weekends, holidays and semester break: VT 100; VT 111; VT 113; VT 120; VT 122; VT 126; VT 130; VT 131; VT 152

Catalog Data: June 1, 2020

Certificate Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>VT 100</td>
<td>Introduction to Veterinary Technology</td>
<td>3</td>
</tr>
<tr>
<td>COURSE CODE</td>
<td>COURSE TITLE</td>
<td>UNITS</td>
</tr>
<tr>
<td>-------------</td>
<td>-----------------------------------------------------------</td>
<td>-------</td>
</tr>
<tr>
<td>VT 111</td>
<td>Anatomy-Physiology of Animals</td>
<td>4</td>
</tr>
<tr>
<td>VT 110</td>
<td>Veterinary Office Practice</td>
<td>3</td>
</tr>
<tr>
<td>VT 113</td>
<td>Clinical Laboratory Techniques for Veterinary Technicians</td>
<td>4</td>
</tr>
<tr>
<td>VT 152</td>
<td>Introduction to Laboratory Animals and Caged Birds</td>
<td>2</td>
</tr>
<tr>
<td>VT 120</td>
<td>Pharmacology and Anesthesiology for the Veterinary Technician</td>
<td>4</td>
</tr>
<tr>
<td>VT 122</td>
<td>Animal Disease: Pathology</td>
<td>3</td>
</tr>
<tr>
<td>VT 126</td>
<td>Dentistry for the Veterinary Technician</td>
<td>1.5</td>
</tr>
<tr>
<td>VT 123</td>
<td>Large Animal Disease: Pathology</td>
<td>3</td>
</tr>
<tr>
<td>VT 130</td>
<td>Advanced Veterinary Technology</td>
<td>4</td>
</tr>
<tr>
<td>VT 131</td>
<td>Introduction to Diagnostic Imaging</td>
<td>3</td>
</tr>
<tr>
<td>VT 134</td>
<td>Large Animal Nursing</td>
<td>1.5</td>
</tr>
<tr>
<td></td>
<td><strong>Total Units:</strong></td>
<td><strong>36</strong></td>
</tr>
</tbody>
</table>

1Students enrolled in VT 100 will be required to spend 2-6 hours per week in the care of colony animals, Shifts will be assigned and will include weekends, holidays, and semester break.

2Students enrolled in VT 111 will be required to spend 2-6 hours per week in the care of colony animals, Shifts will be assigned and will include weekends, holidays, and semester break.

3Students enrolled in VT 113 will be required to spend 2-6 hours per week in the care of colony animals, Shifts will be assigned and will include weekends, holidays, and semester break.

4Students enrolled in VT 152 will be required to spend 2-6 hours per week in the care of colony animals, Shifts will be assigned and will include weekends, holidays, and semester break.

5Students enrolled in VT 120 will be required to spend 2-6 hours per week in the care of colony animals, Shifts will be assigned and will include weekends, holidays, and semester break.

6Students enrolled in VT 126 will be required to spend 2-6 hours per week in the care of colony animals, Shifts will be assigned and will include weekends, holidays, and semester break.

7Students enrolled in VT 130 will be required to spend 2-6 hours per week in the care of colony animals, Shifts will be assigned and will include weekends, holidays, and semester break.

8Students enrolled in VT 131 will be required to spend 2-6 hours per week in the care of colony animals, Shifts will be assigned and will include weekends, holidays, and semester break.

**Enrollment Eligibility**

To be eligible for enrollment in the program, the student must meet the following criteria:

- Completion of BIOL 400 with a grade of “C” or better.*
- Completion of CHEM 400 or CHEM 305 with a grade of “C” or better.
- Completion of BIOL 440 with a grade of “C” or better.
- Completion of a pre-enrollment form (includes official copies of all college transcripts) received by April 1st for the following Fall Semester.
- AVMA requires that all applicants for enrollment must have a high school diploma or G.E.D.
- * Students are advised to check prerequisites for courses when registering.

**Enrollment Process**

Eligible students are selected for the program according to the following steps:

- Only students who meet the pre-enrollment requirements will be considered for the program.
Selection will be based on a random selection process, should the number of qualified applicants exceed available spaces in the program.

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- **SLO 1**: Apply the principles of pharmacology to the practice of veterinary medicine
  - Interpret written orders, calculate doses, and correctly fill prescriptions in a veterinary pharmacy.
  - Identify the indications and contraindications to the utilization of pharmaceuticals in the practice of veterinary medicine and surgery.
  - Administer medications including but not limited to anesthetics, tranquilizers, pain medications, antibiotics, anti-inflammations, hormones, chemotherapy agents, and other specialty medications to animals using appropriate techniques.

- **SLO 2**: Assist the veterinarian in the performance of veterinary medicine and surgery
  - List and identify instrumentation used in a veterinary hospital
  - Demonstrate the ability to sterilize instrumentation and maintain equipment in a veterinary hospital
  - Demonstrate correct tissue handling and suturing techniques in a surgical setting
  - Correctly restrain animals for treatment including companion, non-domestic, and large animals
  - Perform nursing functions to include, but not limited to: physical examination, intravenous catheter care, basic life support (BLS), Urinary catheter care, bandaging, and homeostatic maintenance for animals within a veterinary hospital

- **SLO 3**: Apply the principles of radiography to the practice of veterinary medicine
  - Take radiographs of small and large animals using correct radiographic technique.
  - Demonstrate the ability to develop and critique radiographs, and correct errors in the performance of veterinary radiography.
  - Compare and contrast imaging modalities such as CAT, MRI, and ultrasound with respect to indications and applications of these techniques

- **SLO 4**: Perform clinical laboratory duties within a veterinary hospital
  - Identify common parasite ova and larvae of domestic animals in fecal and blood samples.
  - Perform common laboratory tests utilized to formulate a minimum database for an animal including, but not limited to the performance of clinical hematology, chemistry, urinalysis, and fecal analysis tests.
  - Formulate a quality control and maintenance program schedule for a clinical in house veterinary laboratory.

- **SLO 5**: Utilize the principles of dentistry in the practice of veterinary medicine
  - Demonstrate proper technique in the utilization of dental instruments.
  - Perform non-surgical extractions in animals.
  - Communicate to clients home dental care techniques
  - Perform a dental prophylaxis procedure in small animals.

- **SLO 6**: Perform clerical hospital/office duties within a veterinary hospital
  - Maintain financial and patient records.
  - Operate a veterinary office computer system.
  - Maintain logs required by law including radiographic, laboratory, surgical, anesthesia, and controlled substance logs.
  - Organize and maintain an appointment schedule.
  - Perform an inventory of hospital supplies and medications.
  - Demonstrate telephone answering skills such as greeting clients, answering questions and proper telephone etiquette.

- **SLO 7**: Provide safe, humane, and effective care for common laboratory animals used in animal research
  - Administer medications by oral or injectable methods to laboratory animals.
  - Identify common laboratory animal species.
Veterinary Technology (VT)

VT 100 Introduction to Veterinary Technology

This is an orientation course that reviews the history, training and career opportunities pertaining to Registered Veterinary Technicians. Animal behavior, handling, training and restraint will be thoroughly presented and discussed in the lecture periods. Laboratories will provide opportunities for students to gain hands-on experience with domestic, farm, laboratory and non-domestic animal species (when they are available). Students will be introduced to the medical terminology common to the animal health care field. Students will also be required to spend 2-6hrs/week during assigned times in the care of the colony animals. Time may include weekends and holidays as well as semester break. Enrollment in this course limited to students admitted to the Veterinary Technology program via the pre-enrollment process. See the course catalog or a counselor for more information.

Career Information

Private Veterinary Practice; Zoos/Wild Animal Parks; Pharmaceutical Industry; Veterinary Supplies Sales; Diagnostic Laboratories; Military Service; Education; Biomedical Research; Humane Societies/Animal Control; Regulatory Veterinary Medicine; Livestock Health Management

Veterinary Technology (VT)

VT 100 Introduction to Veterinary Technology

Units: 3
Hours: 36 hours LEC; 54 hours LAB
Prerequisites: None.
Enrollment Limitation: Students must complete the pre-enrollment process for the Veterinary Technology program. All students entering the Veterinary Technology program must complete BIOL 400 or BIOL 310 and BIOL 440 and CHEM 305 to be considered for pre-enrollment. See the course catalog or a counselor for more information
Catalog Date: June 1, 2020

This is an orientation course that reviews the history, training and career opportunities pertaining to Registered Veterinary Technicians. Animal behavior, handling, training and restraint will be thoroughly presented and discussed in the lecture periods. Laboratories will provide opportunities for students to gain hands-on experience with domestic, farm, laboratory and non-domestic animal species (when they are available). Students will be introduced to the medical terminology common to the animal health care field. Students will also be required to spend 2-6hrs/week during assigned times in the care of the colony animals. Time may include weekends and holidays as well as semester break. Enrollment in this course limited to students admitted to the Veterinary Technology program via the pre-enrollment process. See the course catalog or a counselor for more information.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO 1: Relate and physically demonstrate an understanding of animal behavior, handling, training, and restraint principles with respect to domestic, farm, laboratory and non-domestic species (such as birds and reptiles).
- Describe physical restraint techniques for various species and the consequences of inappropriate restraint to both handler and animal patient.
- Explain the indications for using chemical restraint and the common drugs used for such a purpose.
- Explain the indications for euthanasia and the acceptable methods of euthanasia for a variety of species and circumstances.
- Differentiate the common behavioral disorders of dogs and cats and define appropriate treatment and/or management for these disorders.
- SLO 2: Discuss the level of training, responsibilities, legal implications and job diversity of Registered Veterinary Technicians.
- List the job tasks legally restricted to Registered Veterinary Technicians.
- Describe a spectrum of available career opportunities for a Registered Veterinary Technician.
- Explain the licensure requirements for Registered Veterinary Technicians.
- SLO 3: Demonstrate knowledge of medical terminology commonly used in the animal health care field.
- Define commonly used medical terms in veterinary medicine.
VT 110 Veterinary Office Practice

Interpret commonly used statements from a medicolegal document such as a patient record.

Communicate, using appropriate medical terminology, different patient medical conditions as would be done in a hospital “rounds” environment.

Effectively translate medical information and directions to lay people regarding animal patient disease and care.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO 1: Perform duties expected of a receptionist in a veterinary office.
- Assess and interpret client needs during telephone conversations.
- Admit and discharge patients, take history, maintain records and prepare appropriate documents and certificates for signature.
- Perform basic filing of medical records, radiographs, lab reports, etc.
- Schedule appointments for clients.
- Perform appropriate elementary computer skills (input, retrieve and print data).
- Differentiate between emergency and non-emergency needs of veterinary patients based on client information.
- SLO 2: Maintain radiograph, surgery, anesthesia, laboratory, and controlled substance logs and accurately enter data.
- Assess which logs are appropriate to procedures being performed on a patient.
- SLO 3: Understand and organize work duties of personnel in a veterinary hospital.
- Formulate a plan of basic cleanliness and orderliness of a veterinary facility (including a hospital, clinic, practice, or laboratory).
- SLO 4: Use weights and measures commonly used in a veterinary facility.
- Demonstrate the operation of a scale, pharmacy or laboratory balance, calibrated syringes, and other calibrated measuring devices used in a veterinary facility.
- Accurately convert between metric and U.S. standard measurements of mass, volume and length.
- SLO 5: Demonstrate knowledge of Veterinary Laws and Ethics.
- Understand the relevant Veterinary Medical Board terminology and the legal limitations of a Registered Veterinary Technician in the veterinary field.
- Demonstrate understanding of the National Association of Veterinary Technicians of America (NAVTA) and the American Veterinary Medical Association (AVMA) code of ethics for Veterinary Technicians and Veterinarians.
- SLO 6: Use of proper medical terminology.
- Demonstrate comprehension of medical terminology.
- SLO 7: Client and co-worker relations
- Practice through role play and demonstrate understanding of communication techniques for effective inter-personal relationships in the workplace.
- SLO 8: Interview skills
- Discuss and practice recommended interview approaches to questions and scenarios for successful outcomes.
Discuss unsuccessful interview performances and how to improve for future interview opportunities.

VT 111 Anatomy-Physiology of Animals

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO 1: Describe the structural and functional organization of the animal body.
  - Describe the hierarchical structure of living things.
  - Explain the microscopic structure of animal cells.
  - Construct a concept map that explains locations and functions of tissues within the body of animals.
  - Identify organs and organ systems of an animal body by visual inspection using models, diagrams, and cadavers.
  - Identify the body cavities of animals.

- SLO 2: Demonstrate the ability to use medical terminology correctly.
  - Define directions on the body using anatomical terminology.
  - Describe the regional anatomy of the animal body using anatomical terms.

- SLO 3: Explain the basic physiology of each body systems and relate that knowledge to the overall function of the animal body.
  - Describe the functions of each organ system.
  - Explain the mechanisms of metabolic reactions within the body.
  - Explain the mechanism of internal communication using the nervous and endocrine systems within the body.

- SLO 4: Compare the differences in anatomy and physiology of specific organ systems among domestic animals such as ruminants, equines, and carnivores.
  - Describe the structure of specific organ systems unique to domestic animals such as ruminants, equines, and carnivores.
  - Explain the mechanism of digestion in ruminants, equines, and carnivores.

- SLO 5: Explain the basic principles of homeostasis as relates to maintenance of the animal body.
  - Identify components of a homeostatic system.
  - Analyze the differences between negative and positive feedback systems and give examples of each.

- SLO 6: Integrate anatomical structure of different organs and organ systems by describing topographical anatomy of specific areas of the body.
  - Describe the surgical anatomy of different areas of the body.
  - Explain the structures that will be affected by a specific surgical approach to an area of the body.
  - Analyze what function will be disrupted by damage to a specific area of the body.

Units: 4

Hours: 54 hours LEC; 72 hours LAB

Prerequisite: None.

Corequisite: Concurrent enrollment in VT 100 (may be taken previously)

Enrollment Limitation: Students must complete the pre-enrollment process for the Veterinary Technology program. See the course catalog or a counselor for more information

Catalog Date: June 1, 2020

This course is a study of the basic anatomy and physiology of common domestic animals, specifically dogs, cats, horses, swine and ruminants. The information will be organized according to body systems. Within each system, the variation between species will be explored. Whenever possible, topics will be related to pertinent veterinary situations. (Note: Laboratory periods will include dissection of cadavers.) Students will also be required to spend 2-6hrs /week during assigned times in the care of the colony animals. Time may include weekends and holidays as well as semester break.
VT 113 Clinical Laboratory Techniques for Veterinary Technicians

This course will cover the basic clinical laboratory skills needed by Registered Veterinary Technicians. Topics covered will include parasitology, cytology, urinalysis, microbiology, and hematology. Both normal and abnormal values for various species of animals will be covered. Students will gain additional hands-on experience as they learn to restrain animals for specimen collection procedures. Office procedures as they pertain to clinical laboratory work will be included: filing, recordkeeping, telephone reports, etc. Students will be required to spend 2-6 hours per week during assigned times in the care of the colony animals. Time may include weekends and holidays as well as semester break.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO 1: Properly use and care for common veterinary laboratory equipment.
  - Demonstrate how to operate a microscope, hematology analyzer, blood chemistry analyzer, centrifuge, microbiological incubator, and the enzyme-linked immunosorbent assay (ELISA) test kits.
  - Plan a schedule for daily, weekly, and monthly maintenance for common veterinary laboratory equipment.

- SLO 2: Perform and evaluate safety procedures within a clinical veterinary laboratory setting.
  - Explain the procedures utilized to handle biological specimens including but not limited to: body fluids, fecal material, and tissue samples.
  - Describe the types and uses of protective clothing such as gloves, goggles, masks, caps, aprons and gowns required in a veterinary clinical laboratory.
  - Differentiate between the usage of a biohazard container and a sharps container.

- SLO 3: Demonstrate knowledge of basic biology of common veterinary parasites by the following:
  - Draw a life cycle for each Phylum and Class of parasites that infect domestic animals.
  - Differentiate between zoonotic and non-zoonotic parasites.
  - Explain basic methods of parasite control.

- SLO 4: Accurately perform diagnostic testing for internal and external parasites.
  - Perform a fecal flotation and centrifugation.
  - Analyze a fecal sample and identify parasite ova.
  - Perform a skin scraping.
  - Analyze a skin scraping and identify common ectoparasites.
  - Perform an ear swab for ear mites.
  - Perform a heartworm test.

- SLO 5: Culture and identify common veterinary microorganisms.
  - Perform a gram stain.
  - Perform a bacterial culture and sensitivity test.
  - Interpret the results of a culture and sensitivity test.
  - Differentiate between rods, cocci, spirochetes, yeast, and fungi by microscopy.

- SLO 6: Demonstrate basic knowledge of principles of hematology by performing the following:
  - Identify blood cells of domestic animals.
  - Perform a blood smear and stain on a microscope slide.
  - Perform a CBC including a PCV, white cell count and differentiation, and platelet estimate.
  - Describe the appropriate tubes and anticoagulants used for hematology.
Explain how the CBC relates to disease processes in an animal.

- SLO 7: Perform blood chemistry analysis.
- Correlate tests for enzymes and other chemicals with specific organs.
- Identify the correct blood collection tubes used for chemistry analysis.
- Correlate the results of serum chemistry analysis with disease processes in an animal.
- SLO 8: Analyze a urine specimen.
- Describe different methods of urine collection.
- Demonstrate how to perform a urine sedimentation analysis.
- Demonstrate how to perform a urinalysis by dipstick methods.
- Correlate the results of a urinalysis with disease processes in an animal.
- SLO 9: Demonstrate knowledge of basic principles of cytology by performing the following:
  - Perform a direct smear and stain on cytological specimens.
  - Perform a fine needle aspiration.
  - Differentiate between the basic characteristics of normal cells and neoplastic cells.
  - Distinguish the phases of the canine estrus cycle by identification of vaginal cell types.
  - Identify the basic characteristics of animal semen.
  - Differentiate between normal and abnormal sperm.

VT 120 Pharmacology and Anesthesiology for the Veterinary Technician

- **Units:** 4
- **Hours:** 54 hours LEC; 72 hours LAB
- **Prerequisites:** VT 111 and 113 with grades of "C" or better
- **Catalog Date:** June 1, 2020

This course will lay the foundation for the students’ understanding of pharmacological agents. Drugs will be discussed according to classification, action, method of administration and dispensing (including procedures for scheduled drugs). Injectable and inhalation anesthetic agents will be discussed and demonstrated during surgical laboratory exercises. Students will have an opportunity to work with two types of inhalation anesthetic agents. All students will rotate through various surgical positions where they will enhance their knowledge of equipment and job tasks required of the surgical assistant and anesthesia monitor. Students will learn intravenous catheterization and fluid therapy. Students will be required to spend 2-6hrs /week during assigned times in the care of the colony animals. Time may include weekends and holidays as well as semester break. Students will also be assigned a dog and cat which will require an additional 140 min/wk for obedience training, socialization and grooming.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO 1: Apply principles of pharmacology to the utilization of drugs in the practice of veterinary medicine.
- Safely administer drugs and anesthetics while providing surgical care.
- Evaluate status of anesthetized patients by monitoring from the preanesthetic period through the recovery period.
- Describe the effects and contraindication of commonly used preanesthetic and anesthetic agents.
- SLO 2: Operate and perform maintenance on a gas anesthetic machine.
- Identify the components of a gas anesthetic machine and describe their function.
- Perform maintenance on a gas anesthetic machine including breakdown and reassembly.
- SLO 3: Assist the veterinarian in surgery.
- List the names and describe uses of surgical instruments and equipment.
- Demonstrate the protocol for the utilization of aseptic technique in the surgical environment.
Devise a program for the disinfection and sterilization of instruments, operating room materials, and the operating room.

- SLO 4: Perform nursing and technician duties involving medicating, examining, and preparing patients for surgery.
- Demonstrate collection of blood from peripheral veins.
- Demonstrate the placement of intravenous catheters in dogs and cats.
- Perform endotracheal intubation of dogs and cats.
- Perform preanesthetic evaluation of patients including complete blood counts, serum chemistries and urinalysis.
- Suture existing skin wounds.
- Calculate drug doses and dilutions accurately.
- Perform subcutaneous, intramuscular and intravenous injections.

VT 122 Animal Disease: Pathology

**Units:** 3  
**Hours:** 54 hours LEC  
**Prerequisite:** VT 113 and 298 with grades of "C" or better; Students must have at least one unit of VT 298. Students should have experience in a clinical setting, including animal handling, client communication, sample collection and basic diagnostic modalities including auscultation, radiology, sample preparation, etc. prior to taking VT 122.  
**Catalog Date:** June 1, 2020

A course of study designed to acquaint the Veterinary Technician trainee with the many varied disease entities seen in the animal health field. While most of the diseases discussed will be those of common small, domestic animals, some problems of exotic and laboratory animal species will also be investigated. There will be exposure to such areas of study as etiology, pathogenesis, symptomatology and prevention of disease. Necropsy demonstrations may be provided as visual aids to the textbook study.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- SLO 1: Apply principles of animal diseases in the practice of veterinary medicine.
- Describe common signs of disease of major body systems.
- Evaluate environmental factors that predispose patient to disease.
- Evaluate patient’s immune system function in relation to disease conditions.
- Describe features of common disease agents and pathogenesis.
- SLO 2: Assist the veterinarian in small animal disease investigation.
- Evaluate status of sick patient by observing clinical appearance.
- Take a complete medical history of small animal patient.
- Demonstrate the protocol for a complete physical examination of a diseased small animal patient.
- Conduct and properly record findings from physical examination.
- Conduct or assist with a small animal necropsy and report findings.
- Describe the effects and contraindication of commonly used disease treatments.
- Properly utilize medical terminology while describing the condition of the small animal patient.
- SLO 3: Operate and perform basic diagnostic tests for the diagnosis of small animal disease.
- Perform disease evaluation of patients including complete blood counts, serum chemistries, urinalysis and disease specific tests.
- Describe common laboratory findings associated with specific disease conditions.
- List the names and describe uses of diagnostic tests utilized for diagnosis of infectious diseases.
- SLO 4: Develop a small animal preventive health plan.
- Devise a program for the prevention of small animal diseases for the specific patient’s environment.
VT 123 Large Animal Disease: Pathology

- Articulate to owner the disease agents which may affect the pet and what clinical signs to observe.
- Apply knowledge to predict features of related or potential disease conditions.
- Describe common zoonotic diseases and their prevention and control within the household.

Units: 3
Hours: 54 hours LEC
Prerequisite: VT 113 with a grade of "C" or better
Corequisite: BIOL 440 (may have been taken previously)
Catalog Date: June 1, 2020

A course of study designed to acquaint the Veterinary Technician trainee with the many varied large animal disease entities seen in the animal health field. While most of the diseases discussed will be those of the common large domestic animals, some emerging and foreign animal diseases will be investigated with an emphasis on public health concerns. There will be exposure to such areas of study as etiology, pathogenesis, symptomatology and control of disease. Course will cover mechanisms of protecting the nation's food supply through herd health disease prevention and control programs for zoonotic diseases.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO 1: Apply principles of large animal diseases in the practice of veterinary medicine.
- Properly use medical terminology pertinent to the study of large animal disease.
- Apply the concept of herd health to describe the interaction of environment, host and disease agent.
- Perform a disease risk assessment to evaluate large animal patient's predisposition to disease.
- Apply basic on farm biosecurity protocols based on the assessment results.
- Determine herd immune status and evaluate disease risk potential.
- Describe features of common disease agents and pathogenesis.
- Assess the potential emergence of a foreign disease within the herd.
- Evaluate the factors leading to the emergence or re-emergence of infectious diseases worldwide.
- Describe epidemiology of emerging and re-emerging diseases.
- Apply disease prevention and control methodology to protect the nation's food supply.
- Protect public health through implementation of biosecurity and disease prevention and control principles.
- SLO 2: Assist the veterinarian in large animal disease investigation.
- Evaluate status of sick patients by observing clinical appearance and environment.
- Obtain a complete medical history of large animal patient(s).
- Perform a complete physical examination of the diseased patient(s).
- Properly use medical terminology while reporting the condition of the patient and herd.
- Conduct a large animal necropsy and report findings.
- Describe the effects and contraindication of commonly used disease treatments.
- SLO 3: Perform basic diagnostic tests for the diagnosis of large animal disease.
- Perform disease evaluation of patients including complete blood counts, serum chemistries, urinalysis and disease specific tests.
- Describe common laboratory findings associated with specific large animal disease conditions.
- List names and describe uses of diagnostic tests that are utilized for the diagnosis of infectious diseases.
- SLO 4: Develop a Herd Health Plan.
- Devise a program for the prevention of large animal diseases for the specific herd environment.
- Articulate to owner the disease agents which may affect the patient and what clinical signs to observe.
Apply knowledge to predict features of related conditions.
Describe common zoonotic diseases and their prevention and control within the herd.
Apply knowledge of the various methods of control of infectious agents, including vaccination, antimicrobial therapy, behavioral, and social changes.

VT 126 Dentistry for the Veterinary Technician

**Units:** 1.5  
**Hours:** 18 hours LEC; 27 hours LAB  
**Prerequisite:** None.  
**Corequisite:** VT 120  
**Catalog Date:** June 1, 2020

This course will prepare the student for all aspects of veterinary diagnostics and prophylaxis in dogs and cats appropriate to the veterinary technician. It will include instruction in dental charting, radiography, prophylaxis and extractions. Students will perform dental radiography and prophylaxis on anesthetized animals. Students will also be required to spend 2-6hrs/week during assigned times in the care of the colony animals. Time may include weekends and holidays as well as semester break.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- SLO 1: Perform routine dental prophylaxis (manual and machine).
- Demonstrate correct usage of hand scaling instruments.
- Demonstrate correct sharpening and maintenance of hand dental instruments.
- Explain what type of damage to the patient may be incurred with improper usage of scaling instrumentation.
- Correctly apply polishing paste to dental surfaces.
- Examine oral cavity of an anesthetized patient.
- SLO 2: Prepare dental radiographs of anesthetized animals.
- Demonstrate various positions of animals for dental radiography.
- Explain usage of radiograph machine in the practice of dentistry.
- Develop dental radiographs.
- Prepare a maintenance schedule for radiographic developing equipment.
- Evaluate technique used to obtain dental radiographs.
- SLO 3: Maintain dental records
- Compare different types of charting systems used in veterinary dentistry.
- Compose a patient dental chart.
- SLO 4: Perform routine non-surgical extractions of teeth.
- Demonstrate correct technique utilized to remove teeth non surgically.
- Differentiate between surgical and non surgical extractions.
- Explain the criteria for determining when a surgical extraction must be performed.
- SLO 5: Discuss home dental care for animals with clients.
- Prepare a written home care plan for a client.
- Discuss home care in a "mock" client situation.
- SLO 6: Demonstrate knowledge of the anatomy and nomenclature of canine, feline and equine dentition.

VT 130 Advanced Veterinary Technology
This course includes instruction in advanced veterinary technology practices which includes, but is not limited to abnormal hematology, cytology, an introduction to bone marrow aspiration and evaluation, veterinary nutrition, emergency patient care, and advanced life support. There will be an emphasis placed upon advanced nursing techniques for companion animals, laboratory animals and non domestic species. Students will be required to spend two to six hours per week during assigned times in the care of the colony animals. Time may include weekends and holidays as well as semester break. Students will also be assigned a dog and cat which will require an additional 140 minutes per week for obedience training, socialization and grooming.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO 1: Demonstrate techniques for collection, handling, and reading of bone marrow samples in animals.
- Describe the process of hematopoiesis including the cellular characteristics and maturation sequence of blood cell precursors.
- Demonstrate the technique used to collect and store bone marrow samples.
- Identify the correct instrumentation to use for bone marrow collection.
- SLO 2: Compare hematological differences between healthy and diseased animals.
- Identify mature and immature leukocytes and erythrocytes in peripheral blood.
- Identify platelets and assess platelet morphology.
- Compare erythrocyte indexes and morphology between normal and diseased animals.
- Perform simple clotting tests to assess coagulation in an animal.
- SLO 3: Demonstrate the ability to run a chemical assay on whole blood and identify abnormalities in the chemical assay.
- Describe the components serum and plasma.
- Identify abnormalities in the chemical content of blood.
- SLO 4: Perform an electrocardiogram.
- Recognize common arrhythmias on an ECG.
- Identify abnormalities on an ECG trace, and correlate abnormalities with physical symptoms of cardiac disease in an animal.
- SLO 5: Apply and care for bandages, casts, and splints on animals.
- Apply bandages and casts correctly.
- Describe appropriate use of various casting, bandaging and splinting materials and techniques.
- SLO 6: Triage patients in need of veterinary medical care.
- Describe the causes, diagnosis and treatment of shock.
- Describe the principles of basic life support (BLS), first aid and emergency care.
- Describe the administration and monitoring of fluid therapy including blood transfusion.
- Describe indications for, methods of, and risks associated with O2 therapy.
- Perform CPR on a 'mock' animal, including drug and electrical therapies.
- Prioritize treatment of specific emergency situations as presented by the instructor.
- Describe common causes, associated signs and treatment of selected animal poisoning cases.
- SLO 7: Analyze a nutritional support plan for an animal.
- Compare ingredients found in small animal commercial diets.
- Select an appropriate diet for nutritional support of normal healthy patients, or a patient with a particular disease condition, obesity, or to help recover from disease or starvation.
- SLO 8: Demonstrate ability to perform advanced support and nursing techniques.
- Demonstrate how to perform gastric lavage on a mock animal.
• Insert a nasal oxygen canula in an animal.
• Place IV catheters in dogs and cats including cephalic, saphenous, and jugular catheters.
• Collect urine specimens by cystocentesis.
• Suture existing skin wounds.
• Perform CVP monitoring of an animal.
• Perform a blood crossmatch and transfusion on an animal.
• SLO 9: Critique general anesthetic protocols and procedures.
• Formulate an anesthetic plan for an animal with a given disease condition as presented by the instructor.
• Appropriately respond to an anesthetic emergency including, hypovolemia, hypotension, hypertension, cardiac arrest, respiratory arrest, hypothermia, and hyperthermia.

