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.

The Pharmacy Technology program is accredited by the American Society of Health-System Pharmacists (ASHP).

ASHP
4500 East-West Highway, Suite 900
Bethesda, MD 20814
(866) 279-0681
ASHP Program Directory (https://accreditation.ashp.org/directory/#/program/technician)

Degrees and Certificates Offered

A.S. in Pharmacy Technology
Pharmacy Technician Certificate

Dean Dana Wassmer
Program Director Veneece Awad
Phone (916) 691-7390
Email wassmed@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 qualifies students for registration with the California State Board of Pharmacy and be employed as an 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: January 1, 2022

Degree Requirements

<table>
<thead>
<tr>
<th>COURSE CODE</th>
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<th>UNITS</th>
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<tbody>
<tr>
<td>PHARM 300</td>
<td>Introduction to Pharmacy Practice</td>
<td>3</td>
</tr>
<tr>
<td>PHARM 315</td>
<td>Pharmaceutical Calculations I</td>
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</tr>
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<td>PHARM 400</td>
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</tbody>
</table>
COURSE CODE | COURSE TITLE | UNITS
---|---|---
COMM 301 | Introduction to Public Speaking | 3
PHARM 370 | Pharmaceutical Calculations II | 2
**Total Units:** | **32**

1.Course can be taken prior to admission into the Pharmacy Technology Program.
2.Course 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.
- In order to qualify for official acceptance into the Pharmacy Technology Program, and proceed forward to complete the hands-on laboratory training (PHARM 360, 380, 400) and externship training (PHARM 410, 420), students must complete the following courses with a grade of C or higher: 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.
- Must meet the minimum age requirements that are based on state requirements for employment of pharmacy technicians; (Must be 18 years old and over.)
- Have demonstrated math proficiency sufficient to fulfill the requirements of pharmacy technician job responsibilities; - All applicants must score a minimum of 75% on a mathematics and English screening exam. This requirement may be waived for applicants submitting official transcripts documenting completion of Elementary algebra or Math100 or equivalent; or submitting official transcripts documenting completion of an Associate degree or higher.
- Attend and complete Program Orientation that provides detailed information regarding application process and important information about ACPE/ASHP Accredited Pharmacy Technician Program and careers in Pharmacy.

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: Apply federal, state and local laws, regulations, and professional standards to pharmacy practice.
- PSLO 2: Analyze 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 significant 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.

Certificate of Achievement

Pharmacy Technician Certificate

The CRC Pharmacy Technology Certificate 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 Pharmacist.

Students who complete the program in a satisfactory manner will be awarded a Certificate of Program Completion and are qualified to apply to the California State Board of Pharmacy for registration as a pharmacy technician. Students will also be eligible to take the PTCE (Pharmacy Technician Certification Exam) and become a Certified Pharmacy Technician.

A two-year expanded Pharmacy Technician Program is also available, which includes general education. This two-year course sequence leads to an Associate in Science Degree in Pharmacy Technician, and offers the student the ability to transfer to a four-year program or to enter the job market with additional technical and theoretical background.
Certificate Requirements

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<td></td>
<td><strong>Total Units:</strong></td>
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</tbody>
</table>

Student Learning Outcomes

Upon completion of this program, the student will be able to:

- **PSLO 1:** Apply federal, state, and local laws; regulations and professional standards to pharmacy practice.
- **PSLO 2:** Understand the setting, duties and responsibilities of a pharmacy technician.
- **PSLO 3:** Demonstrate the comprehension of knowledge pertaining to human anatomy, physiology, and pharmacology.
- **PSLO 4:** Perform basic mathematical functions and dosage calculations utilizing metric, apothecary, household and avoirdupois systems.
- **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

As a registered pharmacy technician in California, you can — under the supervision of a registered pharmacist — perform routine tasks related to receiving, dispensing, distribution, control, maintenance, compounding, manufacturing, packaging, and labeling of pharmaceutical products. Typical tasks include: Transcribing physicians orders/prescriptions Preliminary review of new orders/prescriptions Filling prescriptions and medications orders Preparing unit dose and multi-dose forms Preparing and labeling sterile solutions using aseptic technique Data entry and label generation Maintenance of inventory and stock Maintenance of pharmacy work areas Main Area for Pharmacy Technician to work: Retail pharmacy. Closed-door pharmacy. Hospital pharmacy. Compounding Pharmacy Correctional Facility Insurance Company Pharmacy Software Company A sample of reported job titles: Pharmacy Technician; Clinical Pharmacy Technician, Billing and Quality Technician; Compounding Technician; Lead Pharmacy Technician, Inventory Specialist, Controlled Substances Technician, Chemo Technician, Pharmacy benefit manager and Pharmacy Analyst.