VT 131 Introduction to Diagnostic Imaging

Units: 3
Hours: 36 hours LEC; 54 hours LAB
Prerequisite: VT 120 and 122 with grades of "C" or better
Catalog Date: June 1, 2020

This course is designed to meet the needs of the veterinary technician who will be working for veterinarians in private practice, animal research laboratories, and/or private and state industrial or educational institutions. The course covers safety procedures, rules, regulations, x-ray production and theory as well as specific techniques associated with the use of radiographic equipment. It includes positioning techniques for various animal species as well as radiograph developing techniques and basic x-ray theory. Alternate imaging modalities are introduced and their use in veterinary medicine described. Emphasis is placed on the theory of diagnostic ultrasound and its use in veterinary medicine. A local field trip to a facility that offers the opportunity to perform large animal radiographic techniques may be required. Students will also be required to spend 2-6 hrs/week during assigned times in the care of the colony animals. Time may include weekends and holidays as well as semester break.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• SLO 1: Produce diagnostic radiographs of dogs, cats, birds, small mammals and reptiles.
• Measure and position animals using anatomical landmarks.
• Demonstrate how to choose an appropriate technique to produce a quality radiographic image.
• Utilize radiographic equipment to produce a latent image.
• Process an exposed film using automatic and hand processing methods.
• Perform radiographic contrast studies.
• Perform radiographic techniques to screen for canine hip dysplasia.
• SLO 2: Analyze radiographic image for diagnostic quality.
• Critique image quality based on proper positioning and radiographic technique.
• Demonstrate ability to offer solutions to correct deficiencies in non-diagnostic radiographic images.
• Recognize radiographic artifact and cause of artifact.
• SLO 3: Implement radiation safety measures to minimize radiation exposure to personnel and to the patient.
• Properly use portable and stationary radiography equipment.
• Recognize faulty equipment.
• Properly use barrier equipment.
• Demonstrate an understanding of radiation regulations.
• SLO 4: Implement radiation quality control measures.
• Demonstrate proper maintenance protocols for imaging equipment.
VT 134 Large Animal Nursing

**Units:** 1.5
**Hours:** 18 hours LEC; 27 hours LAB
**Prerequisite:** VT 113 with a grade of "C" or better
**Catalog Date:** June 1, 2020

A course in restraint, behavior, anesthesia and nursing care of domestic large animal species. Species covered will include horses, cattle, sheep, goats, and swine. Students will learn and have hands on practice in basic restraint, physical examination, oral and injectable medication administration, and blood and urine collection techniques. In this course students will receive instruction through in-person lectures and/or online modules and discussions followed by hands-on practice and demonstrations at off campus livestock facilities. Written Midterm and Final examinations will take place on campus. Students will also receive instruction in the use of restraint equipment and techniques for obstetrical examination and dystocia, administration of and complications associated with large animal anesthesia, tail and leg wrapping, intravenous catheterization, and common husbandry practices including disbudding, tail docking, and castration.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- Develop and properly use a technique chart.
- Properly complete radiation logs, files and records.
- Demonstrate how to properly label, file and store films.
- SLO 5: Demonstrate understanding of other radiographic imaging techniques.
- Understand the uses of ultrasound and demonstrate how to prepare an animal for an ultrasound procedure.
- Understand basic knowledge of the function and appropriate use of other modalities including fluoroscopy, MRI, CT and PET.

VT 152 Introduction to Laboratory Animals and Caged Birds

**Units:** 2
**Hours:** 27 hours LEC; 27 hours LAB
**Prerequisite:** VT 100 and 111 with grades of "C" or better
**Catalog Date:** June 1, 2020
This course is designed to expand upon the brief introduction the veterinary technology student has had to caged birds and laboratory animals. The student will have more hands-on exposure to laboratory animals and caged birds (e.g. specimen collection, anesthesia, etc.) thereby increasing their understanding of laboratory animal care maintenance requirements. Greater emphasis will be placed on obtaining handling skills. This course will provide information and handling skills which will help the student prepare for the American Association for Laboratory Animal Science (AALAS) certification. A field trip to a research facility is required. Students will also be required to spend 2-6hrs/week during assigned times in the care of the colony animals. Time may include weekends and holidays as well as semester break.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- **SLO1**: Students will explain the laws that affect working with and maintaining laboratory animals. Differentiate and identify local, state and federal laws and statutes regulating animal use.
- **SLO2**: Students will be able to explain and identify acceptable and appropriate laboratory animal housing. Distinguish common research facility cages and devices including environmental enrichment designs.
- **SLO3**: Students identify appropriate AVMA approved euthanasia protocol for laboratory animal species. Describe the principles and methods of AVMA and IACUC approved humane euthanasia for a variety of lab animal, reptile and bird species.
- **SLO4**: Students will identify and discuss organ systems and anatomy of rodent, lagomorph, avian and reptile species. Identify and describe the basic organ systems and comparative anatomy of mice, rats, rabbits, hamsters, guinea pigs, snakes, turtles, lizards and birds.
- **SLO5**: Students calculate and administer accurately calculated drugs to laboratory animal species. Assemble appropriate equipment and administer intravenous, intraperitoneal, subcutaneous and intramuscular injections to laboratory animals, reptiles and birds.
- **SLO6**: Students safely and humanely anesthetize rodents and lagamorphs for basic procedures. Weigh animals and convert measurements and dosages to metric values. Calculate drug dosages. Assess appropriate vessel access for successful venipuncture and perform blood sample collection.
- **SLO7**: Students develop disease recognition, prevention and treatment including zoonotic and infectious diseases. Recognize and distinguish contagious, nutritional, environmental, congenital and zoonotic diseases for lab animals, reptiles and birds. Maintain disease prevention with proper husbandry and cleaning practices. Discuss appropriate medical or surgical management of these diseases, including pharmacological agents employed and specific laboratory tests used for diagnosis.
- **SLO8**: Students identify and describe unique nutritional requirements for laboratory animal, avian and reptile species.
Define the basic concepts of nutrition and food types as pertinent to laboratory species, reptiles and birds.

SLO9: Students identify the role of the veterinary technician in successful operation of a laboratory animal facility or research center.

Describe the role of the Registered Veterinary Technician in laboratory animal medicine.

Discuss the veterinary technician's role in facilities management.

VT 295 Independent Studies in Veterinary Technology

<table>
<thead>
<tr>
<th>Units:</th>
<th>1 - 3</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Hours:</td>
<td>54 - 162 hours LAB</td>
<td></td>
</tr>
<tr>
<td>Prerequisite:</td>
<td>None.</td>
<td></td>
</tr>
<tr>
<td>Catalog Date:</td>
<td>June 1, 2020</td>
<td></td>
</tr>
</tbody>
</table>

An independent studies project involves an individual student or small group of students in study, research, or activities beyond the scope of regularly offered courses. See the current catalog section of “Special Studies” for full details of Independent Studies.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- **SLO #1:** Actively engage in intellectual inquiry beyond that required in order to pass a course of study (College Wide Learning Outcome – Area 4).
- Discuss and outline a proposal of study (that can be accomplished within one semester term) with a supervising instructor qualified within the discipline.
- Design an independent study (to be completed individually or by collaboration of a small group) to foster special knowledge, skills, and experience that are not available in any one regularly scheduled course.
- Use information resources to gather discipline-specific information.
- **SLO #2:** Utilize modes of analysis and critical thinking to apply theoretical perspectives and/or concepts in the major discipline of study to significant problems and/or educational activities (College Wide Learning Outcome – Area 3).
- Analyze and apply the knowledge, skills and experience that are involved in the independent study to theoretical perspectives and/or concepts in the major discipline of study.
- Explain the importance of the major discipline of study in the broader picture of society.
- **SLO #3:** Communicate a complex understanding of content matter of the major discipline of study (College Wide Outcome – Area 3).
- Demonstrate competence in the skills essential to mastery of the major discipline of study that are necessary to accomplish the independent study.
- **SLO #4:** Identify personal goals and pursue these goals effectively (College Wide Outcome – Area 4).
- Utilize skills from the “academic tool kit” including time management, study skills, etc., to accomplish the independent study within one semester term.

VT 298 Work Experience in Veterinary Technology

<table>
<thead>
<tr>
<th>Units:</th>
<th>1 - 4</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Hours:</td>
<td>60 - 300 hours LAB</td>
<td></td>
</tr>
<tr>
<td>Prerequisite:</td>
<td>None.</td>
<td></td>
</tr>
<tr>
<td>Enrollment Limitation:</td>
<td>Students must be in a paid or unpaid internship, volunteer position or job related to career goals in Veterinary Technology.</td>
<td></td>
</tr>
<tr>
<td>General Education:</td>
<td>AA/AS Area III(b)</td>
<td></td>
</tr>
<tr>
<td>Catalog Date:</td>
<td>June 1, 2020</td>
<td></td>
</tr>
</tbody>
</table>
This course provides students with opportunities to develop marketable skills in preparation for employment in their major field of study or advancement within their career. It is designed for students interested in work experience and/or internships in associate degree level or certificate occupational programs. Course content includes understanding the application of education to the workforce; completion of required forms which document the student's progress and hours spent at the work site; and developing workplace skills and competencies. Appropriate level learning objectives are established by the student and the employer. During the semester, the student is required to participate in a weekly orientation and 75 hours of related paid work experience, or 60 hours of unpaid work experience for one unit. An additional 75 or 60 hours of related work experience is required for each additional unit. Work Experience may be taken for a total of 16 units when there are new or expanded learning objectives. Only one Work Experience course may be taken per semester.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- **DEMONSTRATE AN UNDERSTANDING AND APPLICATION OF PROFESSIONAL WORKPLACE BEHAVIOR IN A FIELD OF STUDY RELATED ONE'S CAREER.(SLO 1)**
  - Understand the effects time, stress, and organizational management have on performance.
  - Demonstrate an understanding of consistently practicing ethics and confidentiality in a workplace.
  - Examine the career/life planning process and relate its relevancy to the student.
  - Demonstrate an understanding of basic communication tools and their appropriate use.
  - Demonstrate an understanding of workplace etiquette.

- **DESCRIBE THE CAREER/LIFE PLANNING PROCESS AND RELATE ITS RELEVANCY TO ONE'S CAREER.(SLO 2)**
  - Link personal goals to long term achievement.
  - Display an understanding of creating a professional first impression.
  - Understand how networking is a powerful job search tool.
  - Understand necessary elements of a résumé.
  - Understand the importance of interview preparation.
  - Identify how continual learning increases career success.

- **DEMONSTRATE APPLICATION OF INDUSTRY KNOWLEDGE AND THEORETICAL CONCEPTS AS WRITTEN IN LEARNING OBJECTIVES IN PARTNERSHIP WITH THE EMPLOYER WORK SITE SUPERVISOR.(SLO 3)**
Welding | Cosumnes River College

The CRC welding program is designed for students interested in seeking employment or advancing employment in welding fabrication and industrial repairs. Current job statistics show a long-term and growing industry demand for skilled welders with very good pay for those with experience. Welding encompasses study in electrical, metallurgy, chemistry, physics, design, and mechanical engineering.

Dean

 (916) 691-4300

HarrisC2@crc.losrios.edu

Associate Degrees

A.S. in General Agriculture

Agriculture is a vital component of our local, state, and national economies and offers many exciting employment opportunities. In addition to the production of a wide range of valuable agricultural commodities, the Sacramento region is home to numerous multinational agricultural corporations and statewide governmental agencies. It is also a center for international agricultural trade and commerce. This program is designed for students majoring in Agriculture while also allowing the student to select courses that fit his/her individual needs and desires.

As a General Agriculture major, you will:

* Study a general agriculture curriculum representing all of the departments of the Cosumnes River College agriculture program including: agriculture business, horticulture, welding, veterinary technology and plant science.

* Develop your leadership and communication skills.

* Identify the agricultural career you are most interested in and build a course of study to better qualify you for a profession.

HIGHLIGHTS

* As the only community college agriculture program in the Sacramento region, the CRC General Agriculture program provides an excellent opportunity for individuals who wish to pursue a career in agriculture and receive a General Agriculture Associate of Science degree.

* The faculty in this program works closely with the five California agricultural degree offering universities to provide a quality program for students interested in agriculture business, management and economics.

* The Sacramento region is fortunate to have some of the best high school agriculture programs in California. The faculty in the CRC Ag program works closely with these feeder schools to articulate coursework and facilitate the successful transition of agriculture students from high school to the university.

* Internships in agriculture are available for students interested in work experience opportunities.

NOTE TO TRANSFER STUDENTS: If you are interested in transferring to a four-year college or university to pursue a bachelor’s degree in this major, it is critical that you meet with a CRC counselor to select and plan the courses for your major. Schools vary widely in terms of the required preparation. The courses that CRC requires for an Associate’s degree in this major may be different from the requirements needed for the Bachelor’s degree.

Catalog Date: June 1, 2020

Degree Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
</table>


<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGB 310</td>
<td>Agriculture Computer Applications</td>
<td>3</td>
</tr>
<tr>
<td>AGB 320</td>
<td>Agriculture Accounting</td>
<td>3</td>
</tr>
<tr>
<td>AGB 321</td>
<td>Agriculture Economics</td>
<td>3</td>
</tr>
<tr>
<td>AMT 306</td>
<td>Small Engine Repair</td>
<td>3</td>
</tr>
<tr>
<td>HORT 300</td>
<td>Introduction to Horticulture</td>
<td>3</td>
</tr>
<tr>
<td>PLTS 310</td>
<td>Soils, Soil Management, and Plant Nutrition (3)</td>
<td>3</td>
</tr>
<tr>
<td>or HORT 302</td>
<td>Soils, Soil Management, and Plant Nutrition (3)</td>
<td>3</td>
</tr>
<tr>
<td>ANSC 300</td>
<td>Introduction to Animal Science</td>
<td>3</td>
</tr>
<tr>
<td>PLTS 300</td>
<td>Introduction to Plant Science</td>
<td>3</td>
</tr>
<tr>
<td>WELD 100</td>
<td>Introduction to Welding</td>
<td>3</td>
</tr>
<tr>
<td>WEXP 498</td>
<td>Work Experience in (Subject) (1 - 4)</td>
<td></td>
</tr>
</tbody>
</table>

Subtotal Units: 29

Agriculture Business

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGB 300</td>
<td>Introduction to Agriculture Business</td>
<td>3</td>
</tr>
<tr>
<td>AGB 330</td>
<td>Agriculture Sales and Communication</td>
<td>3</td>
</tr>
<tr>
<td>AGB 331</td>
<td>Agriculture Marketing</td>
<td>3</td>
</tr>
</tbody>
</table>

Agriculture Business Units: 9

Total Units: 38

Horticulture

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>HORT 305</td>
<td>Plant Identification-Fall Selections</td>
<td>3</td>
</tr>
<tr>
<td>HORT 312</td>
<td>Plant Propagation</td>
<td>3</td>
</tr>
</tbody>
</table>

Horticulture Units: 6

Total Units: 35

Landscape

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>HORT 320</td>
<td>Sustainable Landscape Construction</td>
<td>3</td>
</tr>
<tr>
<td>HORT 324</td>
<td>Sustainable Landscape Maintenance</td>
<td>3</td>
</tr>
</tbody>
</table>

Landscape Units: 6

Total Units: 35
Welding

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>WELD 110</td>
<td>Advanced Shielded Metal Arc Welding</td>
<td>4</td>
</tr>
</tbody>
</table>

Welding Units: 4

Total Units: 33

This major requires that you complete all courses in the required program plus one area of concentration.

The General Agriculture Associate in Science (A.S.) degree may be obtained by completion of the required program, plus general education requirements, plus sufficient electives to meet a 60-unit total. See CRC graduation requirements.

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- PSLO 1: Demonstrate knowledge and hands-on experience in the basic concepts of all aspects of agriculture.
- PSLO 2: Demonstrate the ability to logically breakdown aspects of a project/problem and be able to resolve an issue in the agriculture industry.
- PSLO 3: Demonstrate independent & group learning expressing effective communication skills, both orally & written.
- PSLO 4: Participate in leadership opportunities to develop life-long learning traits.

Career Information

Management; Supervision; Finance; Insurance; Government; Marketing; Distribution; International Trade; Sales and Service; Nursery Management and Operations; Park Maintenance; Landscape Design, Teaching, Communication; Contracting & Maintenance; Fertilizer & Insecticide Application; Research; Retail/Wholesale; Estimator; Consultant; Government Agency employee; Welding Technician; Inspection; Welding Engineering; Sculpting; Home/Handicraft & Hobby; Construction; Trucking & Automotive. Some positions, however, require a four-year degree for which CRC’s program is a good base for transfer.

A.S. in Welding Technology

The Welding Program at Cosumnes River College specializes in welding training to meet current needs for the Welding Industry. In addition to learning technical welding skills of Shielded Metal Arc, Gas Metal Arc, Gas Tungsten Arc and Flux Core Arc Welding processes, students will be introduced to safety standards, common metal working machinery and welding practices common with the welding industry.

Catalog Date: June 1, 2020

Degree Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>WELD 100</td>
<td>Introduction to Welding</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>A minimum of 8 units from the following:</td>
<td>8</td>
</tr>
<tr>
<td>WELD 110</td>
<td>Advanced Shielded Metal Arc Welding (4)</td>
<td></td>
</tr>
<tr>
<td>WELD 111</td>
<td>Basic Pipe Welding Procedures (4)</td>
<td></td>
</tr>
<tr>
<td>WELD 113</td>
<td>Basic Flux Core Welding Procedures (4)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>A minimum of 9 units from the following:</td>
<td>9</td>
</tr>
<tr>
<td>WELD 126</td>
<td>Gas Metal Arc Welding of Plate &amp; Pipe (3)</td>
<td></td>
</tr>
<tr>
<td>WELD 127</td>
<td>Gas Metal Arc Welding Process of Sheet Metal (3)</td>
<td></td>
</tr>
<tr>
<td>WELD 128</td>
<td>Gas Tungsten Arc Welding of Aluminum Alloys (3)</td>
<td></td>
</tr>
<tr>
<td>COURSE CODE</td>
<td>COURSE TITLE</td>
<td>UNITS</td>
</tr>
<tr>
<td>-------------</td>
<td>--------------------------------------------------</td>
<td>-------</td>
</tr>
<tr>
<td>WELD 129</td>
<td>Gas Tungsten Arc Welding of Stainless Steel (3)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>A minimum of 5 units from the following:</td>
<td></td>
</tr>
<tr>
<td>WELD 298</td>
<td>Work Experience in Welding (1 - 4)</td>
<td></td>
</tr>
<tr>
<td>WELD 145</td>
<td>Basic Welding Shop Fabrication Skills (3)</td>
<td></td>
</tr>
<tr>
<td>WELD 151</td>
<td>Welding Industry Training (4)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total Units:</td>
<td>25</td>
</tr>
</tbody>
</table>

The Welding Technology Associate in Science (A.S.) degree may be obtained by completion of the required program, plus general education requirements, plus sufficient electives to meet a 60-unit total. See CRC graduation requirements.

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- Demonstrate welding skills to meet or exceed Industry Standards. PSLO #1
- Understand and implement Welding Procedures and Welding Specifications to meet or exceed the Welding Code Standards. PSLO #2
- Understand and implement Cal-OSHA and FED-OSHA Safety Regulations and Procedures that pertain to the Welding Industry. PSLO #3
- Apply academic skills in reading, mathematics, chemistry, physics, business, communication, engineering design and concepts to welding fabrication. PSLO #4
- Demonstrate work attributes that contribute to personal success and contribute to the goals of the company or organization for which one is employed. PSLO #5

Career Information

Production Shop Welder Production Field Welder Welding Fabricator Welding Safety Trainer Welding Inspector Welding Quality Control Supervisor Welding Supervisor Welding Teacher (High-School) Welding Instructor (Trade or College) Welding Sales Welding Safety Owner or Operator of a welding business Manager of a welding business

Certificates of Achievement

Welding Code Certificate

The Welding Code Certificate specializes in the American Welding Society Structural Steel Welding Code (D1.1) and Seismic Welding Code (D1.8). Students have the option to select one of the three courses; Flux Core Arc Welding, Shielded Metal Arc Welding and Pipe Welding procedures as a focus course to prepare to take the Certified Welding Inspector (CWI) exam at an AWS testing site. Students may take all of the focus courses to assist with preparing for the CWI exam, but only one of the optional courses is needed to earn the certificate.

**Catalog Date:** June 1, 2020

Certificate Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>A minimum of 4 units from the following:</td>
<td>4</td>
</tr>
<tr>
<td>WELD 110</td>
<td>Advanced Shielded Metal Arc Welding (4)</td>
<td></td>
</tr>
<tr>
<td>WELD 111</td>
<td>Basic Pipe Welding Procedures (4)</td>
<td></td>
</tr>
<tr>
<td>WELD 113</td>
<td>Basic Flux Core Welding Procedures (4)</td>
<td></td>
</tr>
<tr>
<td>WELD 151</td>
<td>Welding Industry Training</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Total Units:</td>
<td>8</td>
</tr>
</tbody>
</table>
Student Learning Outcomes

Upon completion of this program, the student will be able to:

- PSLO 1: Demonstrate welding skills sufficient to meet industry standards.
- PSLO 2: Identify and recall American Welding Society Structural Steel regulations pertaining to construction and or fabrication of weldments.

Career Information

Job advancement in the welding industry as a welder, quality control inspector or welding supervisor. Certified Welding Inspector Certified Welding Supervisor Certified Welding Educator

Welding Fabricator Certificate

The Welding Fabricator Certificate specializes in up to date welding code and safety regulations, modern power sources and techniques, fabrication procedures with the Gas Metal Arc Welding Process and the Gas Tungsten Arc Welding Process. Students will have the opportunity to meet or exceed industry standards in-order to become employed in the welding industry.

Catalog Data: June 1, 2020

Certificate Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>WELD 145</td>
<td>Basic Welding Shop Fabrication Skills</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>A minimum of 7.5 units from the following:</td>
<td>7.5</td>
</tr>
<tr>
<td>WELD 125</td>
<td>Introduction to the Gas Metal Arc Welding Process (1.5)</td>
<td></td>
</tr>
<tr>
<td>WELD 126</td>
<td>Gas Metal Arc Welding of Plate &amp; Pipe (3)</td>
<td></td>
</tr>
<tr>
<td>WELD 127</td>
<td>Gas Metal Arc Welding Process of Sheet Metal (3)</td>
<td></td>
</tr>
<tr>
<td>WELD 128</td>
<td>Gas Tungsten Arc Welding of Aluminum Alloys (3)</td>
<td></td>
</tr>
<tr>
<td>WELD 129</td>
<td>Gas Tungsten Arc Welding of Stainless Steel (3)</td>
<td></td>
</tr>
<tr>
<td>WELD 160</td>
<td>Welding Technology for the Automotive Industry (1.5)</td>
<td></td>
</tr>
<tr>
<td>Total Units:</td>
<td></td>
<td>10.5</td>
</tr>
</tbody>
</table>

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- PSLO #1: Fabrication and Certification: Use proper hand, measuring and layout tools to fabricate welding projects or certification coupons.
- Be able to properly and accurate measure a welding bead with a fillet weld gage.
- Be able to properly measure the height of a welding bead with a "V Wac" gage or "Bridge Cam" gage.
- PSLO #2: Professionalism: Demonstrate work attributes that contribute to personal success and contribute to the goals of the company or organization for which one is employed.
- Be able to be a team player who shows up to work on time.

Career Information

Job advancement and or employment in the welding industry.
The CRC welding program is designed for students interested in seeking employment or advancing employment in welding fabrication and industrial repairs.

Current job statistics show a long-term and growing industry demand for skilled welders with very good pay for those with experience in Gas Metal Arc Welding, Shielded Metal Arc Welding and Flux Core Arc Welding talents.

Welding encompasses study in Electrical, Metallurgy, Chemistry, Physics, Design, and Mechanical Engineering.

This welding certificate can be used in conjunction with other technology areas such as:
* Automotive Mechanics Technology
* Building Inspection Technology
* Construction Management Technology

Highlights include:
* Classes for beginning and advanced welders
* Welder Operator Qualification Records
* Hands-on experience and opportunities for participation in student projects

**Catalog Date:** June 1, 2020

## Certificate Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>WELD 100</td>
<td>Introduction to Welding</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>A minimum of 13 units from the following:</strong></td>
<td></td>
</tr>
<tr>
<td>WELD 125</td>
<td>Introduction to the Gas Metal Arc Welding Process (1.5)</td>
<td></td>
</tr>
<tr>
<td>WELD 160</td>
<td>Welding Technology for the Automotive Industry (1.5)</td>
<td></td>
</tr>
<tr>
<td>WELD 110</td>
<td>Advanced Shielded Metal Arc Welding (4)</td>
<td></td>
</tr>
<tr>
<td>WELD 111</td>
<td>Basic Pipe Welding Procedures (4)</td>
<td></td>
</tr>
<tr>
<td>WELD 113</td>
<td>Basic Flux Core Welding Procedures (4)</td>
<td></td>
</tr>
<tr>
<td>WELD 126</td>
<td>Gas Metal Arc Welding of Plate &amp; Pipe (3)</td>
<td></td>
</tr>
<tr>
<td>WELD 127</td>
<td>Gas Metal Arc Welding Process of Sheet Metal (3)</td>
<td></td>
</tr>
<tr>
<td>WELD 128</td>
<td>Gas Tungsten Arc Welding of Aluminum Alloys (3)</td>
<td></td>
</tr>
<tr>
<td>WELD 129</td>
<td>Gas Tungsten Arc Welding of Stainless Steel (3)</td>
<td></td>
</tr>
<tr>
<td>WELD 295</td>
<td>Independent Studies in Welding (1 - 3)</td>
<td></td>
</tr>
<tr>
<td>WELD 151</td>
<td>Welding Industry Training (4)</td>
<td></td>
</tr>
<tr>
<td>WELD 145</td>
<td>Basic Welding Shop Fabrication Skills (3)</td>
<td></td>
</tr>
<tr>
<td>WELD 298</td>
<td>Work Experience in Welding (1 - 4)</td>
<td></td>
</tr>
<tr>
<td><strong>Total Units:</strong></td>
<td></td>
<td><strong>16</strong></td>
</tr>
</tbody>
</table>

## Student Learning Outcomes

Upon completion of this program, the student will be able to:

- **PSLO #1:** Demonstrate welding skills sufficient to meet industry standards.
- **PSLO #2:** Apply integrated knowledge with incremental skill improvement resulting in functional application of welding techniques.
- **PSLO #3:** Interpret safety codes and regulations that pertain to the welding industry.
- **PSLO #4:** Use proper hand, measuring and layout tools to fabricate welding projects or certification coupons.
Career Information

Welding Technician; Sales; Inspection; Supervision & Management; Welding Engineering; Welding Teacher; Welding Safety Trainer; Sculpting; Home/Handicraft & Hobby; Construction; Trucking & Automotive

Welding (WELD)

WELD 100 Introduction to Welding

<table>
<thead>
<tr>
<th>Units:</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hours:</td>
<td>36 hours LEC; 54 hours LAB</td>
</tr>
<tr>
<td>Prerequisite:</td>
<td>None</td>
</tr>
<tr>
<td>Catalog Date:</td>
<td>June 1, 2020</td>
</tr>
</tbody>
</table>

This is an introductory course that covers the safety procedures of operating an electric arc welding machine, oxygen-acetylene cutting torch, oxygen-propane cutting and heating torch, plasma arc cutting, flux core arc welding, gas metal arc welding and the gas tungsten arc welding process. The course also includes the scientific theory of welding and cutting, modern power sources, welding symbols, proper joint design, the proper welding procedures and techniques for all types of welding and cutting processes.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO 1: Demonstrate welding skills sufficient to meet industry standards.
- The student will perform basic fillet weld beads in the flat position with the GMAW, GTAW, SMAW and the FCAW process.
- SLO 2: Apply integrated knowledge with incremental skill improvement resulting in functional application of welding techniques.
- The student will demonstrate an understanding of basic welding skills by being able to identify and explain the technical differences of the SMAW, GMAW, GTAW and the FCAW processes.
- The student will demonstrate the ability to use a welding machine's owner's manual as a reference guide to produce a sound weld bead.
- SLO 3: Use proper hand, measuring and layout tools to fabricate welding projects.
- Demonstrate proper use of hand and power tools by changing out high pressure welding cylinders, setting up and shutting down an oxygen fuel outfit and performing a safety inspection of the equipment.
- Demonstrate proper use of a tape measure, carpenter square and soap stone to layout and cut material with various shop tools to specific dimensions to complete the welding assignments.
- SLO 4: Demonstrate knowledge of Cal OSHA regulations pertaining to the welding industry.
- Demonstrate how to safely operate high-pressure gas cylinders and regulators for welding and cutting operations per manufacturer's recommendations.
- Demonstrate how to safely adjust, ignite and shut down a cutting torch or welding torch to manufacturer's recommended procedures.
- Demonstrate how to safely prepare and handle oxygen and acetylene cylinders, regulators, cutting and welding attachments for transportation and long term storage conditions.

WELD 110 Advanced Shielded Metal Arc Welding

<table>
<thead>
<tr>
<th>Units:</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hours:</td>
<td>54 hours LEC; 54 hours LAB</td>
</tr>
<tr>
<td>Prerequisite:</td>
<td>WELD 100 or 160 with a grade of &quot;C&quot; or better</td>
</tr>
<tr>
<td>Catalog Date:</td>
<td>June 1, 2020</td>
</tr>
</tbody>
</table>
The WELD 110 advanced welding course specializes in vertical up and overhead welding procedures with the shielded metal arc welding (SMAW) process. Students will be introduced to current welding code regulations for structural steel, bridge and seismic applications with the SMAW process. Students will learn welding parameters, distortion, pre-heat and post-heat procedures, acceptable code procedures and practices. Laboratory assignments will prepare students to be successful in the WELD 151 Industry Training course.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO 1: Demonstrate welding skills that meet industry certified welder standards.
- perform the proper welding procedures and techniques with the Shielded Metal Arc Welding (SMAW) and the Flux Core Arc Welding (FCAW) process.
- produce code-quality welds with the SMAW or FCAW process.
- demonstrate the ability to manipulate the welding arc of the SMAW or FCAW process to significantly reduce, if not eliminate undercut, porosity, slag inclusion, and inconsistent weld bead profile.
- explain the technical function of shielding gas for the SMAW process.
- identify, analyze and manipulate welding parameters to produce an AWS D1.1 acceptable weld bead with the SMAW and FCAW process.
- SLO 2: Apply integrated knowledge with incremental skill improvement resulting in functional application of welding techniques.
- explain the technical function of shielding gas for the FCAW process.
- identify the technical differences of the electrode alloy content and flux elements of the SMAW and FCAW processes.
- explain the theoretical and set-up procedures for a constant voltage and a constant current power supplies.
- read and understand any manufacturer's operating manual as a resource guide to safely operate any given welding machine.
- reference welding manufacturer's websites to research welding electrode consumable data required to complete a welding procedure specification document.
- demonstrate standard certification procedures by using a welding procedure specification document to attain certification.
- SLO 3: Use proper hand, measuring and layout tools to fabricate welding projects.
- demonstrate how to correctly inspect welds for accuracy, weld profile characteristics and identify any rejectable weld discontinuities.
- SLO 4: Demonstrate knowledge of Cal OSHA regulations that pertain to the welding industry.
- demonstrate the safe operating procedures for an oxygen acetylene cutting torch, plasma cutting torch, hydraulic shearing and punching tool and a mechanical metal cutting shear.
- demonstrate effective safety inspections of tools, equipment and personal protective equipment.
- SLO 5: Demonstrate work attributes that contribute to personal success and contribute to the goals of the company or organization for which one is employed.
- effectively communicate with other welders, production or schedule supervisors, welding inspectors and safety personnel to effectively and efficiently perform code quality welding.

WELD 111 Basic Pipe Welding Procedures

- Units: 4
- Hours: 54 hours LEC; 54 hours LAB
- Prerequisite: WELD 100 or 160 with a grade of "C" or better; The student needs safety training on gas cutting equipment and electric arc welding machinery to be eligible for the WELD 111 course.
- Catalog Date: June 1, 2020

Basic Pipe Welding Procedures covers personal safety, hand and power tool safety, machinery safety and operational procedures for preparing metal for welding. The student will be introduced to the proper procedures of beveling pipe with a cutting torch and grinder, welding in the 5G and 6G positions with the SMAW, FCAW, GMAW or the GTAW process. The course will also include Metallurgy, Materials, Fabrication, Welding Codes, Industry Standards, Welding Procedures and Welding Inspection procedures. Laboratory assignments will allow students to focus on pipe to pipe fit-up and welding bead quality to meet or exceed industry standards.

Student Learning Outcomes
Upon completion of this course, the student will be able to:

- SLO #1: Demonstrate welding skills sufficient to meet industry standards (Program Learning Outcome #1).
- The student must be able to perform a surface weld on 8" pipe with E6010 electrode.
- The student must be able to perform a surface weld on 8" pipe with E7018 electrode.
- SLO #2: Develop safe work habits and skills with welding tools and machinery for a safe welding procedures and practices for a long term career in the welding industry (Program Learning Outcome #3).
- The student must be able to properly setup and shut down an oxygen acetylene cutting torch apparatus safely.
- The student must be able to safely shear metal with various hydraulic and power actuated shears.
- SLO #3: Utilize proper hand, measuring and layout tools to fabricate welding projects (Program Learning Outcome #4).
- The student must be able to measure a pipe bevel angle with a protractor.
- The student must be able to measure a weld bead height with a "V wac" gauge within a 1/32" tolerance.

WELD 113 Basic Flux Core Welding Procedures

Units: 4
Hours: 54 hours LEC; 54 hours LAB
Prerequisite: WELD 100 or 160 with a grade of "C" or better
Catalog Date: June 1, 2020

The flux core arc welding process course provides training to develop semi-automatic welding skills on carbon steel plate to structural welding code standards. Topics include safety training, welding inspection and testing procedures with various size diameter flux cored electrodes, with and without external shielding gas, in all positions on fillet and groove welds. The laboratory assignments will prepare the student for the WELD 151 Industrial Training course.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO 1: Demonstrate welding skills that meet industry standards.
- Perform the proper welding procedures and techniques with the Flux Core Arc Welding (FCAW) process.
- Produce code-quality welds with the FCAW process.
- Demonstrate the ability to manipulate the welding arc of the FCAW process to significantly reduce, if not eliminate undercut, porosity, slag inclusion, and inconsistent weld bead profile.
- Identify, analyze and manipulate welding parameters to produce an AWS D1.1 acceptable weld bead with the FCAW process.
- SLO 2: Use proper hand, measuring and layout tools to fabricate welding projects.
- Demonstrate how to correctly inspect welds for accuracy, weld profile characteristics and identify any rejectable weld discontinuities.
- SLO 3: Apply integrated knowledge with incremental skill improvement resulting in functional application of welding techniques.
- Explain the technical function of shielding gas for the FCAW process.
- Identify the technical differences of the electrode alloy content and flux elements of the FCAW processes.
- Explain the theoretical and set-up procedures for a constant voltage and a constant current power supplies.
- Read and understand any manufacturer’s operating manual as a resource guide to safely operate any given welding machine.
- Reference welding manufacturer’s websites to research welding electrode consumable data required to complete a welding procedure specification document.

WELD 125 Introduction to the Gas Metal Arc Welding Process
The Gas Metal Arc Welding (GMAW) course is an introductory welding course designed for the career or non-career welding student who requires the proper safety training and welding procedures to perform the GMAW process to meet industry safety and welding standards.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO 1: Demonstrate welding skills sufficient to meet industry standards. (PSLO #1)
- Perform a 2F welding coupon with the GMAW process safely on plate
- Perform a 3F Down welding coupon with the GMAW process safely on plate
- SLO 2: Utilize proper hand, measuring and layout tools to fabricate welding projects. (PSLO #3)
- Measure a fillet weld properly.
- Measure the bead height on a groove weld properly.

WELD 126 Gas Metal Arc Welding of Plate & Pipe

Units: 3
Hours: 36 hours LEC; 54 hours LAB
Prerequisite: None.
Catalog Date: June 1, 2020

Gas Metal Arc Welding process of Plate and Pipe focuses on safety, hand and power tools, machinery, welding parameters, welding code and power supplies. The laboratory assignments will allow students to focus on proper preparation methods and welding techniques to perform correct pipe to pipe connections to meet or exceed industry standards.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO 1: Demonstrate welding skills sufficient to meet industry standards. (PSLO #1)
- Perform a 2F welding coupon with the GMAW process on plate
- Perform a 3F welding coupon with the GMAW process on plate
- SLO 2: Utilize proper hand, measuring and layout tools to fabricate welding projects. (PSLO #3)
- Measure a fillet weld properly.
- Measure the bead height on a groove weld properly.

WELD 127 Gas Metal Arc Welding Process of Sheet Metal

Units: 3
Hours: 36 hours LEC; 54 hours LAB
Prerequisite: None.
Catalog Date: June 1, 2020

Gas Metal Arc Welding Process of Sheet Metal is a welding course that specializes in the safety, shop hand and power tools, machinery, power supplies, welding codes and welding techniques of the Gas Metal Arc Welding process. Laboratory assignments will be completed on medium carbon steel, aluminum alloy or stainless steel sheet-metal to meet industry standards. AWS, ASME and API Qualifications may be issued by the employer, not the college welding program.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO #1: Demonstrate welding skills sufficient to meet industry standards. (PSLO #1)
- Perform a 2F welding coupon with the GMAW process.
- Perform a 3F Up welding coupon with the GMAW process.
- SLO #2: Apply integrated knowledge with incremental skill improvement resulting in functional application of welding techniques. (PSLO #2)
- Perform a fillet weld in the horizontal position and use those learned skills to perform a 3F Up, 3F Down or 4F weld.
- SLO #3: Use proper hand, measuring and layout tools to fabricate welding projects. (PSLO #3)
- Measure a fillet weld properly.
- Measure the bead height on a groove weld properly.
- Develop safe work habits and skills with welding tools and machinery for a safe long term career in the welding industry.

WELD 128 Gas Tungsten Arc Welding of Aluminum Alloys

Units: 3
Hours: 36 hours LEC; 54 hours LAB
Prerequisite: WELD 100 or 160 with a grade of “C” or better
Catalog Date: June 1, 2020

Gas Tungsten Arc Welding of Aluminum Alloy focuses on welding safety, shop tools and machinery, welding codes, welding inspection, power supplies, welding technique and welding parameters. Laboratory assignments will be completed with the Gas Tungsten Arc Welding process with modern inverter power supplies on Aluminum Alloy material to prepare students for employment in the welding industry. AWS, ASME and API Qualifications may be issued by the employer, not the college welding program.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO #1: Demonstrate welding skills sufficient to meet industry standards. (PSLO #1)
- Perform a 2F welding coupon with the GTAW process.
- Perform a 1G welding coupon with the GTAW process.
- SLO #2 Interpret safety codes and regulations that pertain to the welding industry. (PSLO #3)
- Have a basic understanding of OSHA safety regulations with high pressure cylinders.
- Have a basic understanding of personal protective equipment for welding operators.
- SLO #3: Use proper hand, measuring and layout tools to fabricate welding projects or certification coupons. (PSLO #4)
- Accurately use a tape measure to layout metal for student projects.
- Accurately measure a fillet weld.

WELD 129 Gas Tungsten Arc Welding of Stainless Steel

Units: 3
Hours: 36 hours LEC; 54 hours LAB
Prerequisite: WELD 100 or 160 with a grade of “C” or better
Catalog Date: June 1, 2020

Gas Tungsten Arc Welding of stainless steel focuses on welding safety, shop tools and machinery, welding codes, welding inspection, power supplies, welding technique and welding parameters. Laboratory assignments will be completed with the Gas Tungsten Arc Welding process with modern inverter power supplies on stainless steel material. AWS, ASME and API Qualifications may be issued by the employer, not the college welding program.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO #1: Demonstrate welding skills sufficient to meet industry standards. (PSLO #1, Welding Skills)
WELD 145 Basic Welding Shop Fabrication Skills

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO 1: Apply integrated knowledge with incremental skill improvement resulting in functional application of welding techniques.
- Demonstrate the ability to design a project with a pencil and paper
- Demonstrate the ability to design a project with a computer assisted drawing program.
- SLO 2: Use proper hand, measuring and layout tools to fabricate welding projects.
- The student shall be able to measure metal with a standard or metric tape measure.
- The student shall be able to properly use hand tools like a hacksaw, drill and grinder to perform fabrication projects.

WELD 151 Welding Industry Training

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO 1: Demonstrate welding skills sufficient to meet industry welding standards.
- Produce code quality welds with the Gas Metal Arc Welding Process (GMAW), Gas Tungsten Arc Welding Process (GTAW), Shielded Metal Arc Welding Process (SMAW) and or the Flux Core Arc Welding process (FCAW).
Identify, analyze and correct welding parameters to produce a suitable weld bead with the GMAW, GTAW, SMAW and or the FCAW process.

Apply and manipulate the welding arc of the GMAW, GTAW, SMAW and or the FCAW process to significantly reduce undercut, porosity, cold lap and other common welding defects.

SLO 2: Identify and apply proper hand, measuring and layout tools to fabricate welding projects.

Inspect welds for accurate weld size, acceptable weld profile and identify any weld discontinuities to the latest welding code common to the welding industry.

SLO 3: Identify and recall American Welding Society Structural Steel regulations pertaining to construction, manufacturing or fabrication.

Interpret safety rules and regulations and demonstrate safe welding and cutting procedures.

SLO 4: Apply work attributes that contribute to personal success and contribute to the goals of the company or organization for which one is employed.

Communicate effectively with other welders, production or schedule supervisors, welding inspectors and safety personnel to effectively and efficiently perform code quality welding.

WELD 160 Welding Technology for the Automotive Industry

Units: 1.5
Hours: 18 hours LEC; 27 hours LAB
Prerequisite: None.
Catalog Date: June 1, 2020

This is an introductory level course that addresses safety and the proper procedures pertaining to the following equipment: Oxygen Acetylene and Oxygen Propane Cutting and Heating equipment, Electric Arc Welding, Plasma Arc Cutting equipment, Gas Metal Arc Welding equipment and Gas Tungsten Arc Welding equipment. The course focuses on welding technology for the purpose of modification and/or repair of automotive related components.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO 1: Demonstrate the welding skills sufficient to meet industry standards.
- Demonstrate the basic knowledge and elementary skills of oxygen acetylene cutting, plasma arc cutting, shielded metal arc welding, gas metal arc welding, gas tungsten arc welding on Aluminum alloys.
- SLO 2: Apply integrated knowledge with incremental skill improvement resulting in functional application of welding techniques.
- Explain the technical differences of the welding and cutting processes such as the GMAW, GTAW, OFC and PAC processes.
- Identify and adjust the welding parameters for a gas metal arc welding machine and a shielded metal arc welding machine to the correct amperage, voltage, wire feed speed, shielding gas flow rate to weld the correct weld bead.
- SLO 3: Use proper hand, measuring and layout tools to fabricate welding projects.
- Develop a basic hand and eye coordination skills with basic welding tools and metalworking equipment.
- SLO 4: Demonstrate knowledge of Cal OSHA regulations pertaining to the welding industry.
- Inspect, set up, change out cylinders and regulators, safely operate, and disassemble an Oxygen-Acetylene Welding and Cutting outfit.
- Safely operate an Oxygen-Acetylene Cutting Torch to severe carbon steel plate and severe aluminum alloy with a plasma cutting machine.
- SLO 5: Demonstrate work attributes that contribute to personal success and contribute to the goals of the company or organization for which one is employed.

WELD 294 Topics in Welding
WELD 294 is a course developed in cooperation with the industry to meet specialized training needs of the Sacramento area or specifically high demand welding processes for the welding industry.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO 1: Demonstrate welding skills sufficient to meet industry certified welder standards.
- Apply integrated knowledge with incremental skill improvement resulting in functional application of welding techniques.
- SLO 3: Use proper hand, measuring and layout tools to fabricate welding projects.
- Demonstrate knowledge of Cal OSHA and Fed OSHA regulations pertaining to the welding industry.
- Demonstrate new advancements in power supplies and welding skills sufficient to meet industry standards.
- SLO 4: Demonstrate knowledge of Cal OSHA regulations pertaining to the welding industry.

WELD 295 Independent Studies in Welding

An independent studies project involves an individual student or small group of students in study, research, or activities beyond the scope of regularly offered courses. See the current catalog section of "Special Studies" for full details of Independent Studies.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO #1: Actively engage in intellectual inquiry beyond that required in order to pass a course of study (College Wide Learning Outcome – Area 4).
- Discuss and outline a proposal of study (that can be accomplished within one semester term) with a supervising instructor qualified within the discipline.
- Design an independent study (to be completed individually or by collaboration of a small group) to foster special knowledge, skills, and experience that are not available in any one regularly scheduled course.
- Use information resources to gather discipline-specific information.
- SLO #2: Utilize modes of analysis and critical thinking to apply theoretical perspectives and/or concepts in the major discipline of study to significant problems and/or educational activities (College Wide Learning Outcome – Area 3).
- Analyze and apply the knowledge, skills and experience that are involved in the independent study to theoretical perspectives and/or concepts in the major discipline of study.
- Explain the importance of the major discipline of study in the broader picture of society.
- SLO #3: Communicate a complex understanding of content matter of the major discipline of study (College Wide Outcome – Area 3).
- Demonstrate competence in the skills essential to mastery of the major discipline of study that are necessary to accomplish the independent study.
- SLO #4: Identify personal goals and pursue these goals effectively (College Wide Outcome – Area 4).
- Utilize skills from the "academic tool kit" including time management, study skills, etc., to accomplish the independent study within one semester term.

WELD 298 Work Experience in Welding
This course provides students with opportunities to develop marketable skills in preparation for employment in their major field of study or advancement within their career. It is designed for students interested in work experience and/or internships in associate degree level or certificate occupational programs. Course content includes understanding the application of education to the workforce; completion of required forms which document the student's progress and hours spent at the work site; and developing workplace skills and competencies. Appropriate level learning objectives are established by the student and the employer. During the semester, the student is required to participate in a weekly orientation and 75 hours of related paid work experience, or 60 hours of unpaid work experience for one unit. An additional 75 or 60 hours of related work experience is required for each additional unit. Work Experience may be taken for a total of 16 units when there are new or expanded learning objectives. Only one Work Experience course may be taken per semester.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- **DEMONSTRATE AN UNDERSTANDING AND APPLICATION OF PROFESSIONAL WORKPLACE BEHAVIOR IN A FIELD OF STUDY RELATED ONE'S CAREER (SLO 1)**
  - Understand the effects time, stress, and organizational management have on performance.
  - Demonstrate an understanding of consistently practicing ethics and confidentiality in a workplace.
  - Examine the career/life planning process and relate its relevancy to the student.
  - Demonstrate an understanding of basic communication tools and their appropriate use.
  - Demonstrate an understanding of workplace etiquette.
- **DESCRIBE THE CAREER/LIFE PLANNING PROCESS AND RELATE ITS RELEVANCY TO ONE'S CAREER (SLO 2)**
  - Link personal goals to long term achievement.
  - Display an understanding of creating a professional first impression.
  - Understand how networking is a powerful job search tool.
  - Understand necessary elements of a résumé.
  - Understand the importance of interview preparation.
  - Identify how continual learning increases career success.
- **DEMONSTRATE APPLICATION OF INDUSTRY KNOWLEDGE AND THEORETICAL CONCEPTS AS WRITTEN IN LEARNING OBJECTIVES IN PARTNERSHIP WITH THE EMPLOYER WORK SITE SUPERVISOR (SLO 3)**
Vietnamese | Cosumnes River College

CRC offers the basic grammar and conversation courses in Vietnamese. Students will be able to understand the spoken language, to speak with reasonable fluency, and to write at their speaking level.

Dean

📞 (916) 691-7740

✉️ CasareA@crc.losrios.edu
The two-year programs in Theatre Arts are designed to provide students with a broad spectrum of activities in all phases of play production.

Dean

(916) 691-7170

BedforB@crc.losrios.edu

Associate Degrees for Transfer

A.A.-T. in Theatre Arts

The Cosumnes River Theatre Department Associate of Arts Degree for Transfer Program is designed to facilitate successful transfer to baccalaureate theatre or drama degree programs. This degree provides students with the lower division breadth and depth of the field of theatre arts. Additionally, this degree exposes students to the core principles and practices in the field. Students will learn: the basics of acting, the basics of theatre technology and production, and where theatre fits in to both the historical and modern world of entertainment.

Catalog Date: June 1, 2020

Degree Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>TA 300</td>
<td>Introduction to the Theatre (3)</td>
<td>3</td>
</tr>
<tr>
<td>or TA 302</td>
<td>History and Theory of the Theatre I (3)</td>
<td></td>
</tr>
<tr>
<td>TA 350</td>
<td>Theory and Techniques of Acting I</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>A minimum of 3 units from the following:</td>
<td></td>
</tr>
<tr>
<td>TAP 320</td>
<td>Classical Rehearsal and Performance I (1 - 3)</td>
<td>3</td>
</tr>
<tr>
<td>or TAP 300</td>
<td>Modern Rehearsal and Performance I (1 - 3)</td>
<td></td>
</tr>
<tr>
<td>or TAP 340</td>
<td>Musical Rehearsal and Performance I (1 - 3)</td>
<td></td>
</tr>
<tr>
<td>or TAP 360</td>
<td>Children's Theatre Rehearsal and Performance I (1 - 3)</td>
<td></td>
</tr>
<tr>
<td>TAP 310</td>
<td>Modern Technical Production I (1 - 3)</td>
<td></td>
</tr>
<tr>
<td>or TAP 330</td>
<td>Classical Technical Production I (1 - 3)</td>
<td></td>
</tr>
<tr>
<td>or TAP 350</td>
<td>Musical Technical Production I (1 - 3)</td>
<td></td>
</tr>
<tr>
<td>or TAP 370</td>
<td>Children's Theatre Technical Production I (1 - 3)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>A minimum of 9 units from the following:</td>
<td>9</td>
</tr>
<tr>
<td>TA 305</td>
<td>Script Analysis (3)</td>
<td></td>
</tr>
<tr>
<td>TA 351</td>
<td>Theory and Techniques of Acting II (3)</td>
<td></td>
</tr>
<tr>
<td>TA 420</td>
<td>Stagecraft (3)</td>
<td></td>
</tr>
<tr>
<td>COURSE CODE</td>
<td>COURSE TITLE</td>
<td>UNITS</td>
</tr>
<tr>
<td>-------------</td>
<td>------------------------------------------------</td>
<td>-------</td>
</tr>
<tr>
<td>TA 422</td>
<td>Stage Lighting (3)</td>
<td></td>
</tr>
<tr>
<td>TA 430</td>
<td>Costume Construction (3)</td>
<td></td>
</tr>
<tr>
<td>TAP 320</td>
<td>Classical Rehearsal and Performance I (1 - 3)</td>
<td></td>
</tr>
<tr>
<td>or TAP 300</td>
<td>Modern Rehearsal and Performance I (1 - 3)</td>
<td></td>
</tr>
<tr>
<td>or TAP 340</td>
<td>Musical Rehearsal and Performance I (1 - 3)</td>
<td></td>
</tr>
<tr>
<td>TAP 310</td>
<td>Modern Technical Production I (1 - 3)</td>
<td></td>
</tr>
<tr>
<td>or TAP 330</td>
<td>Classical Technical Production I (1 - 3)</td>
<td></td>
</tr>
<tr>
<td>or TAP 350</td>
<td>Musical Technical Production I (1 - 3)</td>
<td></td>
</tr>
<tr>
<td>Total Units</td>
<td></td>
<td>18</td>
</tr>
</tbody>
</table>

If students utilized three units of Rehearsal and Performance courses in the core of the degree they may use three units of Technical Production courses here. If they used Technical Production courses in the core they may use three units of Rehearsal and Performance courses here.

The Associate in Arts in Theatre Arts for Transfer (AA-T) degree may be obtained by completion of 60 transferable, semester units with a minimum 2.0 GPA, including (a) the major or area of emphasis described in the Required Program, and (b) either the Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education-Breadth Requirements.

Student Learning Outcomes
Upon completion of this program, the student will be able to:

- Critique and evaluate the role of the theatre arts and its relationship to other parts of society.
- Evaluate the historical, artistic, social, and philosophical environments in which theatre exists.
- Analyze and critique dramatic literature and performance.
- Formulate alternative solutions to theatrical production situations.
- Employ audition and performance skills in community, educational, and/or professional theatres.
- Develop skills to work as a theatre technician in community, educational, and/or professional theatres.
- Demonstrate the ability to work effectively as an ensemble member of a theatre company.
- Demonstrate skills that will allow the student to thrive in a baccalaureate level theatre program.

Career Information
People with advanced degrees in Theatre have a broad range of employment opportunities including, but not limited to, acting, design/technology for the theatre, publicity and public relations, teaching, theatre technician, stage management, and Box Office management. Some of these careers may need additional degrees beyond the Associates level. NOTE TO TRANSFER STUDENTS: The Associate Degree for Transfer program is designed for students who plan to transfer to a campus of the California State University (CSU). Other than the required core, the courses you choose to complete this degree will depend to some extent on the selected CSU for transfer. In addition, some CSU-GE Breadth or IGETC requirements can also be completed using courses required for this associate degree for transfer major (known as "double-counting"). Meeting with a counselor to determine the most appropriate course choices will facilitate efficient completion of your transfer requirements. For students wishing to transfer to other universities (UC System, private, or out-of-state), the Associate Degree for Transfer may not provide adequate preparation for upper-division transfer admissions; it is critical that you meet with a CRC counselor to select and plan the courses for the major, as programs vary widely in terms of the required preparation.

Associate Degrees
A.A. in Theatre Arts
The two-year degree in Theatre Arts is a comprehensive program in theater that combines a critical study of theatre with experiential practice in one or more of its component parts. Students explore the various areas of theater to build a foundation for future creative work. The theatre arts degree will provide training in theatre arts production for students who intend to pursue study beyond the AA degree, who are preparing for careers in teaching or in the professional theatre. The basic program also provides an opportunity for specialization in Performance or Design/Technology. A Certificate of Achievement in Theatre for Young Audiences is also available for students whose interest is in doing theatre with or for children.

Highlights include:
* Distinguished faculty with nationally renowned professional experience in directing and design, as well as considerable teaching experience on both the graduate and undergraduate levels.
* A Visual and Performing Arts Complex, which includes a 320-seat proscenium theatre, a 100-seat Black Box theatre, and an outdoor stage.
* Opportunity for advanced students to gain access to the finest four-year college and university theatre programs as well as internships in major regional theatres throughout the country.
* Partnerships with local professional theatre companies for internships.

This degree is designed to provide hands-on experience in the production of plays as well as prepare students for transfer to four-year institutions, and for a baccalaureate major in Theatre or related majors.

Note to Transfer Students:
If you are interested in transferring to a four-year college or university to pursue a bachelor's degree in this major, it is critical that you meet with a CRC counselor to select and plan the courses for your major. Schools vary widely in terms of the required preparation. The courses that CRC requires for an Associate's degree in this major may be different from the requirements needed for the Bachelor's degree.