Pharmacy Technology (PHARM) Courses

**PHARM 300 Introduction to Pharmacy Practice**

- **Units:** 3
- **Hours:** 54 hours LEC
- **Prerequisite:** None.
- **Transferrable:** CSU
- **Catalog Date:** January 1, 2022

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.

**PHARM 315 Pharmaceutical Calculations I**

- **Units:** 3
- **Hours:** 54 hours LEC
- **Prerequisite:** None.
- **Corequisite:** PHARM 300
- **Transferrable:** CSU
- **Catalog Date:** January 1, 2022

This course presents the mathematical concepts and practical experience required for students to prepare pharmaceutical dosages in both community and institutional pharmacy settings. Through lecture demonstrations and practice problem sets, students will learn the skills necessary to pass the math portion of the Pharmacy Technician Certification Examination.

**PHARM 320 Pharmacology of Therapeutic Agents**

- **Units:** 5
- **Hours:** 81 hours LEC, 27 hours LAB
- **Prerequisite:** None.
- **Corequisite:** PHARM 300
- **Advisory:** LIBR 318

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.
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.

**PHARM 350 Pharmaceutical Information Management**

- **Units:** 4
- **Hours:** 36 hours LEC; 108 hours LAB
- **Prerequisite:** None.
- **Corequisite:** PHARM 300
- **Advisory:** LIBR 318
- **Transferable:** CSU
- **Catalog Date:** January 1, 2022

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, medication order preparation and medication cards.

**PHARM 360 Retail Operation of Pharmaceutical Practice**

- **Units:** 3
- **Hours:** 27 hours LEC; 81 hours LAB
- **Prerequisite:** PHARM 300 and 350 with grades of "C" or better
- **Transferable:** CSU
- **Catalog Date:** January 1, 2022

This course introduces the practical, technical, and legal aspects of drug management; distribution (dispensing); and storage in outpatient (retail) settings. Topics include the process of pharmaceutical purchasing; inventory control including handling of receipts, storage, removal, and documentation. The course offers an overview of the technician's role in billing, collection of payment and third-party payment. Students will be introduced to small or large scale of non-sterile compounding, packaging, quality control and practical aspects of recordkeeping. The lab will provide hands-on training in interpreting, processing and filling prescriptions.

**PHARM 370 Pharmaceutical Calculations II**

- **Units:** 2
- **Hours:** 27 hours LEC; 27 hours LAB
- **Prerequisite:** PHARM 300 and 315 with grades of "C" or better
- **Transferable:** CSU
- **Catalog Date:** January 1, 2022

This course presents advanced 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.

**PHARM 380 Preparation of Sterile Products**

- **Units:** 3
- **Hours:** 27 hours LEC; 81 hours LAB
- **Prerequisite:** PHARM 300 and 315 with grades of "C" or better
- **Transferable:** CSU
- **Catalog Date:** January 1, 2022

This course presents a general study of the usual technician functions associated with an institutional drug distribution system. Students will learn the state laws and regulations pertaining to preparation and dispensing of pharmaceutical products. Hands-on training in medication order processing, pharmacy patient profile maintenance, medication preparation, and inpatient drug distribution using manual and automated systems. Extemporaneous preparations in an inpatient pharmacy with emphasis on aseptic techniques and use of the laminar flow hood in the preparation of sterile products. Includes history of sterile products and parenteral therapy, characteristics of sterile products and sterile products calculations. Also includes introduction to total parenteral nutrition, chemotherapy and hazardous drugs.

**PHARM 400 Pharmacy Technician Profession**

- **Units:** 2
- **Hours:** 36 hours LEC
- **Prerequisite:** PHARM 350, 360, and 380 with grades of "C" or better
- **Transferable:** CSU
- **Catalog Date:** January 1, 2022

This course prepares the student for employment as a pharmacy technician. Students learn the scope of practice of a pharmacy technician. Students will also learn professional ethics, attitudes, values, and beliefs of successful pharmacy technicians. Emphasis is placed on projecting an image appropriate to the profession and effective interpersonal relationships with other health care professionals and the appreciation for certification and active involvement in local, state, and national technician organizations.

**PHARM 410 Acute Care Practicum**

- **Units:** 2

This course provides the student with the necessary knowledge and skills to function as a certified pharmacy technician in an acute care setting. Students will be introduced to the role of the pharmacy technician in the acute care setting and the responsibilities associated with this role. Students will also learn about the legal and ethical aspects of patient care in the acute care setting and the importance of maintaining patient confidentiality. The course will also cover the importance of continuous improvement and the role of the pharmacist in the improvement of patient care in the acute care setting.
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.

PHARM 420 Retail Practicum

- **Units:** 2
- **Hours:** 120 hours LAB
- **Prerequisite:** PHARM 350, 360, and 400 with grades of "C" or better
- **Transferable:** CSU
- **Catalog Date:** January 1, 2022

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.