**Catalog Date:** June 1, 2020

### Degree Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>TA 300</td>
<td>Introduction to the Theatre (3)</td>
<td>3</td>
</tr>
<tr>
<td>or TA 302</td>
<td>History and Theory of the Theatre I (3)</td>
<td>3</td>
</tr>
<tr>
<td>TA 305</td>
<td>Script Analysis (3)</td>
<td>3</td>
</tr>
<tr>
<td>TA 350</td>
<td>Theory and Techniques of Acting I</td>
<td>3</td>
</tr>
<tr>
<td>TA 420</td>
<td>Stagecraft</td>
<td>3</td>
</tr>
</tbody>
</table>

A minimum of 3 units from the following: 3

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>TAP 300</td>
<td>Modern Rehearsal and Performance I (1 - 3)</td>
<td></td>
</tr>
<tr>
<td>TAP 301</td>
<td>Modern Rehearsal and Performance II (1 - 3)</td>
<td></td>
</tr>
<tr>
<td>TAP 302</td>
<td>Modern Rehearsal and Performance III (1 - 3)</td>
<td></td>
</tr>
<tr>
<td>TAP 303</td>
<td>Modern Rehearsal and Performance IV (1 - 3)</td>
<td></td>
</tr>
<tr>
<td>TAP 320</td>
<td>Classical Rehearsal and Performance I (1 - 3)</td>
<td></td>
</tr>
<tr>
<td>TAP 321</td>
<td>Classical Rehearsal and Performance II (1 - 3)</td>
<td></td>
</tr>
<tr>
<td>TAP 322</td>
<td>Classical Rehearsal and Performance III (1 - 3)</td>
<td></td>
</tr>
<tr>
<td>TAP 323</td>
<td>Classical Rehearsal and Performance IV (1 - 3)</td>
<td></td>
</tr>
<tr>
<td>TAP 340</td>
<td>Musical Rehearsal and Performance I (1 - 3)</td>
<td></td>
</tr>
<tr>
<td>TAP 341</td>
<td>Musical Rehearsal and Performance II (1 - 3)</td>
<td></td>
</tr>
<tr>
<td>TAP 342</td>
<td>Musical Rehearsal and Performance III (1 - 3)</td>
<td></td>
</tr>
<tr>
<td>TAP 343</td>
<td>Musical Rehearsal and Performance IV (1 - 3)</td>
<td></td>
</tr>
<tr>
<td>TAP 360</td>
<td>Children's Theatre Rehearsal and Performance I (1 - 3)</td>
<td></td>
</tr>
<tr>
<td>TAP 361</td>
<td>Children's Theatre Rehearsal and Performance II (1 - 3)</td>
<td></td>
</tr>
<tr>
<td>TAP 362</td>
<td>Children's Theatre Rehearsal and Performance III (1 - 3)</td>
<td></td>
</tr>
<tr>
<td>TAP 363</td>
<td>Children's Theatre Rehearsal and Performance IV (1 - 3)</td>
<td></td>
</tr>
</tbody>
</table>

A minimum of 3 units from the following: 3
<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>TAP 310</td>
<td>Modern Technical Production I (1 - 3)</td>
<td></td>
</tr>
<tr>
<td>TAP 311</td>
<td>Modern Technical Production II (1 - 3)</td>
<td></td>
</tr>
<tr>
<td>TAP 312</td>
<td>Modern Technical Production III (1 - 3)</td>
<td></td>
</tr>
<tr>
<td>TAP 313</td>
<td>Modern Technical Production IV (1 - 3)</td>
<td></td>
</tr>
<tr>
<td>TAP 330</td>
<td>Classical Technical Production I (1 - 3)</td>
<td></td>
</tr>
<tr>
<td>TAP 331</td>
<td>Classical Technical Production II (1 - 3)</td>
<td></td>
</tr>
<tr>
<td>TAP 332</td>
<td>Classical Technical Production III (1 - 3)</td>
<td></td>
</tr>
<tr>
<td>TAP 333</td>
<td>Classical Technical Production IV (1 - 3)</td>
<td></td>
</tr>
<tr>
<td>TAP 350</td>
<td>Musical Technical Production I (1 - 3)</td>
<td></td>
</tr>
<tr>
<td>TAP 351</td>
<td>Musical Technical Production II (1 - 3)</td>
<td></td>
</tr>
<tr>
<td>TAP 352</td>
<td>Musical Technical Production III (1 - 3)</td>
<td></td>
</tr>
<tr>
<td>TAP 353</td>
<td>Musical Technical Production IV (1 - 3)</td>
<td></td>
</tr>
<tr>
<td>TAP 370</td>
<td>Children's Theatre Technical Production I (1 - 3)</td>
<td></td>
</tr>
<tr>
<td>TAP 371</td>
<td>Children's Theatre Technical Production II (1 - 3)</td>
<td></td>
</tr>
<tr>
<td>TAP 372</td>
<td>Children's Theatre Technical Production III (1 - 3)</td>
<td></td>
</tr>
<tr>
<td>TAP 373</td>
<td>Children's Theatre Technical Production IV (1 - 3)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Subtotal Units:</td>
<td>18</td>
</tr>
</tbody>
</table>

### Acting/Performance Track

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>TA 351</td>
<td>Theory and Techniques of Acting II (3)</td>
<td>6</td>
</tr>
<tr>
<td>TA 356</td>
<td>Acting for the Camera I (3)</td>
<td></td>
</tr>
<tr>
<td>TA 360</td>
<td>Styles of Acting (3)</td>
<td></td>
</tr>
<tr>
<td>TA 401</td>
<td>Children's Literature and Creative Drama (3)</td>
<td></td>
</tr>
<tr>
<td>TA 498</td>
<td>Work Experience in Theatre Arts (1 - 4)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Acting/Performance Track Units:</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>Total Units:</td>
<td>24</td>
</tr>
</tbody>
</table>

### Technical Theater Track

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>TA 422</td>
<td>Stage Lighting (3)</td>
<td>6</td>
</tr>
<tr>
<td>TA 424</td>
<td>Advanced Technical Theatre (3)</td>
<td></td>
</tr>
<tr>
<td>TA 430</td>
<td>Costume Construction (3)</td>
<td></td>
</tr>
<tr>
<td>TA 404</td>
<td>Techniques of Puppetry (3)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Technical Theater Track Units:</td>
<td>6</td>
</tr>
</tbody>
</table>
The Theatre Arts Associate in Arts (A.A.) degree may be obtained by completion of 60 transferable, semester units, including (a) the major or area of emphasis described in the Required Program; and (b) one of the following: the CRC General Education, the Intersegmental General Education Transfer Curriculum (IGETC), or the California State University General Education-Breadth Requirements.

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- Critique and evaluate the role of the theatre arts and its relationship to other parts of society.
- Evaluate the historical, artistic, social, and philosophical environments in which theatre exists.
- Analyze and critique dramatic literature and performance.
- Develop both a conceptual understanding and a practical application of skills related to the theatre discipline in performance, technical theatre, theatre production and performance studies.
- Synthesize the roles and responsibilities of working as a member of an ensemble and production team and perform dependably, competently, collaboratively and resourcefully as part of the ensemble and production team.
- Apply the necessary skills for entry-level work in educational, community and professional theatrical endeavors and for entry into undergraduate bachelorette study in theatre arts.

Career Information

Theater arts majors will develop attributes that are highly valued by employers. These include: interpersonal soft skills, critical thinking, research, analysis, oral/written communication, presentation, and problem solving skills. The A.A. degree helps prepare students for many career opportunities. Program career opportunities include jobs with theater production and performing arts organizations as well as many related industries such as advertising, television, film, recreation, and academia. Potential Job Titles: Costume Designer, Drama Therapist, Casting Director, Set Designer, Stage Manager, Talent Manager, Playwright, Teacher Stage Actor, Director, Literary Manager, Arts Manager, Box office manager, Producer, Arts advocate, Lobbyist, Giving and Fundraising Specialist, Lighting Designer, Sound Designer, Designer, Lighting Engineer, Dramaturge, Shop Supervisor, Wardrobe Crew, Dresser, Booking Agent, Public Relations Specialist, Special Effects Technician, Theater Critic, Voice acting, Announcer, Event Planner, Arts Administrator, PR and Advertising Specialist. Additionally, many employers in other disciplines actively recruit theatre majors. Students may find employment in government agencies, nonprofits, educational institutions, and businesses depending on their skills and experience. Internships or relevant part-time jobs may be a prerequisite to finding employment. This list does not reflect all potential places of employment or kinds of jobs for theater arts majors. Some career choices may require courses beyond the Associate Degree.

Certificate of Achievement

Theatre for Young Audiences Certificate

The Certificate in Children's Theatre focuses on building skills in puppetry, storytelling, Story Dramatization, creative drama in the classroom and other skills pertaining to children's theatre. This certificate allows the student to further their education with transferable theatre classes.

Catalog Date: June 1, 2020

Certificate Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>TA 401</td>
<td>Children's Literature and Creative Drama</td>
<td>3</td>
</tr>
<tr>
<td>TA 404</td>
<td>Techniques of Puppetry</td>
<td>3</td>
</tr>
<tr>
<td>COURSE CODE</td>
<td>COURSE TITLE</td>
<td>UNITS</td>
</tr>
<tr>
<td>-------------</td>
<td>--------------------------------------------</td>
<td>-------</td>
</tr>
<tr>
<td>TA 344</td>
<td>Improvisation and Theatre Games</td>
<td>2</td>
</tr>
<tr>
<td>TAP 360</td>
<td>Children's Theatre Rehearsal and Performance I (1 - 3)</td>
<td>3</td>
</tr>
<tr>
<td>TAP 361</td>
<td>Children's Theatre Rehearsal and Performance II (1 - 3)</td>
<td></td>
</tr>
<tr>
<td>TAP 362</td>
<td>Children's Theatre Rehearsal and Performance III (1 - 3)</td>
<td></td>
</tr>
<tr>
<td>TAP 363</td>
<td>Children's Theatre Rehearsal and Performance IV (1 - 3)</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Total Units:</strong></td>
<td><strong>11</strong></td>
</tr>
</tbody>
</table>

### Student Learning Outcomes

Upon completion of this program, the student will be able to:

- Critique and evaluate the role of the theatre for youth and its relationship to other parts of society. SLO #1
- Evaluate the historical, artistic, social, and philosophical environments in which theatre for youth exists. SLO #2
- Analyze and critique dramatic literature and performance for young audiences. SLO #3
- Collaborate effectively as an ensemble member of a theatre group or company. SLO #4

### Career Information

Recreation leaders, teaching-artists, youth group director, after-school drama specialist.

### TA 300 Introduction to the Theatre

<table>
<thead>
<tr>
<th>Units:</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hours:</td>
<td>54 hours LEC</td>
</tr>
<tr>
<td>Prerequisite:</td>
<td>None</td>
</tr>
<tr>
<td>Transferable:</td>
<td>CSU; UC</td>
</tr>
<tr>
<td>General Education:</td>
<td>AA/AS Area I; CSU Area Ct; IGETC Area 3A</td>
</tr>
<tr>
<td>C-ID:</td>
<td>C-ID THTR 111</td>
</tr>
<tr>
<td>Catalog Date:</td>
<td>June 1, 2020</td>
</tr>
</tbody>
</table>

This course will increase students' understanding, appreciation, and critical perceptions of theatre arts. Students will be introduced to the elements of the production process including play writing, acting, directing, design, and criticism. Students will also survey different periods, styles and genres of theatre through play reading, discussion, films and viewing and critiquing live theatre, including required attendance of theatre productions. Students will examine the relationship of theatre to various cultures throughout history, and the contributions of significant individual theatre artists. It is an audience-oriented, non-performance theatre arts course open to all students.

### Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO #1. Assess the historical, artistic, social, and philosophical in which theatre exists.
- Students will demonstrate the ability to critically evaluate analyze and interpret (including significant historical or contemporary analyses and interpretations) arts, ideas, skills (including language), and/or institutions.
- Analyze and evaluate the nature of theatre and its role in society.
- Critique and evaluate the role of the theatre arts and its relationship to other parts of society.
- Demonstrate an appreciation of artistic endeavors, cultural expressions, ideas and/or institutions through non-empirical, analytic, interpretive studies and critical thinking projects.
• Articulate the development of and relationships between different civilizations, cultural traditions, ideas and/or institutions through the application of non-empirical, analytical reasoning.

• SLO #2. As a theatre patron analyze and critique dramatic literature and performance.

• Critically analyze dramatic literature and performances.

• Identify and examine theatrical components in production.

• Demonstrate an appreciation of viewing theatre as an art form

• Execute analysis and interpretations of arts, ideas, skills (including language), and/or institutions, and will properly use the vocabulary appropriate to the field.

• Examine and evaluate the production needs of a play in order to propose, demonstrate, and articulate alternative solutions to theatrical production situations.

**TA 302 History and Theory of the Theatre I**

**Units:** 3
**Hours:** 54 hours LEC
**Prerequisites:** None.
**Advisory:** ENGWR 101, or placement through the assessment process.
**Transferable:** CSU; UC
**General Education:** AA/AS Area I; CSU Area C1; IGETC Area 3A
**C-ID:** C-ID THTR 113
**Catalog Date:** June 1, 2020

This course is a survey of the history of theatre from the Greeks through the 17th Century. The history and development of theatre and drama are studied in relationship to cultural, political and social conditions of the time. Plays are read for analysis of structure, plot, character and historical relevance. This course is recommended for students planning to major in Theatre, Humanities, English or Communication.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

• SLO #1: Critique and evaluate the historical, artistic, social and philosophical environments in which theatre exists.

• Outline the historical development of theatre from the Greeks through the 17th century.

• Compile evidence illustrating how the relationship between the audience and theatre artist has changed over time.

• Analyze the role of the theatre arts and its relationship to other parts of society.

• SLO #2: As a theatre patron analyze and critique dramatic literature and performance

• Confirm the value and necessity of theatre arts in culture and society

• Assess the historical relevance, context and importance of different plays.

• Compare, contrast and analyze the world view presented by the playwrights in each play.

• Demonstrate critical thinking and communication skills such as listening, reasoning, analysis and criticism when reading or viewing plays.

**TA 303 History and Theory of the Theatre II**

**Units:** 3
**Hours:** 54 hours LEC
**Prerequisites:** None.
**Advisory:** ENGWR 101, or placement through the assessment process.
**Transferable:** CSU; UC
**General Education:** AA/AS Area I; CSU Area C1; IGETC Area 3A
**Catalog Date:** June 1, 2020

This course is a survey of the history of theater from the 17th Century through modern times. This history and development of theater and drama are studied in relationship to cultural, political and social conditions of the time. Plays are read or viewed for analysis of structure, plot, character and historical relevance. This course is recommended for students planning to major in Theater, Humanities, English, or Communication.
Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO #1: Critique and evaluate the historical, artistic, social and philosophical environments in which theatre exists.
- Outline the historical development of theatre from the 17th Century through modern times.
- Compile evidence illustrating how the relationship between the audience and theatre artist has changed over time.
- Analyze the role of the theatre arts and its relationship to other parts of society.
- SLO #2: As a theatre patron, analyze and critique dramatic literature and performance.
- Confirm the value and necessity of theatre arts in culture and society
- Assess the historical relevance, context and importance of different plays.
- Compare, contrast and analyze the world view presented by the playwrights in each play.
- Demonstrate critical thinking and communication skills such as listening, reasoning, analysis and criticism when reading or viewing plays.

TA 305 Script Analysis

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Transferable: CSU; UC
General Education: CSU Area C1; IGETC Area 3A
C-ID: C-ID THTR 114
Catalog Date: June 1, 2020

This course will explore an in-depth methodology of reading, analyzing, and understanding play scripts in a variety of genres and styles intended for live theatrical production. Students will investigate techniques used to determine the playwright's methods of creating the plot, themes, characters, and imagery within theatrical scripts and how theatre scripts are distinct from other forms of literature.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- P-SLO 2: Evaluate the historical, artistic, social, and philosophical environments in which theatre exists.
- Identify common patterns in the structures of theatrical scripts through different historical periods and artistic genres.
- Identify where historical, artistic, social, and philosophical elements alter the structures of theatrical scripts.
- P-SLO 3: As a theatre patron analyze and critique dramatic literature and performance.
- Formulate the skills and techniques to achieve a greater comprehension and satisfaction when reading a play
- Assemble both creative and analytical responses to a chosen play
- P-SLO 4: As a participant in theatre productions formulate alternative solutions to theatrical production situations.
- Identify production elements including character requirements, design requirements, and plot structures required and suggested by theatrical scripts.

TA 306 Diversity in American Drama (1960 to Present)

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Transferable: CSU; UC
General Education: AA/AS Area I; AA/AS Area VI; CSU Area C1; CSU Area D3; IGETC Area 3A; IGETC Area 4C
Catalog Date: June 1, 2020

This multicultural course surveys the theatrical expression of Native-American, African-American, Chicana/Chicano, and Asian-American theatre from 1960 to the present, including the social, political, cultural, and economic climate in which the theatre was created.
Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO 1: Critique and evaluate the role of the theatre arts and its relationship to other parts of society.
- Analyze stereotypes and racism as expressed in the theatre of Native-American, African-American, Chicana/Chicano, and Asian American and in society at large.
- Describe and evaluate the ramifications and contributions of the unique theatrical expression of America’s diverse populations.
- SLO 2: Evaluate the historical, artistic, social and philosophical environments in which theatre exists.
- Describe and analyze the major historical, cultural, political, and economic forces at work within Native-American, African-American, Chicana/Chicano, and Asian American groups and in society at large.
- Examine the stereotypes and racism as expressed in the theatre of diverse ethnic groups and society at large.
- SLO 3: As a theatre patron analyze and critique dramatic literature and performance
- Compare and contrast the ways that ritual, music, dance, and storytelling influence and shape the theatrical expression of diverse groups.
- Apply elements of critical theory to ethnically diverse plays to facilitate a broader understanding of the issues raised.

TA 340 Beginning Acting

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Transferable: CSU; UC
Catalog Date: June 1, 2020

This course introduces the student to the basic art and craft of acting. Basic exercises in voice and diction, movement, and character will be utilized.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO #1: Apply the creative process in acting.
  - Objective 1a: Demonstrate knowledge of basic terminology and process of the craft.
  - Objective 1b: Demonstrate the elementary participatory techniques used in the process of acting.
  - Objective 1c: Analyze by means of assigned structured improvisation, the elemental tools of the actors craft.
  - Objective 1d: Demonstrate an understanding of how to prepare and perform a scene.
- SLO #2: Analyze and critique dramatic literature and performance.
  - Objective 2a: Confirm the value and necessity of theatre arts in culture and society.
  - Objective 2b: Assess the historical relevance, context and importance of different plays to the actor.
  - Objective 2c: Demonstrate critical thinking and communication skills such as listening, reasoning, analysis and criticism when reading, discussing or viewing plays.

TA 344 Improvisation and Theatre Games

Units: 2
Hours: 36 hours LEC
Prerequisite: None.
Transferable: CSU
Catalog Date: June 1, 2020

This class will include theatre games and improvisational exercises designed to develop trust and cooperation, mental acuity, and physical and vocal range as an actor. Improvisation technique will be developed, providing a strong foundation for more advanced work in scripted and non-scripted performance and also in modern rehearsal technique that involves extensive use of improvisation. Students may be required to attend live theatrical performances.
Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO #1: Apply the creative process in acting.
- Objective 1a: Demonstrate knowledge of basic terminology and process of improvisation.
- Objective 1b: Demonstrate the elementary participatory techniques used in the process of improvisation.
- Objective 1c: Analyze by means of assigned structured improvisation, the elemental tools of the actor's craft.
- Objective 1d: Demonstrate an understanding of how to prepare and perform an improvised scene.
- SLO #2: Analyze and critique improvisation and performance.
- Objective 2a: Confirm the value and necessity of theatre arts in culture and society.
- Objective 2b: Assess the historical relevance, context and importance of different plays to the actor.
- Objective 2c: Demonstrate critical thinking and communication skills such as listening, reasoning, analysis and criticism when reading, discussing or viewing plays.

TA 350 Theory and Techniques of Acting I

| Units: | 3 |
| Hours: | 54 hours LEC |
| Prerequisite: | None. |
| Transferable: | CSU; UC |
| General Education: | AA/AS Area I; CSU Area C1 |
| C-ID: | C-ID THTR 151 |
| Catalog Date: | June 1, 2020 |

This course explores the theories and techniques used in the preparation of a role for the stage. American realistic scenes and monologues are staged and performed in the classroom. The emphasis will be placed on broadening the understanding of the acting process.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO #1: Apply the creative process in acting.
- Objective 1a: Demonstrate knowledge and application of basic theory and techniques of acting.
- Objective 1b: Describe the audition process and begin to build a repertoire of audition pieces.
- Objective 1c: Perform simple vocal warm-up technique and a methodology for good vocal production.
- Objective 1d: Demonstrate an understanding of how to prepare and perform scene and monologues.
- SLO #2: Analyze and critique dramatic literature and performance.
- Objective 2a: Confirm the value and necessity of theatre arts in culture and society.
- Objective 2b: Assess the historical relevance, context and importance of different plays to the actor.
- Objective 2c: Demonstrate critical thinking and communication skills such as listening, reasoning, analysis and criticism when reading, discussing or viewing scenes, monologues or plays.

TA 351 Theory and Techniques of Acting II

| Units: | 3 |
| Hours: | 54 hours LEC |
| Prerequisite: | TA 350 with a grade of "C" or better |
| Advisory: | ENGWR 300 |
| Transferable: | CSU; UC |
| C-ID: | C-ID THTR 152 |
| Catalog Date: | June 1, 2020 |
This course follows TA 350 and continues the exploration of the theories and techniques used in the preparation of a role for the stage. A variety of scenes and monologues are staged and performed in the classroom. An emphasis will be placed on deepening the understanding of the acting process. The student actor is encouraged to explore and expand the range and flexibility of their individual acting process. Student actors are required to participate in a student showcase performance at the end of each semester.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- SLO #1: Apply the creative process in acting.
  - Objective 1a: Demonstrate knowledge and application of broader and multiple theories and techniques of acting beyond basic theories and techniques.
  - Objective 1b: Perform advanced vocal warm-up technique and apply methodology for good vocal production.
  - Objective 1c: Perform advanced physical warm-up technique and apply methodology for good physical connectivity.
  - Objective 1d: Demonstrate an understanding of how to prepare and perform a variety of scenes and monologues at a more advanced level.
  - Objective 1e: Explore and expand the range and flexibility of personal acting process.
- SLO #2: Critique and evaluate the role of the theatre arts and its relationship to other parts of society.
  - Objective 2a: Confirm the value and necessity of theatre arts in culture and society.
  - Objective 2b: Assess the historical relevance, context and importance of different plays to the actor.
  - Objective 2c: Survey the major approaches to Western acting since the nineteenth century, their historical evolution, and their relationship to one another.
- SLO #3: Analyze and critique dramatic literature and performance.
  - Objective 3a: Demonstrate critical thinking and communication skills such as listening, reasoning, analysis and criticism when reading, discussing or viewing scenes, monologues or plays.
- SLO #4: Audition and perform in community, educational, and/or professional theatres.
  - Objective 4a: Participate in and refine the audition process.
  - Objective 4b: Further enhance the repertoire of audition pieces.

**TA 356 Acting for the Camera I**

- **Same As:** RTVF 378
- **Units:** 3
- **Hours:** 36 hours LEC; 54 hours LAB
- **Prerequisite:** RTVF 370 or TA 350 with a grade of "C" or better
- **Transferable:** CSU; UC
- **General Education:** CSU Area C1
- **Catalog Date:** June 1, 2020

This is an introductory course in the theory and techniques of acting for film and video, comparing the differences between stage acting and acting for the camera. Scenes and commercials are enacted and played back on videotape for class critiquing. Students experience single camera and multiple-camera studio production and performance techniques. This course is the same as RTVF 378, and only one may be taken for credit.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- write in clear, concise English (SLO-1).
- analyze, interpret, and exercise critical judgment in the evaluation of media productions (SLO-2).
- analyze a scene from an observer's point of view and identify strengths and weaknesses of that presentation from a fundamental technique viewpoint.
- formulate alternative solutions to theatrical production situations as an on-camera participant in theatre productions (SLO-3).
- demonstrate a firm foundation in the basic fundamentals of the craft of acting for the camera.
- investigate the technical and stylistic differences between stage acting and acting for the camera.
• demonstrate acting skills and talents in a video studio setting, and in a single camera out-of-order shoot.
• demonstrate understanding of performance technique using microphones.
• audition and/or perform in community, educational, or professional productions (SLO-4).
• demonstrate through projects that with the power of a communicator, comes moral and ethical responsibility (SLO-5).
• demonstrate a hands-on ability to perform the professional level critical thinking needed for successful teamwork in television, film or other media employment (SLO-6).
• demonstrate performance techniques for work in professional commercials, industrial films, theatrical films, cable and broadcast video.
• describe the steps involved in entering the business of acting for films and video.

TA 360 Styles of Acting

Units: 3
Hours: 54 hours LEC
Prerequisite: TA 350 with a grade of "C" or better
Transferable: CSU; UC
Catalog Date: June 1, 2020

Students will study and practice radically different styles of acting (historical, literary, fantastical) and characterizations; scene work is presented in a variety of historical periods (Greek, Commedia, Elizabethan, Molière, Restoration, Belle Epoque), as well as modern hyper-realistic theatrical forms such as the theatres of alienation and the absurd, and exemplary recent dramas by Tony Kushner, Margaret Edson, August Wilson and Doug Wright. The instructor may concentrate on selected periods. Students may wish to challenge the prerequisite on the basis of equivalent experience.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• SLO #1: Apply the creative process in acting.
  • Objective 1a: Demonstrate knowledge and application of basic theory and techniques of acting in period pieces.
  • Objective 1b: Demonstrate an understanding of how to prepare and perform period scene and monologues.
• SLO #2: Analyze and critique dramatic literature and performance.
  • Objective 2a: Confirm the value and necessity of theatre arts in culture and society.
  • Objective 2b: Assess the historical relevance, context and importance of different styles to the actor playing period pieces.
  • Objective 2c: Demonstrate critical thinking and communication skills such as listening, reasoning, analysis and criticism when reading, discussing or viewing period scenes, monologues or plays.

TA 395 Playwriting

Units: 3
Hours: 54 hours LEC
Prerequisite: None.
Advisory: ENGWR 300, or placement through the assessment process.
Transferable: CSU
Catalog Date: June 1, 2020

This course includes the writing, reading, performance, critique and continuous revision of original work. Students will write continually throughout the semester, and their work will be read, performed, and discussed in class. Students will complete a full-length play by the end of the semester.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

• SLO 1: Critique and evaluate the role of the theatre arts and its relationship to other parts of society (P-SLO 1).
• Demonstrate an understanding of the theatrical techniques used in creating unique characterizations in plays.
TA 401 Children's Literature and Creative Drama

This course examines teaching strategies and techniques for introducing children to drama and theatre. This course will introduce the students to children's dramatic literature and creative drama in the classroom. Encouraging both teacher and student imagination and expression, the course helps future teachers, service providers and/or recreational leaders integrate drama into their programs and classrooms. Students will be introduced to a variety of genres and strategies for incorporating drama into their programs, including mime, dramatic play, improvisation, and dramatic literature. The course focuses on drama as an art form as well as a teaching tool.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO 1: Critique and evaluate the role of the theatre arts and its relationship to other parts of society.
- Objective 1a: Develop a comprehensive approach for the use of drama in education.
- Objective 1b: Develop simple drama activities and games for children.
- Objective 1c: Describe the basic skills used to teach narrative pantomime, story dramatization and improvisation to children.
- SLO 2: Evaluate the historical, artistic, social and philosophical environments in which theatre exists.
- Objective 2a: Plan drama lessons which integrate the exercises into the classroom curriculum.
- Objective 2b: Analyze and explore the nature of working in groups and setting classroom limits.
- SLO 3: As a theatre patron analyze and critique dramatic literature and performance.
- Objective 3a: While viewing performances, live or recorded, critique the social, emotional and developmental appropriateness of the theatrical experience for children.

TA 404 Techniques of Puppetry

This course explores puppetry as a dramatic medium. It covers the history and development of puppetry; puppet design and creation; puppet manipulation and improvisation; and puppet play production techniques and applications.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO #1: Apply the creative process in acting with puppets.
- Objective 1a: Demonstrate knowledge of basic terminology and process of puppetry.
- Objective 1b: Demonstrate the elementary voice and puppet movement techniques used in the process of puppetry.
- Objective 1c: Analyze by means of assigned structured improvisations and scenes, the elemental tools of the puppeteer.
- Objective 1d: Demonstrate an understanding of how to prepare and perform an puppetry scene.
Objective 1e: Create original material for puppetry using standard dramatic structure.

SLO #2: Analyze and critique puppetry and performance.

Objective 2a: Confirm the value and necessity of theatre arts in culture and society.

Objective 2b: Demonstrate critical thinking and communication skills such as listening, reasoning, analysis and criticism when reading, discussing or viewing puppet plays.

SLO #3: Work as a theatre technician in community, educational, and/or professional theatres.

Objective 3a: Construct puppets using basic craft skills (clay and foam modeling, casting, sewing, woodworking, painting)

Objective 3b: Plan and execute productions using constructed puppets.

TA 420 Stagecraft

Unit: 3
Hours: 36 hours LEC; 54 hours LAB
Prerequisite: None.
Transferable: CSU; UC
C-ID: C-ID THTR 171
Catalog Date: June 1, 2020

This course is an introduction to technical theatre and the creation of scenic elements. Includes basic concepts of design, painting techniques, set construction, set movement, prop construction, backstage organization, and career possibilities. Also included in this class is an introduction to theatrical construction and painting techniques; types of theatrical scenery and backstage organization. These topics are explored through a combination of lecture and practical experience gained by working on department productions.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO 1: As a participant in theatre productions formulate alternative solutions to theatrical production situations (P-SLO 4).
- Develop the cooperative and collaborative effort necessary in the technical production of plays.
- Develop proficiency in scenic production skills.
- Evaluate scenic tools, materials, and processes.
- Analyze scenic production problems; evaluate alternatives and recommend solutions.
- Analyze and apply information derived from scenic plans.
- SLO 2: Work as a theatre technician in community, educational, and/or professional theatres (P-SLO 6).
- Analyze effective crew methods and procedures.
- Develop the skills necessary to be an effective backstage crew member.

TA 422 Stage Lighting

Unit: 3
Hours: 36 hours LEC; 54 hours LAB
Prerequisite: None.
Transferable: CSU; UC
C-ID: C-ID THTR 173
Catalog Date: June 1, 2020

This course is an introduction to basic concepts of stage lighting, including planning, rigging and operations of lighting systems; optics, equipment, electricity, control and color; basic lighting design.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO 1: As a participant in theatre productions formulate alternative solutions to theatrical production situations. (P-SLO 4)
Demonstrate proficiency in selection, use, and application of lighting technology (instruments, dimmers, and control systems) stage lighting skills.

Evaluate the lighting requirements of a scene or play (through the script, setting, and director's concept) and develop an appropriate lighting design.

Formulate and execute a lighting plan which will provide the visibility as well as artistic needs of a production (color, angle, style, etc.).

SLO-2: Work as a theatre technician in community, educational, and/or professional theatres. (P-SLO 6)

Identify the different types and functions of lighting equipment and evaluate their appropriateness to provide different solutions to production needs.

Interpret and analyze a Light Plot to produce a full scale show.

Calculate the capacity of electrical wire gauge and safe current flow.

Recall and practice safety information concerning electrical hazards

**TA 424 Advanced Technical Theatre**

| Units: | 3 |
| Hours: | 36 hours LEC; 54 hours LAB |
| Prerequisites: | TA 420 and 422 with grades of "C" or better |
| Transferable: | CSU |
| Catalog Date: | June 1, 2020 |

This course will explore advanced technical theatre production techniques and design in the areas of scenery, props, lighting, sound, scenic painting, rigging or stage management, costumes through individual projects and participation in major productions.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- SLO-1: As a participant in theatre productions formulate alternative solutions to theatrical production situations. (P-SLO 4)
- demonstrate proficiency in problem solving solutions to production issues (scenic and or lighting).
- evaluate the scenic and or lighting requirements of a scene or play (through the script, setting, and director's concept) and develop an appropriate solution to the problem.
- formulate and execute a lighting plan which will provide the visibility as well as artistic needs of a production (color, angle, style, etc.) and/or the ability to create a construction plan to build a solution to a production problem that is both artistically viable as well as safe.
- SLO-2: Work as a theatre technician in community, educational, and/or professional theatres. (P-SLO 6)
- demonstrate leadership skills in functioning as a crew leader in the construction and/or implementation of stage lighting solutions.
- evaluate the requirements of a scene or play (through the script, setting, and director's concept) and develop an appropriate lighting design or scenic solution.
- lead work crews in the construction of basic scenic units and the hanging/focusing of standard theatrical lighting instruments

**TA 430 Costume Construction**

| Units: | 3 |
| Hours: | 36 hours LEC; 54 hours LAB |
| Prerequisites: | None. |
| Transferable: | CSU; UC |
| C-ID: | C-ID THTR 174 |
| Catalog Date: | June 1, 2020 |
Student Learning Outcomes

Upon completion of this course, the student will be able to:

- Role of Theatre: Critique and evaluate the role of the theatre arts and its relationship to other parts of society. (SLO 1, PSLO 1)
- Objective 1a: Explain the role of theatre and costuming in society at large.
- Objective 1b: Analyze the historical, artistic, and social environments of various periods and their resultant styles.
- Work as a theatre technician in community, educational, and/or professional theatres. (SLO 2, PSLO 2)
- Objective 2a: Demonstrate basic design skills and basic patterning, construction, and alteration techniques using various sewing machines and hand sewing tools.
- Objective 2b: Explain the composition, properties, and construction of fabric and demonstrate textile manipulation techniques.
- Objective 2c: Describe the role of the costume designer and the costume shop staff in a theatre production.
- Work effectively as an ensemble member of a theatre company. (SLO 3, PSLO 3)
- Objective 3a: Demonstrate basic costume construction, patterning, and alteration techniques using the common machine and hand tools of the craft.
- Problem Solving: As a participant in theatre productions formulate alternative solutions to theatrical production situations. (SLO 4, PSLO 4)
- Objective 4a: Organize an artistic and practical solution to the costume requirements of a dramatic work.
- Objective 4b: Evaluate the costumes in a live theatrical presentation.

TA 495 Independent Studies in Theatre Arts

Units: 1 - 3
Hours: 54 - 162 hours LAB
Prerequisite: None.
Transferable: CSU
Catalog Date: June 1, 2020

An independent studies project involves an individual student or small group of students in study, research, or activities beyond the scope of regularly offered courses. See the current catalog section of "Special Studies" for full details of Independent Studies.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- SLO #1: Actively engage in intellectual inquiry beyond that required in order to pass a course of study (College Wide Learning Outcome – Area 4).
- Discuss and outline a proposal of study (that can be accomplished within one semester term) with a supervising instructor qualified within the discipline.
- Design an independent study (to be completed individually or by collaboration of a small group) to foster special knowledge, skills, and experience that are not available in any one regularly scheduled course.
- Use information resources to gather discipline-specific information.
- SLO #2: Utilize modes of analysis and critical thinking to apply theoretical perspectives and/or concepts in the major discipline of study to significant problems and/or educational activities (College Wide Learning Outcome – Area 3).
- Analyze and apply the knowledge, skills and experience that are involved in the independent study to theoretical perspectives and/or concepts in the major discipline of study.
- Explain the importance of the major discipline of study in the broader picture of society.
- SLO #3: Communicate a complex understanding of content matter of the major discipline of study (College Wide Outcome – Area 3).
Demonstrate competence in the skills essential to mastery of the major discipline of study that are necessary to accomplish the independent study.

SLO #4: Identify personal goals and pursue these goals effectively (College Wide Outcome – Area 4).

Utilize skills from the “academic tool kit” including time management, study skills, etc., to accomplish the independent study within one semester term.

### TA 498 Work Experience in Theatre Arts

**Units:** 1 - 4  
**Hours:** 60 - 300 hours LAB  
**Prerequisite:** None.  
**Enrollment Limitation:** Students must be in a paid or unpaid internship, volunteer position or job related to career goals in Theatre Arts.  
**Transferable:** CSU  
**General Education:** AA/AS Area III(b)  
**Catalog Date:** June 1, 2020

This course provides students with opportunities to develop marketable skills in preparation for employment in their major field of study or advancement within their career. It is designed for students interested in work experience and/or internships in transfer level degree occupational programs. Course content includes understanding the application of education to the workforce; completion of required forms which document the student's progress and hours spent at the work site; and developing workplace skills and competencies. Appropriate level learning objectives are established by the student and the employer. During the semester, the student is required to participate in a weekly orientation and 75 hours of related paid work experience, or 60 hours of unpaid work experience for one unit. An additional 75 or 60 hours of related work experience is required for each additional unit. Work Experience may be taken for a total of 16 units when there are new or expanded learning objectives. Only one Work Experience course may be taken per semester.

### Student Learning Outcomes

Upon completion of this course, the student will be able to:

- **DEMONSTRATE AN UNDERSTANDING AND APPLICATION OF PROFESSIONAL WORKPLACE BEHAVIOR IN A FIELD OF STUDY RELATED TO ONE’S CAREER.** (SLO 1)
  - Understand the effects time, stress, and organizational management have on performance.
  - Demonstrate an understanding of consistently practicing ethics and confidentiality in a workplace.
  - Examine the career/life planning process and relate its relevancy to the student.
  - Demonstrate an understanding of basic communication tools and their appropriate use.
  - Demonstrate an understanding of workplace etiquette.

- **DESCRIBE THE CAREER/LIFE PLANNING PROCESS AND RELATE ITS RELEVANCY TO ONE’S CAREER.** (SLO 2)
  - Link personal goals to long term achievement.
  - Display an understanding of creating a professional first impression.
  - Understand how networking is a powerful job search tool.
  - Understand necessary elements of a résumé.
  - Understand the importance of interview preparation.
  - Identify how continual learning increases career success.

- **DEMONSTRATE APPLICATION OF INDUSTRY KNOWLEDGE AND THEORETICAL CONCEPTS AS WRITTEN IN LEARNING OBJECTIVES IN PARTNERSHIP WITH THE EMPLOYER WORK SITE SUPERVISOR.** (SLO 3)

### Theatre Arts Performance (TAP)

**TAP 300 Modern Rehearsal and Performance I**
This course is the first level of four courses which provide for a workshop training experience for students performing in their first role in a modern theatre production. Students interested in acting audition with the director for acting, singing or dancing roles. All students performing in productions may enroll in this class for one to three units at the discretion of the instructor. Students may enroll in this class after the close of late registration at the discretion of the instructor.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- Audition and perform in community, educational, and/or professional theatres (SLO 1, PSLO 1).
- Objective 1a: Recognize and demonstrate an understanding of the requirements of being an actor in a modern theatrical production including the audition, rehearsal, and production processes.
- Objective 1b: Collaborating with the director and other actors, demonstrate basic understanding of modern script analysis and the techniques of character analysis.
- Objective 1c: Recognize and demonstrate an understanding of the basic skills and rehearsal methods necessary to performing a modern role on stage including: using vocal, instrumental, dance and movement skills, and the use and maintenance of basic production elements such as props, costumes, and furniture to create the world of a chosen play.
- Work effectively as an ensemble member of a theatre company. (SLO 2, PSLO 3)
- Objective 2a: Recognize and demonstrate the basic collaborative responsibilities with the director and designers in rehearsal and in performance in the creation of a modern theatrical production.

TAP 301 Modern Rehearsal and Performance II

This course is the second level of four courses which provide for a workshop training experience for students performing in their second role in a modern theatre production. Students interested in acting audition with the director for acting, singing or dancing roles. All students performing in productions may enroll in this class for one to three units at the discretion of the instructor. Students may enroll in this class after the close of late registration at the discretion of the instructor.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- Audition and perform in community, educational, and/or professional theatres. (SLO 1, PSLO 1)
- Objective 1a: Demonstrate a basic proficiency in the requirements of being an actor in a modern theatrical production including the audition, rehearsal, and production processes.
- Objective 1b: Collaborating with the director and other actors, demonstrate basic proficiency in modern script analysis and the techniques of character analysis.
- Objective 1c: Demonstrate basic proficiency in the skills and rehearsal methods necessary to performing a modern role on stage including: using vocal, instrumental, dance and movement skills, and the use and maintenance of basic production elements such as props, costumes, and furniture to create the world of a chosen play.
- PSLO 3: Work effectively as an ensemble member of a theatre company. (SLO 2, PSLO 3)
- Objective 2a: Demonstrate a basic proficiency in understanding collaborative responsibilities with the director and designers in rehearsal and in performance in the creation of a modern theatrical production.
TAP 302 Modern Rehearsal and Performance III

This course is the third level of four courses which provide for a workshop training experience for students performing in their third role in a modern theatre production. Students interested in acting audition with the director for acting, singing or dancing roles. All students performing in productions may enroll in this class for one to three units at the discretion of the instructor. Students may enroll in this class after the close of late registration at the discretion of the instructor.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- Audition and perform in community, educational, and/or professional theatres. (SLO 1, PSLO 1)
- Objective 1a: Demonstrate an intermediate proficiency in the requirements of being an actor in a modern theatrical production including the audition, rehearsal, and production processes.
- Objective 1b: Collaborating with the director and other actors, demonstrate intermediate proficiency in modern script analysis and the techniques of character analysis.
- Objective 1c: Demonstrate intermediate proficiency in the skills and rehearsal methods necessary to performing a modern role on stage including: using vocal, instrumental, dance and movement skills, and the use and maintenance of basic production elements such as props, costumes, and furniture to create the world of a chosen play.
- Work effectively as an ensemble member of a theatre company. (SLO 2, PSLO 3)
- Objective 2a: Demonstrate an intermediate proficiency in understanding collaborative responsibilities with the director and designers in rehearsal and in performance in the creation of a modern theatrical production.

TAP 303 Modern Rehearsal and Performance IV

This course is the fourth level of four courses which provide for a workshop training experience for students performing in their fourth role in a modern theatre production. Students interested in acting audition with the director for acting, singing or dancing roles. All students performing in productions may enroll in this class for one to three units at the discretion of the instructor. Students may enroll in this class after the close of late registration at the discretion of the instructor.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- Audition and perform in community, educational, and/or professional theatres. (SLO 1, PSLO 1)
- Objective 1a: Demonstrate leadership in a cast by mentoring other actors in the requirements of being an actor in a modern theatrical production.
- Objective 1b: Demonstrate leadership in a cast by assisting the director and other actors in modern script analysis and the techniques of character analysis.
- Objective 1c: Demonstrate leadership in a cast by assisting the director and other actors in the skills and rehearsal methods necessary to performing a modern role on stage including: using vocal, instrumental, dance and movement skills, and the use and maintenance of basic production elements such as props, costumes, and furniture to create the world of a chosen play.
- Work effectively as an ensemble member of a theatre company. (SLO 2, PSLO 3)
Objective 2a: Demonstrate leadership in a cast through their collaborative interactions with the director and designers in rehearsal and in performance in the creation of a modern theatrical production.

TAP 310 Modern Technical Production I

Units: 1 - 3
Hours: 54 - 162 hours LAB
Course Family: Modern Performance and Technical Production (http://crc.losrios.edu/course-families#id_100003)
Prerequisite: None.
Enrollment Limitation: Interview
Transferable: CSU; UC
C-ID: C-ID THTR 192
Catalog Date: June 1, 2020

This course is the first level of four courses which provide for a workshop training experience for students working in their first position on the production crew of a modern theatre production. Students interested in technical work interview for positions in stage management, crewing, set construction, costumes and makeup, lighting and sound, box office and publicity. Students will gain practical experience in the application of production responsibilities in any of the following: stage management, construction, scenery, properties, costume, lighting, sound, and running crews. All students performing in productions may enroll in this class for one to three units at the discretion of the instructor. Students may enroll in this class after the close of late registration at the discretion of the instructor.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- Work as a theatre technician in community, educational, and/or professional theatres. (SLO 1, PSLO 2)
- Objective 1a: Recognize and demonstrate a basic understanding of the responsibilities of the set designer, lighting designer, sound designer, special effects coordinator, technical director, director and audience in relationship to the crew in a Modern production.
- Objective 1b: Recognize and demonstrate a basic understanding of scene shop operation, maintenance and safety procedures regarding the usage of tools and technical equipment, building materials and fastening methods, blueprint readings, and the overall planning of the technical aspects of a Modern theatrical production.
- Objective 1c: Demonstrate a basic proficiency in understanding of formulating solutions to unfamiliar situations in technical theatre and procedures to appraise the efficacy of the solutions. In Modern Theatrical productions the production situations may include: the integration of projections into productions, abstract scenery and lighting, box (realistic) scenery and lighting, accommodating different iterations of audience interaction, etcetera.
- Objective 1d: Recognize and demonstrate a basic understanding of the importance of teamwork in carrying out a group project as it relates to technical theatre in a Modern theatrical production.
- Work effectively as an ensemble member of a theatre company. (SLO 2, PSLO 3)
- Objective 2a: Recognize and demonstrate a basic understanding of different iterations of crew dynamics in Modern theatrical productions including visible crew members (koken), performers acting as crew, crew used to “alienate” an audience’s experience, fourth-wall crew, etcetera.
- Objective 2b: Recognize and demonstrate a basic understanding of technicians’ responsibilities in a Modern theatrical production.

TAP 311 Modern Technical Production II

Units: 1 - 3
Hours: 54 - 162 hours LAB
Course Family: Modern Performance and Technical Production (http://crc.losrios.edu/course-families#id_100003)
Prerequisite: TAP 310 with a grade of "C" or better
Enrollment Limitation: Enrollment is limited to students with the ability to perform specific technical crew positions as determined by an interview and the requirements of the play.
Transferable: CSU; UC
C-ID: C-ID THTR 192
Catalog Date: June 1, 2020
This course is the second level of four courses which provide for a workshop training experience for students working in their second position on the production crew of a modern theatre production. Students interested in technical work interview for positions in stage management, crewing, set construction, costumes and makeup, lighting and sound, box office and publicity. Students will gain practical experience in the application of production responsibilities in any of the following: stage management, house management, construction, scenery, properties, costume, lighting, sound, and running crews. All students performing in productions may enroll in this class for one to three units at the discretion of the instructor. Students may enroll in this class after the close of late registration at the discretion of the instructor.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- Work as a theatre technician in community, educational, and/or professional theatres. (SLO 1, PSLO 2)
- Objective 1a: Demonstrate a basic proficiency in understanding the responsibilities of the set designer, lighting designer, sound designer, special effects coordinator, technical director, performers, and the director and audience in relationship to the crew in a Modern production.
- Objective 1b: Demonstrate a basic proficiency in understanding scene shop operation, maintenance and safety procedures regarding the usage of tools and technical equipment, building materials and fastening methods, blueprint readings, and the overall planning of the technical aspects of a Modern theatrical production.
- Objective 1c: Demonstrate a basic proficiency in understanding of formulating solutions to unfamiliar situations in technical theatre and procedures to appraise the efficacy of the solutions. In Modern Theatrical productions the production situations may include: the integration of projections into productions, abstract scenery and lighting, box (realistic) scenery and lighting, accommodating different iterations of audience interaction, etcetera.
- Objective 1d: Demonstrate a basic proficiency in understanding the importance of teamwork in carrying out a group project as it relates to technical theatre in a Modern theatrical production.
- Work effectively as an ensemble member of a theatre company. (SLO 2, PSLO 3)
- Objective 2a: Demonstrate a basic proficiency in understanding of different iterations of crew dynamics in Modern theatrical productions including visible crew members (koken), performers acting as crew, crew used to “alienate” an audience’s experience, fourth-wall crew, etcetera.
- Objective 2b: Demonstrate a basic proficiency in understanding technicians’ responsibilities in a Modern theatrical production.

TAP 312 Modern Technical Production III

<table>
<thead>
<tr>
<th>Units:</th>
<th>1 - 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hours:</td>
<td>54 - 162 hours LAB</td>
</tr>
<tr>
<td>Course Family:</td>
<td>Modern Performance and Technical Production <a href="http://crc.losrios.edu/course-families#id_100003">Link</a></td>
</tr>
<tr>
<td>Prerequisite:</td>
<td>TAP 311 with a grade of &quot;C&quot; or better</td>
</tr>
<tr>
<td>Enrollment Limitation:</td>
<td>Interview</td>
</tr>
<tr>
<td>Transferable:</td>
<td>CSU; UC</td>
</tr>
<tr>
<td>C-ID:</td>
<td>C-ID THTR 192</td>
</tr>
<tr>
<td>Catalog Date:</td>
<td>June 1, 2020</td>
</tr>
</tbody>
</table>

This course is the third level of four courses which provide for a workshop training experience for students working in their third position on the production crew of a modern theatre production. Students interested in technical work interview for positions in stage management, crewing, set construction, costumes and makeup, lighting and sound, box office and publicity. Students will gain practical experience in the application of production responsibilities in any of the following: stage management, house management, construction, scenery, properties, costume, lighting, sound, and running crews. All students performing in productions may enroll in this class for one to three units at the discretion of the instructor. Students may enroll in this class after the close of late registration at the discretion of the instructor.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- Work as a theatre technician in community, educational, and/or professional theatres. (SLO 1, PSLO 2)
- Objective 1a: Demonstrate an intermediate proficiency in working and collaborating with the set designer, lighting designer, sound designer, special effects coordinator technical director, performers, and the director and audience in relationship to the crew in a Modern production.
- Objective 1b: Demonstrate an intermediate proficiency in scene shop operation, maintenance and safety procedures regarding the usage of tools and technical equipment, building materials and fastening methods, blueprint readings, and the overall planning of the technical aspects of a Modern theatrical production.
Objective 1c: Demonstrate an intermediate proficiency in formulating solutions to unfamiliar situations in technical theatre and procedures to appraise the efficacy of the solutions. In Modern Theatrical productions the production situations may include: the integration of projections into productions, abstract scenery and lighting, box (realistic) scenery and lighting, accommodating different iterations of audience interaction, etcetera.

Objective 1d: Demonstrate an intermediate proficiency in the importance of teamwork in carrying out a group project as it relates to technical theatre in a Modern theatrical production.

Work effectively as an ensemble member of a theatre company. (SLO 2, PSLO 3)

Objective 2a: Demonstrate an intermediate proficiency in different iterations of crew dynamics in Modern theatrical productions including visible crew members (koken), performers acting as crew, crew used to “alienate” an audience’s experience, fourth-wall crew, etcetera.

Objective 2b: Demonstrate an intermediate proficiency in technicians’ responsibilities in a Modern theatrical production.

TAP 313 Modern Technical Production IV

Units: 1 - 3
Hours: 54 - 162 hours LAB
Course Family: Modern Performance and Technical Production (http://crc.losrios.edu/course-families#id_100003)
Prerequisite: TAP 312 with a grade of “C” or better
Enrollment Limitation: Interview
Transferable: CSU; UC
C-ID: C-ID THTR 192
Catalog Date: June 1, 2020

This course is the fourth level of four courses which provide for a workshop training experience for students working in their fourth position on the production crew of a modern theatre production. Students interested in technical work interview for positions in stage management, crewing, set construction, costumes and makeup, lighting and sound, box office and publicity. Students will gain practical experience in the application of production responsibilities in any of the following: stage management, house management, construction, scenery, properties, costume, lighting, sound, and running crews. All students performing in productions may enroll in this class for one to three units at the discretion of the instructor. Students may enroll in this class after the close of late registration at the discretion of the instructor.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- Work as a theatre technician in community, educational, and/or professional theatres. (SLO 1, PSLO 2)
- Objective 1a: Demonstrate leadership in a crew through their interactions and collaborations with the set designer, lighting designer, sound designer, special effects coordinator, technical director, performers, and the director and audience in relationship to the crew in a Modern production.
- Objective 1b: Demonstrate leadership in a crew through mentoring other crew members in scene shop operation, maintenance and safety procedures regarding the usage of tools and technical equipment, building materials and fastening methods, blueprint readings, and the overall planning of the technical aspects of a Modern theatrical production.
- Objective 1c: Demonstrate leadership in a crew through mentoring other crew members in formulating solutions to unfamiliar situations in technical theatre and procedures to appraise the efficacy of the solutions. In Modern Theatrical productions the production situations may include: the integration of projections into productions, abstract scenery and lighting, box (realistic) scenery and lighting, accommodating different iterations of audience interaction, etcetera.
- Objective 1d: Demonstrate leadership in a crew through mentoring other crew members in the importance of teamwork in carrying out a group project as it relates to technical theatre in a Modern theatrical production.
- Work effectively as an ensemble member of a theatre company. (SLO 2, PSLO 3)
- Objective 2a: Demonstrate leadership in a crew through mentoring other crew members in different iterations of crew dynamics in Modern theatrical productions including visible crew members (koken), performers acting as crew, crew used to “alienate” an audience’s experience, fourth-wall crew, etcetera.
- Objective 2b: Demonstrate leadership in a crew through mentoring other crew members in technicians’ responsibilities in a Modern theatrical production.

TAP 320 Classical Rehearsal and Performance I
This course is the first level of four courses which provide for a workshop training experience for students performing in their first role in a classical theatre production. Students interested in acting audition with the director for acting, singing or dancing roles. All students performing in productions may enroll in this class for one to three units at the discretion of the instructor. Students may enroll in this class after the close of late registration at the discretion of the instructor.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- Audition and perform in community, educational, and/or professional theatres. (SLO 1, PSLO 1)
- Objective 1a: Recognize and demonstrate an understanding of the requirements of being an actor in a classical theatrical production including the audition, rehearsal, and production processes.
- Objective 1b: Collaborating with the director and other actors, demonstrate basic understanding of classical script analysis and the techniques of character analysis.
- Objective 1c: Recognize and demonstrate an understanding of the basic skills and rehearsal methods necessary to performing a classical role on stage including: using vocal, instrumental, dance and movement skills, and the use and maintenance of basic production elements such as props, costumes, and furniture to create the world of a chosen play.
- Work effectively as an ensemble member of a theatre company. (SLO 2, PSLO 3)
- Objective 2a: Recognize and demonstrate the basic collaborative responsibilities with the director and designers in rehearsal and in performance in the creation of a classical theatrical production.

TAP 321 Classical Rehearsal and Performance II

This course is the second level of four courses which provide for a workshop training experience for students performing in their second role in a classical theatre production. Students interested in acting audition with the director for acting, singing or dancing roles. All students performing in productions may enroll in this class for one to three units at the discretion of the instructor. Students may enroll in this class after the close of late registration at the discretion of the instructor.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- Audition and perform in community, educational, and/or professional theatres. (SLO 1, PSLO 1)
- Objective 1a: Demonstrate a basic proficiency in the requirements of being an actor in a classical theatrical production including the audition, rehearsal, and production processes.
- Objective 1b: Collaborating with the director and other actors, demonstrate basic proficiency in classical script analysis and the techniques of character analysis.
- Objective 1c: Demonstrate a basic proficiency in the skills and rehearsal methods necessary to performing a classical role on stage including: using vocal, instrumental, dance and movement skills, and the use and maintenance of basic production elements such as props, costumes, and furniture to create the world of a chosen play.
- PSLO 3: Work effectively as an ensemble member of a theatre company. (SLO 2, PSLO 3)
- Objective 2a: Demonstrate a basic proficiency in understanding collaborative responsibilities with the director and designers in rehearsal and in performance in the creation of a classical theatrical production.
TAP 322 Classical Rehearsal and Performance III

This course is the third level of four courses which provide for a workshop training experience for students performing in their third role in a classical theatre production. Students interested in acting audition with the director for acting, singing or dancing roles. All students performing in productions may enroll in this class for one to three units at the discretion of the instructor. Students may enroll in this class after the close of late registration at the discretion of the instructor.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- Audition and perform in community, educational, and/or professional theatres. (SLO 1, PSLO 1)
- Objective 1a: Demonstrate an intermediate proficiency in the requirements of being an actor in a classical theatrical production including the audition, rehearsal, and production processes.
- Objective 1b: Collaborating with the director and other actors, demonstrate intermediate proficiency in classical script analysis and the techniques of character analysis.
- Objective 1c: Demonstrate intermediate proficiency in the skills and rehearsal methods necessary to performing a classical role on stage including: using vocal, instrumental, dance and movement skills, and the use and maintenance of basic production elements such as props, costumes, and furniture to create the world of a chosen play.
- Work effectively as an ensemble member of a theatre company. (SLO 2, PSLO 3)
- Objective 2a: Demonstrate an intermediate proficiency in understanding collaborative responsibilities with the director and designers in rehearsal and in performance in the creation of a classical theatrical production.

TAP 323 Classical Rehearsal and Performance IV

This course is the fourth level of four courses which provide for a workshop training experience for students performing in their fourth role in a classical theatre production. Students interested in acting audition with the director for acting, singing or dancing roles. All students performing in productions may enroll in this class for one to three units at the discretion of the instructor. Students may enroll in this class after the close of late registration at the discretion of the instructor.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- Audition and perform in community, educational, and/or professional theatres. (SLO 1, PSLO 1)
- Objective 1a: Demonstrate leadership in a cast by mentoring other actors in the requirements of being an actor in a classical theatrical production.
- Objective 1b: Demonstrate leadership in a cast by assisting the director and other actors in classical script analysis and the techniques of character analysis.
- Objective 1c: Demonstrate leadership in a cast by assisting the director and other actors in the skills and rehearsal methods necessary to performing a classical role on stage including: using vocal, instrumental, dance and movement skills, and the use and maintenance of basic production elements such as props, costumes, and furniture to create the world of a chosen play.
- Work effectively as an ensemble member of a theatre company. (SLO 2, PSLO 3)
Objective 2a: Demonstrate leadership in a cast through their collaborative interactions with the director and designers in rehearsal and in performance in the creation of a classical theatrical production.

TAP 330 Classical Technical Production I

Units: 1 - 3
Hours: 54 - 162 hours LAB
Course Family: Classical Performance and Technical Production (http://crc.losrios.edu/course-families#id_100000)
Prerequisite: None.
Enrollment Limitation: Interview
Transferable: CSU; UC
C-ID: C-ID THTR 192
Catalog Date: June 1, 2020

This course is the first level of four courses which provide for a workshop training experience for students working in their first position on the production crew of a classical theatre production. Students interested in technical work interview for positions in stage management, crewing, set construction, costumes and makeup, lighting and sound, box office and publicity. Students will gain practical experience in the application of production responsibilities in any of the following: stage management, house management, construction, scenery, properties, costume, lighting, sound, and running crews. All students performing in productions may enroll in this class for one to three units at the discretion of the instructor. Students may enroll in this class after the close of late registration at the discretion of the instructor.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- Work as a theatre technician in community, educational, and/or professional theatres. (SLO 1, PSLO 2)
- Objective 1a: Recognize and demonstrate a basic understanding of the responsibilities of the set designer, lighting designer, sound designer, special effects coordinator, technical director, director and audience in relationship to the crew in a Classical production.
- Objective 1b: Recognize and demonstrate a basic understanding of scene shop operation, maintenance and safety procedures regarding the usage of tools and technical equipment, building materials and fastening methods, blueprint readings, and the overall planning of the technical aspects of a Classical theatrical production.
- Objective 1c: Recognize and demonstrate a basic understanding of formulating solutions to unfamiliar situations in technical theatre and procedures to appraise the efficacy of the solutions. In Classical Theatrical productions the production situations may include: creating a space to evoke a performance in an amphitheater (Greek or Roman), the stagecraft of Shakespeare and other renaissance theatre types, forced perspective and other scenic artistry, etcetera.
- Objective 1d: Recognize and demonstrate a basic understanding of the importance of teamwork in carrying out a group project as it relates to technical theatre in a Classical theatrical production.
- Work effectively as an ensemble member of a theatre company. (SLO 2, PSLO 3)
- Objective 2a: Recognize and demonstrate a basic understanding of different iterations of crew dynamics in Classical theatrical productions including: dressing historical costumes, historical crew configurations, representational scenery and properties, etcetera.
- Objective 2b: Recognize and demonstrate a basic understanding of technicians' responsibilities in a Classical theatrical production.

TAP 331 Classical Technical Production II

Units: 1 - 3
Hours: 54 - 162 hours LAB
Course Family: Classical Performance and Technical Production (http://crc.losrios.edu/course-families#id_100000)
Prerequisite: TAP 330 with a grade of "C" or better
Enrollment Limitation: Interview
Transferable: CSU; UC
C-ID: C-ID THTR 192
Catalog Date: June 1, 2020

This course is the second level of four courses which provide for a workshop training experience for students working in their second position on the production crew of a classical theatre production. Students interested in technical work interview for positions in stage management, crewing, set construction, costumes and makeup, lighting and sound, box office and publicity. Students will gain practical experience in the application of production responsibilities in any of the following: stage management, house management, construction, scenery, properties, costume, lighting, sound, and running crews. All students performing in productions may enroll in this class for one to three units at the discretion of the instructor. Students may enroll in this class after the close of late registration at the discretion of the instructor.
Student Learning Outcomes

Upon completion of this course, the student will be able to:

- Work as a theatre technician in community, educational, and/or professional theatres. (SLO 1, PSLO 2)

Objective 1a: Demonstrate a basic proficiency in understanding the responsibilities of the set designer, lighting designer, sound designer, special effects coordinator, technical director, performers, and the director and audience in relationship to the crew in a Classical production.

Objective 1b: Demonstrate a basic proficiency in understanding scene shop operation, maintenance and safety procedures regarding the usage of tools and technical equipment, building materials and fastening methods, blueprint readings, and the overall planning of the technical aspects of a Classical theatrical production.

Objective 1c: Demonstrate a basic proficiency in understanding of formulating solutions to unfamiliar situations in technical theatre and procedures to appraise the efficacy of the solutions. In Classical Theatrical productions the production situations may include: creating a space to evoke a performance in an amphitheater (Greek or Roman), the stagecraft of Shakespeare and other renaissance theatre types, forced perspective and other scenic artistry, etcetera.

Objective 1d: Demonstrate a basic proficiency in understanding the importance of teamwork in carrying out a group project as it relates to technical theatre in a Classical theatrical production.

- Work effectively as an ensemble member of a theatre company: historical costumes, historical crew configurations, representational scenery and properties, etcetera. (SLO 2, PSLO 3)

Objective 2a: Recognize and demonstrate a basic understanding of different iterations of crew dynamics in Classical theatrical productions including: dressing historical costumes, historical crew configurations, representational scenery and properties, etcetera.

Objective 2b: Recognize and demonstrate a basic understanding of technicians' responsibilities in a Classical theatrical production.

TAP 332 Classical Technical Production III

Units: 1 - 3
Hours: 54 - 162 hours LAB
Course Family: Classical Performance and Technical Production (http://crc.losrios.edu/course-families#id_100004)
Prerequisite: TAP 331 with a grade of "C" or better
Enrollment Limitation: Interview
Transferable: CSU; UC
C-ID: C-ID THTR 192
Catalog Date: June 1, 2020

This course is the third level of four courses which provide for a workshop training experience for students working in their third position on the production crew of a classical theatre production. Students interested in technical work interview for positions in stage management, crewing, set construction, costumes and makeup, lighting and sound, box office and publicity. Students will gain practical experience in the application of production responsibilities in any of the following: stage management, house management, construction, scenery, properties, costume, lighting, sound, and running crews. All students performing in productions may enroll in this class for one to three units at the discretion of the instructor. Students may enroll in this class after the close of late registration at the discretion of the instructor.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- Work as a theatre technician in community, educational, and/or professional theatres. (SLO 1, PSLO 2)

Objective 1a: Demonstrate an intermediate proficiency in working and collaborating with the set designer, lighting designer, sound designer, special effects coordinator technical director, performers, and the director and audience in relationship to the crew in a Classical production.

Objective 1b: Demonstrate an intermediate proficiency in scene shop operation, maintenance and safety procedures regarding the usage of tools and technical equipment, building materials and fastening methods, blueprint readings, and the overall planning of the technical aspects of a Classical theatrical production.

Objective 1c: Demonstrate an intermediate proficiency in formulating solutions to unfamiliar situations in technical theatre and procedures to appraise the efficacy of the solutions. In Classical Theatrical productions the production situations may include: creating a space to evoke a performance in an amphitheater (Greek or Roman), the stagecraft of Shakespeare and other renaissance theatre types, forced perspective and other scenic artistry, etcetera.

Objective 1d: Demonstrate an intermediate proficiency in the importance of teamwork in carrying out a group project as it relates to technical theatre in a Classical theatrical production.
TAP 333 Classical Technical Production IV

**Units:** 1 - 3  
**Hours:** 54 - 162 hours LAB  
**Course Family:** Classical Performance and Technical Production  
**Prerequisite:** TAP 332 with a grade of "C" or better  
**Enrollment Limitation:** Interview  
**Transferable:** CSU; UC  
**C-ID:** C-ID THTR 192  
**Catalog Date:** June 1, 2020

This course is the fourth of four courses which provide for a workshop training experience for students working in their fourth position on the production crew of a classical theatre production. Students interested in technical work interview for positions in stage management, crewing, set construction, costumes and makeup, lighting and sound, box office and publicity. Students will gain practical experience in the application of production responsibilities in any of the following: stage management, house management, construction, scenery, properties, costume, lighting, sound, and running crews. All students performing in productions may enroll in this class for one to three units at the discretion of the instructor. Students may enroll in this class after the close of late registration at the discretion of the instructor.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- Work as a theatre technician in community, educational, and/or professional theatres. (SLO 1, PSLO 2)

- Objective 1a: Demonstrate leadership in a crew through their interactions and collaborations with the set designer, lighting designer, sound designer, special effects coordinator, technical director, performers, and the director and audience in relationship to the crew in a Classical production.

- Objective 1b: Demonstrate leadership in a crew through mentoring other crew members in scene shop operation, maintenance and safety procedures regarding the usage of tools and technical equipment, building materials and fastening methods, blueprint readings, and the overall planning of the technical aspects of a Classical theatrical production.

- Objective 1c: Demonstrate leadership in a crew through mentoring other crew members in formulating solutions to unfamiliar situations in technical theatre and procedures to appraise the efficacy of the solutions. In Classical Theatrical productions the production situations may include: creating a space to evoke a performance in an amphitheater (Greek or Roman), the stagecraft of Shakespeare and other renaissance theatre types, forced perspective and other scenic artistry, etcetera.

- Objective 1d: Demonstrate leadership in a crew through mentoring other crew members in the importance of teamwork in carrying out a group project as it relates to technical theatre in a Classical theatrical production.

- Work effectively as an ensemble member of a theatre company. (SLO 2, PSLO 3)

- Objective 2a: Demonstrate leadership in a crew through mentoring other crew members in different iterations of crew dynamics in Classical theatrical productions including: dressing historical costumes, historical crew configurations, representational scenery and properties, etcetera.

- Objective 2b: Demonstrate leadership in a crew through mentoring other crew members in technicians' responsibilities in a Classical theatrical production.

TAP 340 Musical Rehearsal and Performance I

**Units:** 1 - 3  
**Hours:** 54 - 162 hours LAB  
**Course Family:** Musical Performance and Technical Production  
**Prerequisite:** None.  
**Enrollment Limitation:** Audition  
**Transferable:** CSU; UC  
**C-ID:** C-ID THTR 191  
**Catalog Date:** June 1, 2020
This course is the first level of four courses which provide for a workshop training experience for students performing in their first role in a musical theatre production. Students interested in acting audition with the director for acting, singing or dancing roles. All students performing in productions may enroll in this class for one to three units at the discretion of the instructor. Students may enroll in this class after the close of late registration at the discretion of the instructor.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- Audition and perform in community, educational, and/or professional theatres. (SLO 1, PSLO 1)
- Objective 1a: Recognize and demonstrate an understanding of the requirements of being an actor in a musical theatrical production including the audition, rehearsal, and production processes.
- Objective 1b: Collaborating with the director and other actors, demonstrate basic understanding of musical script analysis and the techniques of character analysis.
- Objective 1c: Recognize and demonstrate an understanding of the basic skills and rehearsal methods necessary to performing a musical role on stage including: using vocal, instrumental, dance and movement skills, and the use and maintenance of basic production elements such as props, costumes, and furniture to create the world of a chosen play.
- Work effectively as an ensemble member of a theatre company. (SLO 2, PSLO 3)
- Objective 2a: Recognize and demonstrate the basic collaborative responsibilities with the director and designers in rehearsal and in performance in the creation of a musical theatrical production.

TAP 341 Musical Rehearsal and Performance II

Units: 1 - 3
Hours: 54 - 162 hours LAB
Course Family: Musical Performance and Technical Production (http://crc.losrios.edu/course-families#id_100005)
Prerequisites: TAP 340 with a grade of "C" or better
Enrollment Limitation: Audition
Transferable: CSU; UC
C-ID: C-ID THTR 191
Catalog Date: June 1, 2020

This course is the second level of four courses which provide for a workshop training experience for students performing in their second role in a musical theatre production. Students interested in acting audition with the director for acting, singing or dancing roles. All students performing in productions may enroll in this class for one to three units at the discretion of the instructor. Students may enroll in this class after the close of late registration at the discretion of the instructor.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- Audition and perform in community, educational, and/or professional theatres. (SLO 1, PSLO 1)
- Objective 1a: Demonstrate a basic proficiency in the requirements of being an actor in a musical theatrical production including the audition, rehearsal, and production processes.
- Objective 1b: Collaborating with the director and other actors, demonstrate basic proficiency in musical script analysis and the techniques of character analysis.
- Objective 1c: Demonstrate basic proficiency in the skills and rehearsal methods necessary to performing a musical role on stage including: using vocal, instrumental, dance and movement skills, and the use and maintenance of basic production elements such as props, costumes, and furniture to create the world of a chosen play.
- Work effectively as an ensemble member of a theatre company (SLO 2, PSLO 3)
- Objective 2a: Demonstrate a basic proficiency in understanding collaborative responsibilities with the director and designers in rehearsal and in performance in the creation of a musical theatrical production.

TAP 342 Musical Rehearsal and Performance III
This course is the third level of four courses which provide for a workshop training experience for students performing in their third role in a musical theatre production. Students interested in acting audition with the director for acting, singing or dancing roles. All students performing in productions may enroll in this class for one to three units at the discretion of the instructor. Students may enroll in this class after the close of late registration at the discretion of the instructor.

### Student Learning Outcomes

Upon completion of this course, the student will be able to:

- Audition and perform in community, educational, and/or professional theatres. (SLO 1, PSLO 1)
- Objective 1a: Demonstrate an intermediate proficiency in the requirements of being an actor in a musical theatrical production including the audition, rehearsal, and production processes.
- Objective 1b: Collaborating with the director and other actors, demonstrate intermediate proficiency in musical script analysis and the techniques of character analysis.
- Objective 1c: Demonstrate intermediate proficiency in the skills and rehearsal methods necessary to performing a musical role on stage including: using vocal, instrumental, dance and movement skills, and the use and maintenance of basic production elements such as props, costumes, and furniture to create the world of a chosen play.
- Work effectively as an ensemble member of a theatre company. (SLO 2, PSLO 3)
- Objective 2a: Demonstrate leadership in a cast by mentoring other actors in the requirements of being an actor in a musical theatrical production.
- Objective 2b: Demonstrate leadership in a cast by assisting the director and other actors in musical script analysis and the techniques of character analysis.
- Objective 2c: Demonstrate leadership in a cast by assisting the director and other actors in the skills and rehearsal methods necessary to performing a musical role on stage including: using vocal, instrumental, dance and movement skills, and the use and maintenance of basic production elements such as props, costumes, and furniture to create the world of a chosen play.
- Objective 2d: Work effectively as an ensemble member of a theatre company. (SLO 2, PSLO 3)

### TAP 343 Musical Rehearsal and Performance IV

This course is the fourth level of four courses which provide for a workshop training experience for students performing in their fourth role in a musical theatre production. Students interested in acting audition with the director for acting, singing or dancing roles. All students performing in productions may enroll in this class for one to three units at the discretion of the instructor. Students may enroll in this class after the close of late registration at the discretion of the instructor.

### Student Learning Outcomes

Upon completion of this course, the student will be able to:

- Audition and perform in community, educational, and/or professional theatres. (SLO 1, PSLO 1)
- Objective 1a: Demonstrate leadership in a cast by mentoring other actors in the requirements of being an actor in a musical theatrical production.
- Objective 1b: Demonstrate leadership in a cast by assisting the director and other actors in musical script analysis and the techniques of character analysis.
- Objective 1c: Demonstrate leadership in a cast by assisting the director and other actors in the skills and rehearsal methods necessary to performing a musical role on stage including: using vocal, instrumental, dance and movement skills, and the use and maintenance of basic production elements such as props, costumes, and furniture to create the world of a chosen play.
- Work effectively as an ensemble member of a theatre company. (SLO 2, PSLO 3)
- Objective 2a: Demonstrate leadership in a cast through their collaborative interactions with the director and designers in rehearsal and in performance in the creation of a musical theatrical production.
TAP 350 Musical Technical Production I

This course is the first of four courses which provide for a workshop training experience for students working in their first position on the production crew of a musical theatre production. Students interested in technical work interview for positions in stage management, crewing, set construction, costumes and makeup, lighting and sound, box office and publicity. Students will gain practical experience in the application of production responsibilities in any of the following: stage management, house management, construction, scenery, properties, costume, lighting, sound, and running crews. All students performing in productions may enroll in this class for one to three units at the discretion of the instructor. Students may enroll in this class after the close of late registration at the discretion of the instructor.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- Work as a theatre technician in community, educational, and/or professional theatres. (SLO 1, PSLO 2)
- Objective 1a: Recognize and demonstrate a basic understanding of the responsibilities of the set designer, lighting designer, sound designer, special effects coordinator, technical director, director and audience in relationship to the crew in a Musical production.
- Objective 1b: Recognize and demonstrate a basic understanding of scene shop operation, maintenance and safety procedures regarding the usage of tools and technical equipment, building materials and fastening methods, blueprint readings, and the overall planning of the technical aspects of a Musical theatrical production.
- Objective 1c: Recognize and demonstrate a basic understanding of formulating solutions to unfamiliar situations in technical theatre and procedures to appraise the efficacy of the solutions. In Musical Theatrical productions the production situations may include: sound reinforcement, accommodating orchestras and musicians, preparing a stage for dance, preparing a space for large casts, etcetera.
- Objective 1d: Recognize and demonstrate a basic understanding of the importance of teamwork in carrying out a group project as it relates to technical theatre in a Musical theatrical production.
- Work effectively as an ensemble member of a theatre company. (SLO 2, PSLO 3)
- Objective 2a: Recognize and demonstrate a basic understanding of different iterations of crew dynamics in Musical theatrical productions including: dressing elaborate costumes, coordinating wireless microphones, balancing sound between singers and the orchestra/musicians, large elaborate scenery and scene changes, etcetera.
- Objective 2b: Recognize and demonstrate a basic understanding of technicians’ responsibilities in a Musical theatrical production.

TAP 351 Musical Technical Production II

This course is the second of four courses which provide for a workshop training experience for students working in their second position on the production crew of a musical theatre production. Students interested in technical work interview for positions in stage management, crewing, set construction, costumes and makeup, lighting and sound, box office and publicity. Students will gain practical experience in the application of production responsibilities in any of the following: stage management, house management, construction, scenery, properties, costume, lighting, sound, and running crews. All students performing in productions may enroll in this class for one to three units at the discretion of the instructor. Students may enroll in this class after the close of late registration at the discretion of the instructor.

Student Learning Outcomes
Upon completion of this course, the student will be able to:

- Work as a theatre technician in community, educational, and/or professional theatres. (SLO 1, PSLO 2)
- Objective 1a: Demonstrate a basic proficiency in understanding the responsibilities of the set designer, lighting designer, sound designer, special effects coordinator, technical director, performers, and the director and audience in relationship to the crew in a Musical production.
- Objective 1b: Demonstrate a basic proficiency in understanding scene shop operation, maintenance and safety procedures regarding the usage of tools and technical equipment, building materials and fastening methods, blueprint readings, and the overall planning of the technical aspects of a Musical theatrical production.
- Objective 1c: Demonstrate a basic proficiency in understanding of formulating solutions to unfamiliar situations in technical theatre and procedures to appraise the efficacy of the solutions. In Musical Theatrical productions the production situations may include: sound reinforcement, accommodating orchestras and musicians, preparing a stage for dance, preparing a space for large casts, etcetera.
- Objective 1d: Demonstrate a basic proficiency in understanding the importance of teamwork in carrying out a group project as it relates to technical theatre in a Musical theatrical production.
- Work effectively as an ensemble member of a theatre company. (SLO 2, PSLO 3)
- Objective 2a: Demonstrate a basic proficiency in understanding of different iterations of crew dynamics in Musical theatrical productions including: dressing elaborate costumes, coordinating wireless microphones, balancing sound between singers and the orchestra/musicians, large elaborate scenery and scene changes, etcetera.
- Objective 2b: Demonstrate a basic proficiency in understanding technicians' responsibilities in a Musical theatrical production.

TAP 352 Musical Technical Production III

- Units: 1 - 3
- Hours: 54 - 162 hours LAB
- Course Family: Musical Performance and Technical Production (http://crc.losrios.edu/course-families#id_100005)
- Prerequisite: TAP 351 with a grade of "C" or better
- Enrollment Limitation: Interview
- Transferable: CSU; UC
- C-ID: C-ID THTR 192
- Catalog Date: June 1, 2020

This course is the third of four courses which provide for a workshop training experience for students working in their third position on the production crew of a musical theatre production. Students interested in technical work interview for positions in stage management, crewing, set construction, costumes and makeup, lighting and sound, box office and publicity. Students will gain practical experience in the application of production responsibilities in any of the following: stage management, house management, construction, scenery, properties, costume, lighting, sound, and running crews. All students performing in productions may enroll in this class for one to three units at the discretion of the instructor. Students may enroll in this class after the close of late registration at the discretion of the instructor.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- Work as a theatre technician in community, educational, and/or professional theatres. (SLO 1, PSLO 2)
- Objective 1a: Demonstrate an intermediate proficiency in working and collaborating with the set designer, lighting designer, sound designer, special effects coordinator technical director, performers, and the director and audience in relationship to the crew in a Musical production.
- Objective 1b: Demonstrate an intermediate proficiency in scene shop operation, maintenance and safety procedures regarding the usage of tools and technical equipment, building materials and fastening methods, blueprint readings, and the overall planning of the technical aspects of a Musical theatrical production.
- Objective 1c: Demonstrate an intermediate proficiency in formulating solutions to unfamiliar situations in technical theatre and procedures to appraise the efficacy of the solutions. In Musical Theatrical productions the production situations may include: sound reinforcement, accommodating orchestras and musicians, preparing a stage for dance, preparing a space for large casts, etcetera.
- Objective 1d: Demonstrate an intermediate proficiency in the importance of teamwork in carrying out a group project as it relates to technical theatre in a Musical theatrical production.
- Work effectively as an ensemble member of a theatre company. (SLO 2, PSLO 3)
- Objective 2a: Demonstrate an intermediate proficiency in different iterations of crew dynamics in Musical theatrical productions including: dressing elaborate costumes, coordinating wireless microphones, balancing sound between singers and the orchestra/musicians, large elaborate scenery and scene changes, etcetera.
TAP 353 Musical Technical Production IV

**Units:** 1 - 3  
**Hours:** 54 - 162 hours LAB  
**Course Family:** Musical Performance and Technical Production (http://crc.losrios.edu/course-families#id_100005)  
**Prerequisite:** TAP 352 with a grade of "C" or better  
**Enrollment Limitation:** Interview  
**Transferable:** CSU; UC  
**C-ID:** C-ID THTR 192  
**Catalog Date:** June 1, 2020

This course is the fourth of four courses which provide for a workshop training experience for students working in their fourth position on the production crew of a musical theatre production. Students interested in technical work interview for positions in stage management, crewing, set construction, costumes and makeup, lighting and sound, box office and publicity. Students will gain practical experience in the application of production responsibilities in any of the following: stage management, house management, construction, scenery, properties, costume, lighting, sound, and running crews. All students performing in productions may enroll in this class for one to three units at the discretion of the instructor. Students may enroll in this class after the close of late registration at the discretion of the instructor.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- Work as a theatre technician in community, educational, and/or professional theatres. (SLO 1, PSLO 2)

- Objective 1a: Demonstrate leadership in a crew through their interactions and collaborations with the set designer, lighting designer, sound designer, special effects coordinator, technical director, performers, and the director and audience in relationship to the crew in a Musical production.

- Objective 1b: Demonstrate leadership in a crew through mentoring other crew members in scene shop operation, maintenance and safety procedures regarding the usage of tools and technical equipment, building materials and fastening methods, blueprint readings, and the overall planning of the technical aspects of a Musical theatrical production.

- Objective 1c: Demonstrate leadership in a crew through mentoring other crew members in formulating solutions to unfamiliar situations in technical theatre and procedures to appraise the efficacy of the solutions. In Musical Theatrical productions the production situations may include: sound reinforcement, accommodating orchestras and musicians, preparing a stage for dance, preparing a space for large casts, etcetera.

- Objective 1d: Demonstrate leadership in a crew through mentoring other crew members in the importance of teamwork in carrying out a group project as it relates to technical theatre in a Musical theatrical production.

- Work effectively as an ensemble member of a theatre company. (SLO 2, PSLO 3)

- Objective 2a: Demonstrate leadership in a crew through mentoring other crew members in different iterations of crew dynamics in Musical theatrical productions including: dressing elaborate costumes, coordinating wireless microphones, balancing sound between singers and the orchestra/musicians, large elaborate scenery and scene changes, etcetera.

- Objective 2b: Demonstrate leadership in a crew through mentoring other crew members in technicians' responsibilities in a Musical theatrical production.

---

TAP 360 Children's Theatre Rehearsal and Performance I

**Units:** 1 - 3  
**Hours:** 54 - 162 hours LAB  
**Course Family:** Children's Theatre Performance and Technical Production (http://crc.losrios.edu/course-families#id_100046)  
**Prerequisite:** None  
**Enrollment Limitation:** Audition  
**Transferable:** CSU; UC  
**C-ID:** C-ID THTR 191  
**Catalog Date:** June 1, 2020

This course is the first level of four courses which provide a workshop training experience for students performing in their first role in a children's theatre production. Students interested in acting audition with the director for acting, singing or dancing roles. All students performing in productions may enroll in this class for one to three units at the discretion of the instructor. Students may enroll in this class after the close of late registration at the discretion of the instructor.

**Student Learning Outcomes**
Upon completion of this course, the student will be able to:

- Audition and perform in community, educational, and/or professional theatres (SLO 1, PSLO 1).
- Objective 1a: Recognize and demonstrate an understanding of the requirements of being an actor in a children’s theatrical production including the audition, rehearsal, and production processes.
- Objective 1b: Collaborating with the director and other actors, demonstrate basic understanding of children’s script analysis and the techniques of character analysis.
- Objective 1c: Recognize and demonstrate an understanding of the basic skills and rehearsal methods necessary for performing a children's role on stage including: using vocal, instrumental, dance and movement skills; and the use and maintenance of basic production elements such as props, costumes, and furniture to create the world of a chosen play.
- Work effectively as an ensemble member of a theatre company. (SLO 2, PSLO 3)
- Objective 2a: Recognize and demonstrate the basic collaborative responsibilities with the director and designers in rehearsal and in performance in the creation of a children's theatrical production.

TAP 361 Children's Theatre Rehearsal and Performance II

This course is the second level of four courses which provide a workshop training experience for students performing in their second role in a children's theatre production. Students interested in acting audition with the director for acting, singing or dancing roles. All students performing in productions may enroll in this class for one to three units at the discretion of the instructor. Students may enroll in this class after the close of late registration at the discretion of the instructor.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- Audition and perform in community, educational, and/or professional theatres. (SLO 1, PSLO 1)
- Objective 1a: Building upon the skills learned in TA 360, the student should be able to demonstrate proficiency in: • Audition Techniques (including cold readings and paired readings); • Rehearsal Techniques (including improvisation and character development techniques); • Production Processes (including working with props and costuming to enhance their performance).
- Objective 1b: Building upon the skills learned in TA 360, the student should be able to demonstrate proficiency in collaborating with the director and other actors to analyze a children's theatre script and employ techniques of character analysis.
- Objective 1c: Building upon the skills learned in TA 360, the student should be able to demonstrate proficiency in the skills and rehearsal methods necessary for performing a children's role on stage including: using vocal, instrumental, dance and movement skills; and the use and maintenance of basic production elements such as props, costumes, and furniture to create the world of a chosen play.
- PSLO 3: Work effectively as an ensemble member of a theatre company. (SLO 2, PSLO 3)
- Objective 2a: Building upon the skills learned in TA 360, the student should be able to demonstrate proficiency in the collaborative responsibilities between the director, designers and actors in rehearsal and in performance in the creation of a children's theatrical production.

TAP 362 Children's Theatre Rehearsal and Performance III

This course is the second level of four courses which provide a workshop training experience for students performing in their second role in a children's theatre production. Students interested in acting audition with the director for acting, singing or dancing roles. All students performing in productions may enroll in this class for one to three units at the discretion of the instructor. Students may enroll in this class after the close of late registration at the discretion of the instructor.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- Audition and perform in community, educational, and/or professional theatres. (SLO 1, PSLO 1)
- Objective 1a: Building upon the skills learned in TA 360, the student should be able to demonstrate proficiency in: • Audition Techniques (including cold readings and paired readings); • Rehearsal Techniques (including improvisation and character development techniques); • Production Processes (including working with props and costuming to enhance their performance).
- Objective 1b: Building upon the skills learned in TA 360, the student should be able to demonstrate proficiency in collaborating with the director and other actors to analyze a children's theatre script and employ techniques of character analysis.
- Objective 1c: Building upon the skills learned in TA 360, the student should be able to demonstrate proficiency in the skills and rehearsal methods necessary for performing a children's role on stage including: using vocal, instrumental, dance and movement skills; and the use and maintenance of basic production elements such as props, costumes, and furniture to create the world of a chosen play.
- PSLO 3: Work effectively as an ensemble member of a theatre company. (SLO 2, PSLO 3)
- Objective 2a: Building upon the skills learned in TA 360, the student should be able to demonstrate proficiency in the collaborative responsibilities between the director, designers and actors in rehearsal and in performance in the creation of a children's theatrical production.
This course is the third level of four courses which provide for a workshop training experience for students performing in their third role in a children's theatre production. Students interested in acting audition with the director for acting, singing or dancing roles. All students performing in productions may enroll in this class for one to three units at the discretion of the instructor. Students may enroll in this class after the close of late registration at the discretion of the instructor.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- Audition and perform in community, educational, and/or professional theatres. (SLO 1, PSLO 1)

- Objective 1a: Building upon the skills developed in TA360 and TA361, the student should be able to differentiate audition, rehearsal and production techniques and skills and appropriately employ them for different situations.

- Objective 1b: Building upon the skills developed in TA360 and TA361, the student should be able to differentiate different techniques of script analysis and character analysis and appropriately employ them for different situations.

- Objective 1c: Building upon the skills developed in TA360 and TA361, the student should be able to differentiate different techniques and rehearsal methods necessary to performing a children's role on stage and appropriately employ them for different situations.

- Work effectively as an ensemble member of a theatre company. (SLO 2, PSLO 3)

- Objective 2a: Building upon the skills developed in TA360 and TA361, the student should be able to differentiate different collaborative responsibilities between the director, designers and actors in rehearsal and in performance in the creation of a children's theatrical production.

TAP 363 Children's Theatre Rehearsal and Performance IV

This course is the fourth level of four courses which provide a workshop training experience for students performing in their fourth role in a children's theatre production. Students interested in acting audition with the director for acting, singing or dancing roles. All students performing in productions may enroll in this class for one to three units at the discretion of the instructor. Students may enroll in this class after the close of late registration at the discretion of the instructor.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- Audition and perform in community, educational, and/or professional theatres. (SLO 1, PSLO 1)

- Objective 1a: Building upon the skills learned in TA360, 361 and 362, the student should demonstrate leadership in a cast by mentoring other actors in the requirements of being an actor in a children's theatrical production.

- Objective 1b: Building upon the skills learned in TA360, 361 and 362, the student should demonstrate leadership in a cast by assisting the director and other actors in children's script analysis and the techniques of character analysis.

- Objective 1c: Building upon the skills learned in TA360, 361 and 362, the student should demonstrate leadership in a cast by assisting the director and mentoring other actors in the skills and rehearsal methods necessary to performing a children's role on stage.

- Work effectively as an ensemble member of a theatre company. (SLO 2, PSLO 3)

- Objective 2a: Building upon the skills learned in TA360, 361 and 362, the student should demonstrate leadership in a cast through their collaborative interactions with the director and designers in rehearsal and in performance in the creation of a children's theatrical production.

TAP 370 Children's Theatre Technical Production I
This course is the first level of four courses which provide a workshop training experience for students working in their first position on the production crew of a children's theatre production. Students interested in technical work interview for positions in stage management, crewing, set construction, costumes and makeup, lighting and sound, box office and publicity. Students will gain practical experience in the application of production responsibilities in any of the following: stage management, house management, construction, scenery, properties, costume, lighting, sound, and running crews. All students working on productions may enroll in this class for one to three units at the discretion of the instructor. Students may enroll in this class after the close of late registration at the discretion of the instructor.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- Work as a theatre technician in community, educational, and/or professional theatres. (SLO 1, PSLO 2)
- Objective 1a: As a crew member, the student should recognize and demonstrate a basic understanding of the responsibilities of the set designer, lighting designer, sound designer, special effects coordinator, technical director, director and audience in relationship to the crew in a children's theatre production.
- Objective 1b: As a crew member, the student should recognize and demonstrate a basic understanding of scene shop operation, maintenance and safety procedures regarding the usage of tools and technical equipment, building materials and fastening methods, blueprint readings, and the overall planning of the technical aspects of a children's theatrical production.
- Objective 1c: As a crew member, the student should recognize and demonstrate a basic proficiency in understanding of formulating solutions to unfamiliar situations in technical theatre and procedures to appraise the efficacy of the solutions. In children's theatrical productions the production situations may include: the integration of projections into productions, abstract scenery and lighting, box (realistic) scenery and lighting, accommodating different iterations of audience interaction, etcetera.
- Objective 1d: As a crew member, the student should recognize and demonstrate a basic understanding of the importance of teamwork in carrying out a group project as it relates to technical theatre in a children's theatrical production.
- Work effectively as an ensemble member of a theatre company. (SLO 2, PSLO 3)
- Objective 2a: As a crew member, the student should recognize and demonstrate a basic understanding of different iterations of crew dynamics in Children's theatrical productions including visible crew members (koken), performers acting as crew, crew used to "alienate" an audience's experience, fourth-wall crew, etcetera.
- Objective 2b: As a crew member, the student should recognize and define technicians' responsibilities in a children's theatrical production.
Objective 1a: As a crew member, the student should demonstrate an ability to collaboratively work with the set designer, lighting designer, sound designer, special effects coordinator, technical director, performers, and the director to effectively produce a children's theatre production.

Objective 1b: As a crew member, the student should demonstrate the ability to evaluate and employ the policies and procedures which govern scene shop operation, maintenance and safety procedures regarding the usage of tools and technical equipment, building materials and fastening methods, blueprint readings, and the overall planning of the technical aspects of a children's theatrical production.

Objective 1c: As a crew member, the student should demonstrate the ability to evaluate and prioritize solutions to unfamiliar situations in technical theatre and procedures to appraise the efficacy of the solutions.

Objective 1d: As a crew member, the student should demonstrate effective teamwork in group projects as it relates to technical theatre in a children's theatrical production.

Work effectively as an ensemble member of a theatre company. (SLO 2, PSLO 3)

Objective 2a: As a crew member, the student should demonstrate the ability to evaluate and prioritize different iterations of crew dynamics in children's theatrical productions.

Objective 2b: As a crew member, the student should demonstrate and appraise technicians' responsibilities in a children's theatrical production.

TAP 372 Children's Theatre Technical Production III

This course is the third level of four courses which provide a workshop training experience for students working in their third position on the production crew of a children's theatre production. Students interested in technical work interview for positions in stage management, crewing, set construction, costumes and makeup, lighting and sound, box office and publicity. Students will gain practical experience in the application of production responsibilities in any of the following: stage management, house management, construction, scenery, properties, costume, lighting, sound, and running crews. All students working on productions may enroll in this class for one to three units at the discretion of the instructor. Students may enroll in this class after the close of late registration at the discretion of the instructor.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- Work as a theatre technician in community, educational, and/or professional theatres. (SLO 1, PSLO 2)

Objective 1a: As a crew member, the student should be able to differentiate the working relationships necessary between the crew and the set designer, lighting designer, sound designer, special effects coordinator technical director, performers, and the director to effectively produce a children's theatre production.

Objective 1b: As a crew member, the student should demonstrate the ability to explain and train others in the policies and procedures which govern scene shop operation, maintenance and safety procedures regarding the usage of tools and technical equipment, building materials and fastening methods, blueprint readings, and the overall planning of the technical aspects of a children's theatrical production.

Objective 1c: As a crew member, the student should demonstrate the ability to differentiate and discriminate between different solutions to unfamiliar situations in technical theatre.

Objective 1d: As a crew member, the student should demonstrate the ability to differentiate and discriminate between different teamwork dynamics in implementing a group project as it relates to technical theatre in a children's theatrical production.

Work effectively as an ensemble member of a theatre company. (SLO 2, PSLO 3)

Objective 2a: As a crew member, the student should demonstrate the ability to differentiate and discriminate between different iterations of crew dynamics in children's theatrical productions.

Objective 2b: As a crew member, the student should demonstrate the ability to differentiate and discriminate between different technicians' responsibilities in a Children's theatrical production.
This course is the fourth level of four courses which provide a workshop training experience for students working in their fourth position on the production crew of a children's theatre production. Students interested in technical work interview for positions in stage management, crewing, set construction, costumes and makeup, lighting and sound, box office and publicity. Students will gain practical experience in the application of production responsibilities in any of the following: stage management, house management, construction, scenery, properties, costume, lighting, sound, and running crews. All students working on productions may enroll in this class for one to three units at the discretion of the instructor. Students may enroll in this class after the close of late registration at the discretion of the instructor.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- Work as a theatre technician in community, educational, and/or professional theatres. (SLO 1, PSLO 2)
- Objective 1a: As a crew member, the student should demonstrate leadership in a crew through their interactions and collaborations with the set designer, lighting designer, sound designer, special effects coordinator, technical director, performers, and the director and audience in relationship to the crew in a Children's production.
- Objective 1b: As a crew member, the student should demonstrate leadership in a crew through mentoring other crew members in scene shop operation, maintenance and safety procedures regarding the usage of tools and technical equipment, building materials and fastening methods, blueprint readings, and the overall planning of the technical aspects of a children's theatrical production.
- Objective 1c: As a crew member, the student should demonstrate e leadership in a crew through mentoring other crew members in formulating solutions to unfamiliar situations in technical theatre and procedures to appraise the efficacy of the solutions.
- Objective 1d: As a crew member, the student should demonstrate leadership in a crew through mentoring other crew members in the importance of teamwork in carrying out a group project as it relates to technical theatre in a Children's theatrical production.
- Work effectively as an ensemble member of a theatre company. (SLO 2, PSLO 3)
- Objective 2a: As a crew member, the student should demonstrate leadership in a crew through mentoring other crew members in different iterations of crew dynamics in children's theatrical productions.
- Objective 2b: As a crew member, the student should demonstrate leadership in a crew through mentoring other crew members in technicians' responsibilities in a Children's theatrical production.
Work Experience Education is a unique, experiential, academic program that allows individuals to apply what they've learned in the classroom to a work environment. Upon completion of their Work Experience, students may earn 1 to 4 units of transferable credit with a letter grade.

Work Experience serves: College interns, volunteers, and employees. It is also one of several Living Skills graduation requirements for an associate degree.

**Dean**

(916) 691-7350

coopers@crc.losrios.edu

---

**Work Experience (WEXP)**

**WEXP 198 Work Experience - General**

**Units:** 1 - 3  
**Hours:** 60 - 225 hours LAB  
**Prerequisite:** None.  
**Enrollment Limitation:** Students must be in a paid or unpaid internship, volunteer position or job.  
**General Education:** AA/AS Area III(b)  
**Catalog Date:** June 1, 2020

This course provides students with opportunities to develop marketable skills in preparation for employment or advancement within a career. It is designed for students interested in exploring various career options. Course content includes understanding the application of education to the workforce; completion of required forms which document the student's progress and hours spent at the work site; and developing workplace skills and competencies. Appropriate level learning objectives are established by the student and the employer. During the semester, the student is required to participate in a weekly orientation and 75 hours of related paid work experience, or 60 hours of unpaid work experience for one unit. An additional 75 or 60 hours of related work experience is required for each additional unit. Work Experience may be taken for a total of 6 units when there are new or expanded learning objectives. Only one Work Experience course may be taken per semester.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- DEMONSTRATE AN UNDERSTANDING AND APPLICATION OF PROFESSIONAL WORKPLACE BEHAVIOR IN A FIELD OF STUDY RELATED ONE'S CAREER.(SLO 1)
  - Understand the effects time, stress, and organizational management have on performance.
  - Demonstrate an understanding of consistently practicing ethics and confidentiality in a workplace.
  - Examine the career/life planning process and relate its relevancy to the student.
  - Demonstrate an understanding of basic communication tools and their appropriate use.
  - Demonstrate an understanding of workplace etiquette.
  - DESCRIBE THE CAREER/LIFE PLANNING PROCESS AND RELATE ITS RELEVANCY TO ONE'S CAREER.(SLO 2)
  - Link personal goals to long term achievement.
  - Display an understanding of creating a professional first impression.
  - Understand how networking is a powerful job search tool.
Understand necessary elements of a résumé.
Understand the importance of interview preparation.
Identify how continual learning increases career success.

DEMONSTRATE APPLICATION OF INDUSTRY KNOWLEDGE AND THEORETICAL CONCEPTS AS WRITTEN IN LEARNING OBJECTIVES IN PARTNERSHIP WITH THE EMPLOYER WORK SITE SUPERVISOR (SLO 3)

WEXP 298 Work Experience in (Subject)

Units: 1 - 4
Hours: 60 - 300 hours LAB
Prerequisite: None.
Enrollment Limitation: Students must be in a paid or unpaid internship, volunteer position or job related to career goals.
General Education: AA/AS Area III(b)
Catalog Date: June 1, 2020

This course provides students with opportunities to develop marketable skills in preparation for employment in their major field of study or advancement within their career. It is designed for students interested in work experience and/or internships in associate degree level or certificate occupational programs. Course content includes understanding the application of education to the workforce; completion of required forms which document the student's progress and hours spent at the work site; and developing workplace skills and competencies. Appropriate level learning objectives are established by the student and the employer. During the semester, the student is required to participate in a weekly orientation and 75 hours of related paid work experience, or 60 hours of unpaid work experience for one unit. An additional 75 or 60 hours of related work experience is required for each additional unit. Work Experience may be taken for a total of 16 units when there are new or expanded learning objectives. Only one Work Experience course may be taken per semester.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- DEMONSTRATE AN UNDERSTANDING AND APPLICATION OF PROFESSIONAL WORKPLACE BEHAVIOR IN A FIELD OF STUDY RELATED ONE'S CAREER (SLO 1)
- Understand the effects time, stress, and organizational management have on performance.
- Demonstrate an understanding of consistently practicing ethics and confidentiality in a workplace.
- Examine the career/life planning process and relate its relevancy to the student.
- Demonstrate an understanding of basic communication tools and their appropriate use.
- Demonstrate an understanding of workplace etiquette.
- DESCRIBE THE CAREER/LIFE PLANNING PROCESS AND RELATE ITS RELEVANCY TO ONE'S CAREER (SLO 2)
- Link personal goals to long term achievement.
- Display an understanding of creating a professional first impression.
- Understand how networking is a powerful job search tool.
- Understand necessary elements of a résumé.
- Understand the importance of interview preparation.
- Identify how continual learning increases career success.
- DEMONSTRATE APPLICATION OF INDUSTRY KNOWLEDGE AND THEORETICAL CONCEPTS AS WRITTEN IN LEARNING OBJECTIVES IN PARTNERSHIP WITH THE EMPLOYER WORK SITE SUPERVISOR (SLO 3)

WEXP 498 Work Experience in (Subject)
This course provides students with opportunities to develop marketable skills in preparation for employment in their major field of study or advancement within their career. It is designed for students interested in work experience and/or internships in transfer level degree occupational programs. Course content includes understanding the application of education to the workforce; completion of required forms which document the student's progress and hours spent at the work site; and developing workplace skills and competencies. Appropriate level learning objectives are established by the student and the employer. During the semester, the student is required to participate in a weekly orientation and 75 hours of related paid work experience, or 60 hours of unpaid work experience for one unit. An additional 75 or 60 hours of related work experience is required for each additional unit. Work Experience may be taken for a total of 16 units when there are new or expanded learning objectives. Only one Work Experience course may be taken per semester.

Student Learning Outcomes

Upon completion of this course, the student will be able to:

- **DEMONSTRATE AN UNDERSTANDING AND APPLICATION OF PROFESSIONAL WORKPLACE BEHAVIOR IN A FIELD OF STUDY RELATED ONE’S CAREER.(SLO 1)**
  - Understand the effects time, stress, and organizational management have on performance.
  - Demonstrate an understanding of consistently practicing ethics and confidentiality in a workplace.
  - Demonstrate an understanding of basic communication tools and their appropriate use.
  - Demonstrate an understanding of workplace etiquette.

- **DESCRIBE THE CAREER/LIFE PLANNING PROCESS AND RELATE ITS RELEVANCY TO ONE’S CAREER.(SLO 2)**
  - Link personal goals to long term achievement.
  - Display an understanding of creating a professional first impression.
  - Understand how networking is a powerful job search tool.
  - Understand necessary elements of a résumé.
  - Understand the importance of interview preparation.
  - Identify how continual learning increases career success.

- **DEMONSTRATE APPLICATION OF INDUSTRY KNOWLEDGE AND THEORETICAL CONCEPTS AS WRITTEN IN LEARNING OBJECTIVES IN PARTNERSHIP WITH THE EMPLOYER WORK SITE SUPERVISOR.(SLO 3)**

---

**Units:** 1 - 4  
**Hours:** 60 - 300 hours LAB  
**Prerequisite:** None.  
**Enrollment Limitation:** Students must be in a paid or unpaid internship, volunteer position or job related to career goals.  
**Transferable:** CSU  
**General Education:** AA/AS Area III(b)  
**Catalog Date:** June 1, 2020
In This Section

College Administrators (/2020-2021-catalog/administrators-faculty-and-staff/college-administrators)
Learn more about Cosumnes River College's college administrators.

Faculty (/2020-2021-catalog/administrators-faculty-and-staff/faculty)
Learn more about Cosumnes River College's faculty.

Staff (/2020-2021-catalog/administrators-faculty-and-staff/staff)
Learn more about Cosumnes River College's classified staff.
2020-2021 Unofficial Catalog Preview

College Administrators | Cosumnes River College

President

Dr. Edward Bush
B.A., UC, Riverside
M.A., CSU, San Bernardino
Ph.D., Claremont Graduate University

Vice Presidents

Dr. Robert Montañez
*Instruction and Student Learning*
B.S., CSU, Stanislaus
Ph.D., UC, Santa Cruz

Theresa Tena
*Administrative Services and Student Support*
B.A., UC, Davis
M.B.A., University of Southern California

Dr. Claire Oliveros
*Student Services and Enrollment Management*
B.S., Western Oregon University
M.S., Portland State University
Ph.D., Oregon State University

Associate Vice Presidents

Tadael Emiru
*Equity, Institutional Effectiveness, and Innovation*
B.S., M.A. St. Cloud State University

Michael Lawlor
*Instruction and Student Learning (Interim)*
A.S., Antelope Valley Community College
B.S., UC, Irvine
M.S., CSU, Long Beach

Deans

Banafsheh Amini
*Associate Dean of Instruction, Science and Engineering*
B.S., UC Berkeley
M.A.S., UC Davis

Dr. Alexander Casareno
*English and Language Studies, Guided Pathways and Grants*
B.A., San Francisco University
M.A., Ph.D., UC Berkeley

Ryan Cox
*Science, Mathematics and Engineering (Interim)*
B.A., UC Santa Barbara
M.B.A., University of Mississippi

Dr. Colette Harris-Mathews
*Automotive Construction and Design Technology, Elk Grove Educational Center*
B.A., M.A., CSU, Sacramento
Ed.D., Argosy University, San Francisco

Brian Bedford
*Art, Media and Entertainment, Equity Officer*
B.A., UC Berkeley
M.B.A., University of Phoenix
J.D., Lincoln Law

Dr. Shannon Cooper
*Counseling and Student Services*
B.A., UC Davis
M.S., CSU, Sacramento
Ph.D., University of San Francisco

Yolanda Garcia
*Student Services and Enrollment Management*
B.A., St. Mary's College
M.S., University of La Verne

Stephen McGloughlin
*Library and Technology Services*
B.A., M.A., Trinity College, Dublin, Ireland
Other Administrative Staff

Joel Powell
Business and Computer Science
B.A., University of CA, Davis
J.D., John F. Kennedy University

Dr. Kathryn Sorensen
Science, Mathematics and Engineering
B.S., Baylor University
M.S., UT at Arlington
Ph.D. UT Austin

Collin Pregliasco
Health and Human Services, Kinesiology and Athletics
B.A., M.A., CSU, San Jose
M.S. American Public University

Dr. LaTonya M. Williams
Social and Behavioral Sciences
B.A., UC Davis
M.A., CSU, Sacramento
Ph.D., Clark Atlanta University

Maria Hyde
Bookstore Manager
B.S., CSU, Sacramento

Hong Pham
Director, First Year Experience
B.A., San Diego State University
M.A., CSU, Sacramento

Dr. Tyler Rollins
Director of Academic and Student Support Projects
B.A., CSU, Chico
M.A., Humboldt State University
Ph.D., University of Colorado, Boulder

Raul Pasamonte
Project Director, TRIO Upward Bound Programs
M.S., CSU, Sacramento

Chris Raines
Administrative Services Director
B.S., Colorado Technical University

Michele Steiner
Director of Donor Relations
M.B.A., North Park University

Kristie West
Public Information Officer
B.A., CSU, Sacramento
M.S., North Dakota State University
Abeid, Trang (2016)
English
A.A., San Joaquin Delta CC
B.A., University of the Pacific, M.A., CSU Sacramento

Adkins Pogue, Andrea (2010)
Public Services Librarian
B.A., University of New Mexico
MLLI, San Jose State University

Andrews, David C. (2001)
Horticulture
A.A., San Joaquin Delta College
B.S., CSU, Fresno

Cooperative Work Experience
A.S., Dixie College
B.S., Utah State University
M.S., CSU, Sacramento

College Nurse
A.A., San Joaquin Delta College
B.S. San Diego State University
M.S., CSU, Sacramento

Beloglovsky, Miriam (2000)
Early Childhood Education
M.A., Phillips Grad. Institute
M.A., CSU, Northridge

Bills, Jena M. (2008)
Biology
B.S., UC, Santa Barbara
M.A., San Francisco State

Bond, Emily F. (2009)
Public Services Librarian
B.A., CSU, Sacramento
MLIS, CSU, San Jose

Buck-Moyer, Paige (2016)
Mathematics
B.A., UC, Berkeley, M.A., UC, Davis

Butler, Patrick (2016)
Real Estate/Business
B.S., UC, Davis
M.B.A., CSU Sacramento

Carlisle, Eli (2015)
Biology
B.A., Princeton University
Ph.D., UC, Davis

Carmona, Tammyra R. (1999)
Biology
B.S., CSU, Sacramento
M.S., University of Southern California

Abraham, Lisa Dominguez (1994)
English
B.A., UC, Berkeley
M.A., CSU, Sacramento

Aldridjge, Teresa W. (1992)
Counselor
A.A., Palomar College
B.A., UC, San Diego
M.A., San Diego State
Ed.D., UC, Davis

Arden-Ogle, Ellen (2012)
Communication Studies
B.A., University of the Pacific
M.A., CSU, Sacramento
Ph.D. Oregon State University

Baca, Jorge (2009)
Mathematics
A.A., Santa Ana College
B.S., UC, Los Angeles
M.S., CSU, Long Beach

Basheer, Allah-mi (2006)
Athletic Counselor
B.A., UC, Irvine
M.S., CSU, Dominguez Hills
Ed.D., University of Southern California

Beyrer, Gregory M. (2000)
Distance Education Coordinator
B.A., UC, Berkeley
M.A., San Jose State University
C. Phil, UC, Los Angeles

Bloomfield, Anthony G. (1998)
Head Men's Baseball Coach/Physical Education
B.A., University of Nevada
M.Ed., Azusa Pacific University

Mathematics
B.A., M.A., UC, San Diego

Medical Assisting
B.A., Humboldt State University

Calamar, Jeanne M. (1989)
Physical Education
B.S., CSU, Hayward
M.S.S., United State Sports Academy

Carlson, William Drew (2001)
Automotive Mechanics Technology
A.A., Modesto Jr. College
B.A., UC, Berkeley

Carney, Michael J. (2002)
MESA/CCCP Coordinator
B.A., UC, Berkeley
M.S., Stanford University
*English*  
B.A., M.A., CSU, Sacramento

*English as a Second Language*  
B.A., T.C., CSU, San Bernardino  
M.A., CSU, Sacramento

Chapman, Gregory D. (2001)  
*Computer Information Science*  
B.S., University of Oklahoma  
M.S., UC, Berkeley

Chappell, Michael (2015)  
*Counselor*  
B.A., M.S. CSU, Sacramento

Coelho, Sherie A. (2001)  
*English*  
A.A., San Joaquin Delta College  
B.A., UC, Davis, M.A.T.W., Humboldt State University

Connally, Ryan M. (2002)  
*Construction*  
A.S., Cosumnes River College  
B.S., University of Oregon

Coughran, Steven J. (2004)  
*Music*  
B.A., M.M., CSU, Sacramento

Crosier, Scott J. (2006)  
*Geography/GIS*  
B.A., M.A., UC, Santa Barbara

Chapman, Gregory D. (2001)  
*Computer Information Science*  
B.S., University of Oklahoma  
M.S., UC, Berkeley

Chappell, Michael (2015)  
*Counselor*  
B.A., M.S. CSU, Sacramento

Coelho, Sherie A. (2001)  
*English*  
A.A., San Joaquin Delta College  
B.A., UC, Davis, M.A.T.W., Humboldt State University

Connally, Ryan M. (2002)  
*Construction*  
A.S., Cosumnes River College  
B.S., University of Oregon

Coughran, Steven J. (2004)  
*Music*  
B.A., M.M., CSU, Sacramento

Crosier, Scott J. (2006)  
*Geography/GIS*  
B.A., M.A., UC, Santa Barbara

Davtian, Anna (2015)  
*Counselor*  
B.A. UC Davis  
M.S., CSU, Sacramento

De Sousa Francisco, Joao (2015)  
*English as a Second Language*  
B.A., UC Davis  
M.A. CSU, Sacramento

Davtian, Anna (2015)  
*Counselor*  
B.A. UC Davis  
M.S., CSU, Sacramento

Davtian, Anna (2015)  
*Counselor*  
B.A. UC Davis  
M.S., CSU, Sacramento

Do, Minh Hong T. (1999)  
*Vietnamese/English as a Second Language*  
B.A., CSU, Fullerton  
M.A., CSU, Sacramento

*Computer Information Science*  
B.A., College of William and Mary  
M.S., CSU, Sacramento

Doan, Anna N. (1998)  
*Counselor*  
B.A., M.S., CSU, Sacramento

DuBray, Daniel T. (1999)  
*Communication Studies*  
A.A., Cosumnes River College  
B.A., M.A., CSU, Sacramento  
Ed.D., Rossier School of Education

Drybread, Todd J. (2020)  
*Biology*  
D.C., Life Chiropractic College West

DuBray, Daniel T. (1999)  
*Communication Studies*  
A.A., Cosumnes River College  
B.A., M.A., CSU, Sacramento  
Ed.D., Rossier School of Education

Drybread, Todd J. (2020)  
*Biology*  
D.C., Life Chiropractic College West

*Computer Information Science*  
B.A., College of William and Mary  
M.S., CSU, Sacramento

Edman, Jeanne L. (2001)  
*Researcher/Psychology*  
B.A., Augsburg College  
M.A., Ph.D., University of Hawaii

Ellis, Jason (2016)  
*Architecture*  
Bachelor of Architecture, University of Oregon  
Bachelor of Engineering, Harvey Mudd College

Emetarom, Chikoh M. (2007)  
*Chemistry*  
B.S., Harvey Mudd College  
M.S., UC, Irvine

Erickson, Cindy Lee (1990)  
*Mathematics*  
B.S., California Polytechnic State University, San Luis Obispo  
M.S., UC, Davis

Emetarom, Chikoh M. (2007)  
*Chemistry*  
B.S., Harvey Mudd College  
M.S., UC, Irvine

Erickson, Cindy Lee (1990)  
*Mathematics*  
B.S., California Polytechnic State University, San Luis Obispo  
M.S., UC, Davis

Esty, Juanita (2016)  
*Articulation Officer/Counselor*  
B.S., M.S., CSU Fresno  
Ed.D. Grand Canyon University

Erickson, Cindy Lee (1990)  
*Mathematics*  
B.S., California Polytechnic State University, San Luis Obispo  
M.S., UC, Davis

Esty, Juanita (2016)  
*Articulation Officer/Counselor*  
B.S., M.S., CSU Fresno  
Ed.D. Grand Canyon University

*Economics*  
B.A., M.A., Ph.D., UC, Riverside

Farley, Rhonda J. (1990)  
*English as a Second Language*  
A.A., Los Medanos College  
B.A., M.A., CSU, Sacramento

*Economics*  
B.A., M.A., Ph.D., UC, Riverside

Farley, Rhonda J. (1990)  
*English as a Second Language*  
A.A., Los Medanos College  
B.A., M.A., CSU, Sacramento

Feindert, Kerstin (2010)  
*English*  
M.A., Ruprecht-Karls Universitat Heidelberg

*Photography*  
B.A., University of Utah  
B.F.A., San Francisco Art Institute  
M.F.A., University of Arizona

Feindert, Kerstin (2010)  
*English*  
M.A., Ruprecht-Karls Universitat Heidelberg

*Photography*  
B.A., University of Utah  
B.F.A., San Francisco Art Institute  
M.F.A., University of Arizona

Fishman, Randi S. (2000)  
*Computer Information Science*  
B.S., UC, Davis  
M.A., San Francisco State University

*Photography*  
B.A., University of Utah  
B.F.A., San Francisco Art Institute  
M.F.A., University of Arizona

Flynn, Martin D. (2017)  
*Theatre Arts*  
M.A., UC, Davis
Ford, Mark A. (2001)
Public Services/Information Resources Librarian
B.A., M.A., CSU, Hayward
M.L.S., Indiana University

Francisco, Jennifer (2002)
English as a Second Language
B.A., St. Olaf College
M.A., University of Iowa

Frigm, Michael P. (2017)
Culinary Arts
A.A.S., Culinary Arts, B.S. Food Service Management, Johnson and Wales University
M.S. Hospitality and Retail Management, Texas Tech University

Garcia-Gomez, Yolanda (2009)
DSPS Coordinator/Counselor
B.S., CSU, San Luis Obispo
M.Ed., University of Illinois

Geissler, Markus (1998)
Computer Information Science
A.A., DeAnza College
M.B.A., CSU, Sacramento
Ph.D., Capella University

Giedd, Shihni (2001)
Reading
B.S., Christ’s College
M.S. Southwest Missouri State University

Gorman, Gabriel D. (2008)
History
A.A., American River College
B.A., M.A., CSU, Sacramento

Gulati, Rubina (2001)
Journalism/Communication
A.A., Cosumnes River College
B.A., UC, Berkeley, M.S., Columbia University

Hagenburger, Timaree A. (2005)
Nutrition
B.S., California Polytechnic University, San Luis Obispo
M.P.H, UC, Los Angeles

English
A.A., American River College
B.A., M.A., CSU, Sacramento

Heard Mollel, Danielle (2019)
English
Ph.D., Cornell University

Hoang, Linda (2017)
Mathematics
M.S., Santa Clara University

Hom, Norman L. (2001)
English
B.A., UC, Davis
M.A., Brown University

Huang, Chao-Jan (2000)
Computer Information Science
B.S., Chinese Culture University, Taiwan
M.B.A., M.S., Syracuse University, New York

English
B.A., UC, Davis
M.A., CSU, Sacramento

Fortin, Cheri L. (2006)
Theatre Arts
B.A., University of Arizona
M.F.A., Arizona State University

Fraze, James C. (2009)
Psychology
B.A., UC, Irvine
Ph.D., Alliant International University

Gale, Lesley D. (2000)
English
B.A., Brigham Young University
M.A., CSU, Sacramento

Gee, Joseph (2008)
Pharmacy Technology
A.A., City College of San Francisco
B.A., UC Berkeley College of Letters &amp Science
Pharmacy Degree, UCSF School of Pharmacy

George, Nyenbeku C. (2008)
Sociology
A.A., Cosumnes River College
B.A., M.A., CSU, Sacramento

Gill, Blanca T. (2001)
Spanish
B.A., M.A., CSU, Sacramento

Real Estate/Business
B.S., J.D., University of Oregon

Gunther, Minet D. (1997)
Head Women’s Volleyball Coach/Physical Education
B.S., Oregon State University
M.A., St. Mary’s College

Learning Disabilities Specialist/ DSPS Counselor
A.A. Lassen College
B.A., CSU, Chico
M.A., CSU Sacramento

Sign Language Studies
B.S., M.S., Western Oregon University

Hikmatjo, Faisal A. (2019)
Diagnostic Medical Sonography
B.S., Nangrah University

Hodgkinson, Georgine R. (1997)
Communication Studies
M.A, CSU, Sacramento

Howard, Wyatt (2019)
Mathematics
Ph.D., University of California, Santa Cruz

Huffman, Elizabeth (2010)
Political Science
B.A., Bucknell University
M.A., Louisiana State University
Ph.D., Emory University

Impinna, Christopher R. (2005)
Veterinary Technology
B.S., D.V.M., UC, Davis
Jackson, Hiram S. (2000)  
GIS/Geography/Earth Science  
B.S., Texas Christian University  
Cert. of Studies, University of Chile  
M.S., UC, Davis

Counselor  
M.A., National University

Kimbler, Jeffrey G. (2009)  
Art  
A.A., Allan Hancock College  
B.A., M.F.A., Arizona State University

Lam, Nam H. (2017)  
Mathematics  
M.S., University of Texas at Dallas

Lawlor, Michael J. (1992)  
Physics  
A.S., Antelope Valley Community College  
B.S., UC, Irvine  
M.S., CSU, Long Beach

Lee, Mark S. (2007)  
Chemistry  
A.A., Allan Hancock College  
A.B., UC, Berkeley  
Ph.D., UC, Davis

Lewis, Howard G., Jr. (2000)  
Agriculture Business  
A.A., Reedley Community College  
B.S., M.A., California Polytechnic University, San Luis Obispo

Physics/Astronomy  
A.A., Hartnell College  
M.S., San Francisco State University  
Ph.D., UC, Davis

Mathematics  
A.S., Modesto Junior College  
B.A., CSU, Stanislaus  
M.A., CSU, Sacramento

Marchand, Lisa P. (1991)  
English as a Second Language  
A.A., American River College  
B.A., CSU, Sacramento  
M.A., UC, Davis

Martin, Mary S. (1990)  
Mathematics  
A.A., Allan Hancock Jr. College  
B.S., California Polytechnic University, San Luis Obispo  
M.S., Carnegie Mellon University

Mathis, Jacqueline S. (2007)  
EDPS Counselor  
A.A., B.A., San Jose City College  
M.S.W., San Jose State

McDowell, Stephen (2016)  
Chemistry  
B.S., UC San Diego  
Ph.D. UN Reno

James, Jonathan (2016)  
Head Men's Basketball/Physical Education  
M.S., Cosumnes River College, B.S., University of Phoenix  
M.S., California University of PA

Kim, Steven (2016)  
Health information Technology  
B.S., UC San Diego  
M.P.H., Loma Linda University

LaDue, Cheri L. (1989)  
Physical Education  
B.S., M.S., Baylor University

Campus Life Coordinator  
A.A., Fashion Institute of Design and Merchandising B.S., California Polytechnic University, Pomona, Ed.D., University of La Verne

Le, Phuong M. (2013)  
Mathematics  
M.A., CSU, Sacramento

Leung, Amy (2013)  
Economics  
M.A., UC, Merced

English  
B.A., UC, Berkeley  
M.A., Simmons College  
Ed.D., University of San Francisco

Lugo, Donnisha (2013)  
Sociology  
M.A., CSU, Sacramento

Counselor  
B.A., M.S., CSU, Sacramento  
Ed.D, UC Davis

Counselor  
B.A., CSU, Dominguez Hills  
M.A., Loyola Marymount University

Martinez-Alire, Crystal (2017)  
Counseling  
B.A., M.A., Ed.D., CSU Sacramento

Mayo, Kathryn J. (2007)  
Photography  
B.F.A., University of Alabama  
M.F.A., Tulane University

McHugh, Matthew E. (2005)  
Emergency Medical Technology  
A.A., Atlantic Community College  
B.S., Widener University, Pennsylvania  
MICT Certificate, Kapiolani Community College, Hawaii
Mederos, Lisa Marie  (2016)  
Marketing/Management  
B.S., CSU Bakersfield  
M.B.A., CSU Sacramento

Miller, Nathan  (2015)  
Communication Studies  
B.A., Washburn University  
M.A., University of Montana

Mills, Shannon L.  (2009)  
Anthropology  
A.S., Sierra College  
B.A., M.A., CSU, Sacramento

Mojica, Edward  (2015)  
Architecture Design Technology  
BArch., Cal Poly, San Luis Obispo  
M.S. Drexel University, Sacramento

Moore, Maureen G.  (1999)  
Humanities  
B.A., San Francisco State University  
M.A., CSU, Sacramento

Political Science  
B.A., M.A., San Francisco State University

Moreno, Camilla N.  (2001)  
Mathematics  
B.S., CSU, Chico  
M.A., CSU, Sacramento

Morgan-Nance, Kathryn  (2013)  
Accounting  
M.S., CSU, Sacramento

Mulhern, Jeannette  (2015)  
Early Childhood Education  
B.A., M.A. CSU, Sacramento

Munoz, Heidi E.  (2012)  
English  
A.S., Sacramento City College  
B.S., University of St. Francis  
M.A., Ph.D., University of Nevada, Reno

Muranaka, Brandon  (2016)  
Mathematics  
B.S., UC Davis  
M.A., University of Hawaii  
M.A.T., UC, Davis  
Ph.D., Oregon State University

Mathematics  
A.S., Santa Rosa Jr. College  
B.A., M.A., CSU, Sacramento

History  
B.A., M.A., PhD, UC Davis

Nguyen, Nhat  (2015)  
Mathematics  
B.S., UC Davis  
M.A., CSU, Sacramento

Nguyen-Vo, Loi  (2008)  
Mathematics  
B.A., UC, Davis  
M.A., CSU, Sacramento

Neves, Megan G.  (2017)  
Counselor  
M.S., CSU, Sacramento

Noel, Brian  (2011)  
Automotive Mechanics Technology  
A.A., Cosumnes River College

Osman, Mohammed  (2002)  
Computer Information Science  
B.E., Osmania University  
M.S., Virginia Tech  
M.B.A., UC Davis

Padilla-Alvarado, Sharon L  (2006)  
Tutoring Coordinator  
B.A., M.A., Stanford University

Anthropology  
B.A., UC, Davis  
M.A., Ph.D., UC, Santa Barbara

Parilo, Margaret S.  (2008)  
Accounting  
B.S., CSU, Sacramento  
M.S., Golden Gate University

Parks, Lance M.  (2001)  
Computer Information Science  
B.S., CSU, Bakersfield  
M.S., Golden Gate University

Patterson, Jason A.  (2017)  
Biology  
D.C., Southern California University of Health Sciences

Anthropology  
B.A., M.A., UC, Davis

Pereira, Michael J.  (1999)  
Automotive Mechanics Technology  
A.A., Cosumnes River College  
B.S., California Polytechnic University, San Luis Obispo
Perez, Rochelle A. (2009)
Librarian
B.S., University of the East
M.L.S., Emporia State University

Phan, Man (2012)
Business
M.B.A., UC, San Diego

Pollock, Sarah (2015)
Biology
B.S., CA Polytechnic State University
M.S., UC Davis

Preble, Ronald E. (2000)
Head Men's Soccer Coach/Physical Education
B.S., CSU, Sacramento
M.S., United States Sports Academy

Reed, Diana (2014)
History
B.A., UC Berkeley
M.A., CSU, Sacramento

Reeves, Erica (2014)
English
B.A., UC Berkeley
M.A., CSU, Sacramento

Rogan, Patrick D. (2005)
Accounting
B.A., CSU, Los Angeles
M.B.A., National University

Russell, Michael (2015)
Chemistry
B.S., Indiana University
M.C., University of Madison
D.V.M. University of Madison

Saller, Brandon (2015)
Engineering
B.S., UC Irvine
Ph.D., UC Davis

Scheeder, Kristy Howard (2011)
Physical Education/Head Women's Softball Coach
B.A., UC, Los Angeles
M.A., University of the Pacific

Seamons, John (2015)
Reading
B.A., M.A., CSU Sacramento

Sharkey, Debra A. (1997)
Geography
A.A., Central Oregon Community College
B.S., Southern Oregon State College
M.A., UC, Davis

Mathematics
A.A., Sacramento City College
A.S., Cosumnes River College
B.S., UC, Davis
M.S. Stony Brook University

Stewart, Lora L. (1981)
Mathematics
B.A., M.A., CSU Sacramento

Thomas-Fish, Cory E. (2007)
Construction Management
B.S., Texas A&M University
M University
M.S., University of Phoenix

Peshkoff, Alexander (2015)
History
B.A., UC Davis
M.A., SF State University, San Francisco

Plascencia, Cesar (2005)
Head Women's Soccer Coach/Physical Education
B.A., CSU, Sacramento
M.S., United States Sports Academy, Alabama

Post, Karl (2016)
Head Women's Volleyball Coach/Physical Education
B.S., W. Virginia University
M.S., Azusa Pacific University

Procasl, Amanda (2016)
Psychology
B.A., CSU, Sacramento
M.A., Northern Arizona University

Reese, Shawn (2014)
Chemistry
Ph.D., Brigham Young University

Welding
A.A., B.S., M.S., Cal Poly State University

Rogers, Kevin M. (1990)
Automotive Mechanics Technology
A.A., Butte College
B.S., CSU, Fresno

Head Women's Basketball Coach/Physical Education
A.A., Sierra College
B.S., UC, Riverside
M.S., Azusa Pacific University

Samaniego, Celia S. (2002)
Spanish
B.A., UC, Los Angeles
M.A. CSU, Sacramento

Philosophy
B.A., M.A., University of Connecticut
Ph.D., UC, Davis

Sertich, Sangchen (2013)
Mathematics
M.A., CSU, Sacramento

Sigauke, Emmanuel (2006)
English
B.A., University of Zimbabwe
M.A., CSU, Sacramento

Soriano, Paolo (2017)
Counseling
A.A. Solano CC
B.A., UC Davis
M.S. CSU Sacramento

Stilth, Sharon A. (2019)
Health Information Technology
M.A., San Francisco State University

Torres, Christopher (2017)
Counseling
A.A. Sacramento City College
B.S., Masters of Counseling, CSU Sacramento
Torres, Gabriel S. (2002)  
Spanish  
B.A., M.A., UC, Davis

Spanish  
B.A., UC, Berkeley  
M.A., CSU, Sacramento

Velasquez, Jacob L. (2019)  
Philosophy  
Ph.D., University of California, Davis

Wagner, Lauren (2014)  
Radio, Television & Film Production  
B.A. San Francisco State University  
M.F.A., University of Southern California

Nutrition/Dietetics  
B.S., M.S., Michigan State University

Weinshilboum, David H. (2007)  
English  
B.A., University of Wisconsin  
M.F.A., Mills College  
M.A., CSU, Sacramento

Wheeler Abeyta, Sandra P. (2017)  
Communication Studies  
M.A., CSU, Sacramento

Williams-Brito, Kimberly (2007)  
Mathematics  
B.A., M.A., San Francisco State University

Winter, Dionne (2016)  
Diagnostic Medical Sonography  
B.S., University of Phoenix  
M.S.E.T., DeVry University

Zaigralin, Ivan (2016)  
Mathematics  
B.S., M.S., San Jose State University  
Ph.D., Boston University

Zisk, Paul (1997)  
Sociology/Social Science/Anthropology  
M.A. Northern Arizona University

Trent, Anna Kazdaglis (2008)  
Art History  
B.A., M.A., Federal Institute of Technology, Zurich  
M.A., UC, Davis

Philosophy  
B.A., M.A., CSU, Long Beach  
M.T.S., Gordon Conwell Seminary

Wadenius, Adam P. (2019)  
Film and Media Studies  
M.A., San Francisco State University

Washington, Christina (2016)  
English  
B.A., M.A., CSU Sacramento

Weathers-Miguel, Lee (2010)  
Counselor  
B.S., University of San Francisco  
M.S., CSU, Sacramento

West, Jim D. (1989)  
Photography  
A.A., Sacramento City College  
B.A., UC, Davis

Williams, Omari (2016)  
Music  
Bachelor of Music Ed., Michigan State Master of Music, University of Houston

Wilson, James B. (2008)  
English as a Second Language  
B.A., TESL, UC Irvine  
M.A., CSU, Fullerton

Yarbrough, Michael D. (2001)  
Mathematics  
B.S., Cal Poly  
M.S., University of Arizona

Zeng, Min M. (2002)  
Mathematics  
B.S., SW China Normal University  
M.S., Western Illinois University  
Ph.D., University of Missouri-Columbia
# Staff | Cosumnes River College

<table>
<thead>
<tr>
<th>Name</th>
<th>Position</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aguayo, Alejandra</td>
<td>Instructional Assistant</td>
</tr>
<tr>
<td>Akutagawa, Glenn</td>
<td>Bookstore Stock Clerk</td>
</tr>
<tr>
<td>Andrews, Richard</td>
<td>Records/Admissions Supervisor</td>
</tr>
<tr>
<td>Arambula, Alvaro</td>
<td>Custodian</td>
</tr>
<tr>
<td>Bachinsky, Vasily</td>
<td>Media Systems / Resources Tech I</td>
</tr>
<tr>
<td>Barkley, Emily</td>
<td>Student Personnel Assistant</td>
</tr>
<tr>
<td>Blittner, Michael</td>
<td>Educational Media Design Specialist</td>
</tr>
<tr>
<td>Briggs, Melissa</td>
<td>Library / Media T.A.</td>
</tr>
<tr>
<td>Bryant, Suzette</td>
<td>Counseling Clerk II</td>
</tr>
<tr>
<td>Campbell, Joe</td>
<td>A/V Prod &amp; Maint Technician II</td>
</tr>
<tr>
<td>Cervantes, Jordan</td>
<td>Student Personnel Assistant</td>
</tr>
<tr>
<td>Cheetham, Michael</td>
<td>Maintenance Technician I</td>
</tr>
<tr>
<td>Ciofi, Tommaso</td>
<td>Senior IT Technician</td>
</tr>
<tr>
<td>Clark, Jeri Child</td>
<td>Development Center Teacher</td>
</tr>
<tr>
<td>Corona-Gomez, Marta</td>
<td>Senior IT Technician</td>
</tr>
<tr>
<td>Correa, Clarissa</td>
<td>Student Personnel Assistant</td>
</tr>
<tr>
<td>Dean, Andrea</td>
<td>Administrative Asst. I</td>
</tr>
<tr>
<td>Deleon, Kathleen</td>
<td>Business Services Supervisor</td>
</tr>
<tr>
<td>Devi, Sunita</td>
<td>Administrative Asst. I</td>
</tr>
<tr>
<td>Dismukes, Aujonique</td>
<td>Student Support Specialist</td>
</tr>
<tr>
<td>Dy, Aliene</td>
<td>Admissions/Records Clerk III</td>
</tr>
<tr>
<td>Elayoubi, Kyle</td>
<td>IT System / DB Admin Analyst I</td>
</tr>
<tr>
<td>Aguilar, Gilbert</td>
<td>Clerk II</td>
</tr>
<tr>
<td>Alvarado, Janet</td>
<td>Financial Aid Officer</td>
</tr>
<tr>
<td>Apedale, Leland</td>
<td>IT Assistant II</td>
</tr>
<tr>
<td>Bachinsky, Sergey</td>
<td>Audio / Visual Production &amp; Maintenance Tech I</td>
</tr>
<tr>
<td>Ballesteros, Lauren</td>
<td>Clerk III</td>
</tr>
<tr>
<td>Bhatia, Gurpreet</td>
<td>Administrative Asst. III</td>
</tr>
<tr>
<td>Brandy, Angela</td>
<td>Financial Aid Supervisor</td>
</tr>
<tr>
<td>Brown, Tina</td>
<td>Account Clerk II</td>
</tr>
<tr>
<td>Buch, Cheryl</td>
<td>Veterinary Technology Instructional Assistant</td>
</tr>
<tr>
<td>Cartwright, Tony</td>
<td>Custodial / Receiving Supervisor</td>
</tr>
<tr>
<td>Charron, Shelly</td>
<td>Counseling Clerk II</td>
</tr>
<tr>
<td>Chen, Yu</td>
<td>Custodian</td>
</tr>
<tr>
<td>Clark, Tiffany</td>
<td>Educational Center Supervisor</td>
</tr>
<tr>
<td>Collins, Natalia</td>
<td>Laboratory Technician</td>
</tr>
<tr>
<td>Corpus, Mary Grace</td>
<td>Administrative Asst. III</td>
</tr>
<tr>
<td>Corrigan, Susan</td>
<td>Administrative Asst. I</td>
</tr>
<tr>
<td>De La Torre, Gina</td>
<td>Administrative Asst. I</td>
</tr>
<tr>
<td>Deutsch, Michael</td>
<td>Athletic Trainer</td>
</tr>
<tr>
<td>Dinh, Day</td>
<td>Senior IT Technician</td>
</tr>
<tr>
<td>Dusanovic, Ruza</td>
<td>Custodian</td>
</tr>
<tr>
<td>Edwards, Kyle</td>
<td>Custodian</td>
</tr>
<tr>
<td>Elliott, Julie</td>
<td>Administrative Asst. I</td>
</tr>
</tbody>
</table>
Ellis, Brandon  
Instructional Assistant

Chin, Amanda  
Clerk III

Fox-Sailor, Margaret  
Clerk III

Gomez-Basaldia, Esmeralda  
Admissions / Records Clerk III

Green, Bonnie  
Administrative Asst. I

Gutierrez, Vanesa  
Child Development Center Teacher

Higashino, Dick  
Laboratory Technician

Holquin, Daniel  
Lead Custodian

Ilagan, Crisonia  
Accountant

Johnson, Latresia  
Outreach Specialist

Keamer, Michael  
Admissions & Records Evaluator

Kiburi, Khalid  
Student Success & Support Program (SSSP) Specialist

Kolesnik, Nataliya  
Instructional Assistant

Koscheski, Donald  
Laboratory Technician

Larsen, Amber  
Maintenance/Operations Clerk

Larsen, Livia  
Laboratory Technician

Le, Phuong  
Financial Aid Officer

Lee, Ka  
Student Support Specialist

Lemus, Miguel  
A&R Evaluator

Lopez, Amber  
Student Personnel Assistant Elk Grove Center

Lopez-Alvarez, Irma  
Instructional Assistant

Lovett, James  
A/V Prod & Maint Technician II

Loyola, Brianna  
Clerk III

Gomez, Selena  
Student Services Supervisor

Martinez, Christina  
Clerk II

Martinez, Selena  
Counseling Clerk II

Ellis, Keith  
Student Personnel Assistant

Figueroa, Denize  
Admissions & Records Evaluator/degree Auditor, Veterans Services

Fulk, David  
Theater Technician

Gonzalez, Jazelle  
Laboratory Technician

Guidi, Sabrina  
Bookstore Assistant Manager

Hartman, Jorrena  
Account Clerk II

Hixson, Timothy  
IT Analyst II

Hurtado, Lynn  
Administrative Asst. II

Johnson, David  
Printing Services Operator II

Juarez, Crispin  
Custodian

Keonoina, Virasane  
Laboratory Technician

Kohn, Ronald  
Laboratory Technician

Korolev, Vladislav  
Custodian

Kwok, Wing  
Clerk III

Larsen, Rachel  
Confidential Admin Asst III

Laxa, Cesar  
Custodian

Leal, Claudia  
Administrative Asst. I

Lee, Tchong  
Head Custodian

Lewis, Leroy  
Counseling Clerk I

Lopez, Teresa  
Account Clerk II

Lor, Ge  
Financial Aid Officer

Low, Ian  
Administrative Asst. I

Lusanaaxay, Aksone  
Financial Aid Clerk II

Marsant, Stanislav  
Administrative Asst. I

Martinez, Fabiola  
Custodian

Meinz, Paul  
IT Business/Tech Analyst I
<table>
<thead>
<tr>
<th>Name</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>Starbuck, Elizabeth</td>
<td>College Relations Specialist</td>
</tr>
<tr>
<td>Tam, Ada</td>
<td>Custodian</td>
</tr>
<tr>
<td>Tinoco, Anna</td>
<td>Clerk III</td>
</tr>
<tr>
<td>Vang, Faith</td>
<td>Instructional Services Asst. II</td>
</tr>
<tr>
<td>Vega, Anthony</td>
<td>Financial Aid Clerk II</td>
</tr>
<tr>
<td>Villalobos, Julia</td>
<td>Admissions &amp; Records Clerk II</td>
</tr>
<tr>
<td>Walker, Kenneth</td>
<td>Student Personnel Assistant</td>
</tr>
<tr>
<td>Williams, Eilene</td>
<td>Student Personnel Assistant</td>
</tr>
<tr>
<td>Wong, Queenie</td>
<td>Administrative Asst. II</td>
</tr>
<tr>
<td>Yabu, Russell</td>
<td>IT Assistant II</td>
</tr>
<tr>
<td>Ye, Mei</td>
<td>Custodian</td>
</tr>
<tr>
<td>Stevenson, James Trevor</td>
<td>College Receiving Clerk/storekeeper</td>
</tr>
<tr>
<td>Tanimoto, Eddie</td>
<td>Child Development Center Teacher</td>
</tr>
<tr>
<td>U styak, Olha</td>
<td>Custodian</td>
</tr>
<tr>
<td>Valencia Tinoco, Estela</td>
<td>Administrative Asst. I</td>
</tr>
<tr>
<td>Veri, Ronald</td>
<td>Account Clerk III</td>
</tr>
<tr>
<td>Vue, Choua</td>
<td>Student Support Specialist</td>
</tr>
<tr>
<td>Wardlaw, Lora</td>
<td>Child Development Center Teacher</td>
</tr>
<tr>
<td>Withey, Rebecca</td>
<td>Instructional Assistant</td>
</tr>
<tr>
<td>Worcester, Douglas</td>
<td>Printing Services Operator II</td>
</tr>
<tr>
<td>Yang, Janey</td>
<td>Admissions &amp; Records Clerk II</td>
</tr>
<tr>
<td>Zachman, Scott</td>
<td>Maintenance Technician II</td>
</tr>
</tbody>
</table>
### Catalog Index | Cosumnes River College

<table>
<thead>
<tr>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
</tr>
</thead>
</table>
| Prerequisites, Corequisites, and Advisories (/2020-2021-catalog/programs-of-study/description-of-courses/prerequisites-corequisites-and-advisories) | Programs of Study (/2020-2021-catalog/programs-of-study) | }
<table>
<thead>
<tr>
<th>Subject</th>
<th>URI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Admissions Eligibility</td>
<td>/2020-2021-catalog/getting-started/admission-requirements-and-procedures/admissions-eligibility</td>
</tr>
<tr>
<td>Advanced Education for High School Students</td>
<td>/2020-2021-catalog/getting-started/admission-requirements-and-procedures/advanced-education-for-high-school-students</td>
</tr>
<tr>
<td>Advanced Placement Test Scores</td>
<td>/2020-2021-catalog/while-you-are-here/alternative-credit/study-options/advanced-placement-test-scores</td>
</tr>
<tr>
<td>Advertising/Public Relations</td>
<td>/2020-2021-catalog/programs-of-study/list-of-programs/advertising/public-relations</td>
</tr>
<tr>
<td>Agriculture</td>
<td>/2020-2021-catalog/programs-of-study/list-of-programs/agriculture</td>
</tr>
<tr>
<td>Agriculture Business</td>
<td>/2020-2021-catalog/programs-of-study/list-of-programs/agriculture-business</td>
</tr>
<tr>
<td>Allied Health</td>
<td>/2020-2021-catalog/programs-of-study/list-of-programs/allied-health</td>
</tr>
<tr>
<td>Alternative Credit/Study Options</td>
<td>/2020-2021-catalog/while-you-are-here/alternative-credit/study-options</td>
</tr>
<tr>
<td>Animal Science</td>
<td>/2020-2021-catalog/programs-of-study/list-of-programs/animal-science</td>
</tr>
<tr>
<td>Anthropology</td>
<td>/2020-2021-catalog/programs-of-study/list-of-programs/anthropology</td>
</tr>
<tr>
<td>Architectural Design Technology</td>
<td>/2020-2021-catalog/programs-of-study/list-of-programs/architectural-design-technology</td>
</tr>
<tr>
<td>Architecture</td>
<td>/2020-2021-catalog/programs-of-study/list-of-programs/architecture</td>
</tr>
<tr>
<td>Art</td>
<td>/2020-2021-catalog/programs-of-study/list-of-programs/art</td>
</tr>
<tr>
<td>Associate Degree Graduation Requirements</td>
<td>/2020-2021-catalog/graduation-and-transfer/graduation-requirements/associate-degree-graduation-requirements</td>
</tr>
<tr>
<td>Automotive Mechanics Technology</td>
<td>/2020-2021-catalog/programs-of-study/list-of-programs/automotive-mechanics-technology</td>
</tr>
<tr>
<td>Promise Programs</td>
<td>/2020-2021-catalog/while-you-are-here/financial-aid/promise-programs</td>
</tr>
<tr>
<td>Psychology</td>
<td>/2020-2021-catalog/programs-of-study/list-of-programs/psychology</td>
</tr>
<tr>
<td>Radio Production</td>
<td>/2020-2021-catalog/programs-of-study/list-of-programs/radio-production</td>
</tr>
<tr>
<td>Radio, Television and Film Production</td>
<td>/2020-2021-catalog/programs-of-study/list-of-programs/radio-television-and-film-production</td>
</tr>
<tr>
<td>Readmission from Dismissed Status</td>
<td>/2020-2021-catalog/getting-started/admission-requirements-and-procedures/readmission-from-dismissed-status</td>
</tr>
<tr>
<td>Real Estate</td>
<td>/2020-2021-catalog/programs-of-study/list-of-programs/real-estate</td>
</tr>
<tr>
<td>Reporting a Crime/Incident</td>
<td>/2020-2021-catalog/while-you-are-here/college-safety-and-security/reporting-a-crime/incident</td>
</tr>
<tr>
<td>Residency Requirements</td>
<td>/2020-2021-catalog/getting-started/admission-requirements-and-procedures/residency-requirements</td>
</tr>
<tr>
<td>Right-to-Know Program Completion</td>
<td>/2020-2021-catalog/while-you-are-here/student-rights-and-responsibilities/right-to-know-program-completion</td>
</tr>
<tr>
<td>Schedule of Fees</td>
<td>/2020-2021-catalog/getting-started/fees/schedule-of-fees</td>
</tr>
<tr>
<td>Scholarships</td>
<td>/2020-2021-catalog/while-you-are-here/financial-aid/scholarships</td>
</tr>
<tr>
<td>Science</td>
<td>/2020-2021-catalog/programs-of-study/list-of-programs/science</td>
</tr>
<tr>
<td>Service Animals on Campus</td>
<td>/2020-2021-catalog/while-you-are-here/student-rights-and-responsibilities/service-animals-on-campus</td>
</tr>
<tr>
<td>Sexual Harassment or Assault</td>
<td>/2020-2021-catalog/while-you-are-here/equal-opportunity-equity-discrimination-and-harassment/sexual-harassment-or-assault</td>
</tr>
</tbody>
</table>
College Safety and Security (/2020-2021-catalog/while-you-are-here/college-safety-and-security)

College-Level Examination Program Scores (/2020-2021-catalog/while-you-are-here/alternative-credit/study-options/college-level-examination-program-scores)

Commencement (/2020-2021-catalog/graduation-and-transfer/commencement)

Communication Studies (/2020-2021-catalog/programs-of-study/list-of-programs/communication-studies)

Computer and Internet Use Policy (/2020-2021-catalog/while-you-are-here/student-rights-and-responsibilities/computer-and-internet-use-policy)

Computer Information Science (/2020-2021-catalog/programs-of-study/list-of-programs/computer-information-science)

Construction (/2020-2021-catalog/programs-of-study/list-of-programs/construction)

Construction Management Technology (/2020-2021-catalog/programs-of-study/list-of-programs/construction-management-technology)

Copyright and Piracy Policy (/2020-2021-catalog/while-you-are-here/student-rights-and-responsibilities/copyright-and-piracy-policy)

Course Numbering (/2020-2021-catalog/programs-of-study/description-of-courses/course-numbering)

Course Prefixes (/2020-2021-catalog/programs-of-study/course-prefixes)

Course Transferability and C-ID (/2020-2021-catalog/graduation-and-transfer/preparing-to-transfer/course-transferability-and-c-id)


Cross-Listed Courses (/2020-2021-catalog/programs-of-study/cross-listed-courses)

Culinary Arts Management (/2020-2021-catalog/programs-of-study/list-of-programs/culinary-arts-management)

Transfer to Private Colleges (/2020-2021-catalog/graduation-and-transfer/preparing-to-transfer/transfer-to-private-colleges)

Transfer to University of California (/2020-2021-catalog/graduation-and-transfer/preparing-to-transfer/transfer-to-university-of-california)

Types of Harassment (/2020-2021-catalog/while-you-are-here/equal-opportunity-equity-discrimination-and-harassment/types-of-harassment)

Undocumented Student Admission (/2020-2021-catalog/getting-started/admission-requirements-and-procedures/undocumented-student-admission)

Veterinary Technology (/2020-2021-catalog/programs-of-study/list-of-programs/veterinary-technology)

Vietnamese (/2020-2021-catalog/programs-of-study/list-of-programs/vietnamese)

Welding (/2020-2021-catalog/programs-of-study/list-of-programs/welding)

While You Are Here (/2020-2021-catalog/while-you-are-here)

Work Experience (/2020-2021-catalog/programs-of-study/list-of-programs/work-experience)

Deaf Culture and American Sign Language Studies (/2020-2021-catalog/programs-of-study/list-of-programs/deaf-culture-and-american-sign-language-studies)
Debts Owed to College (/2020-2021-catalog/getting-started/fees/debts-owed-to-college)

Description of Courses (/2020-2021-catalog/programs-of-study/description-of-courses)

Diagnostic Medical Sonography (/2020-2021-catalog/programs-of-study/list-of-programs/diagnostic-medical-sonography)

Digital Media (/2020-2021-catalog/programs-of-study/list-of-programs/digital-media)


Early Childhood Education (/2020-2021-catalog/programs-of-study/list-of-programs/early-childhood-education)

Economics (/2020-2021-catalog/programs-of-study/list-of-programs/economics)

Education/Teaching (/2020-2021-catalog/programs-of-study/list-of-programs/education/teaching)

Emergency Medical Technology (/2020-2021-catalog/programs-of-study/list-of-programs/emergency-medical-technology)

Engineering (/2020-2021-catalog/programs-of-study/list-of-programs/engineering)

English (/2020-2021-catalog/programs-of-study/list-of-programs/english)

English as a Second Language (/2020-2021-catalog/programs-of-study/list-of-programs/english-as-a-second-language)

Enrollment Verification (/2020-2021-catalog/while-you-are-here/enrollment-verification)

Equal Opportunity (/2020-2021-catalog/while-you-are-here/equal-opportunity-equity-discrimination-and-harassment/equal-opportunity)

Equal Opportunity, Equity, Discrimination, and Harassment (/2020-2021-catalog/while-you-are-here/equal-opportunity-equity-discrimination-and-harassment)

Ethnic Studies (/2020-2021-catalog/programs-of-study/list-of-programs/ethnic-studies)