

CERRITOS COLLEGE PRE-PHARMACY CAREER PATHWAY

IMPORTANT NOTICE: The requirements listed for the major are subject to change without notice. It is the student's responsibility to check for the most recent information with a Cerritos College counselor or by consulting ASSIST at www.assist.org.

NOTE: Courses listed may require prerequisite coursework.

The following curriculum does not lead to an Associate in Arts Pre-Pharmacy Degree. However, students may fulfill requirements for a Natural Sciences Degree by completing a minimum of 18 units of science and math courses to include at least 4 units in the Physical Sciences, at least 4 units in the Biological Sciences, and at least 3 units in a math course beyond Intermediate Algebra. Please refer to the Cerritos College catalog for more information.

Admission to schools of pharmacy is highly competitive. Schools of Pharmacy offering the Doctor of Pharmacy generally require the completion of a minimum of 60 semester units of pre-pharmacy coursework. Applicants who have received a Baccalaureate Degree will be considered more favorably than applicants who have fulfilled only minimum requirements. A solid understanding of the fundamental sciences is essential for the study of the pharmaceutical and biochemical sciences. A discipline in the natural sciences is often a popular major selected.

COMMON COURSE REQUIREMENTS FOR MOST PHARMACY SCHOOLS

| | | | UNITS |
|----------------|-----|-------------------------------------|--------------|
| BIOL | 200 | Principles of Biology | 5 |
| BIOL | 201 | Principles of Biology | 5 |
| CHEM | 111 | General Chemistry | 5 |
| CHEM | 112 | General Chemistry | 5 |
| CHEM | 211 | Organic Chemistry | 5 |
| CHEM | 212 | Organic Chemistry | 5 |
| ENGL | 100 | Freshman Composition | 4 |
| ENGL | 102 | Freshman Composition and Literature | 3 |
| or ENGL | 103 | Critical and Argumentative Writing | (3) |
| MATH | 170 | Analytic Geometry and Calculus I | 4 |

*** For other options see a counselor**

ADDITIONAL REQUIREMENTS FOR SPECIFIC CALIFORNIA PHARMACY SCHOOLS

Loma Linda University – School of Pharmacy

www.llu.edu/llu/sps

The School of Pharmacy is owned and operated by the Seventh-day Adventist Church; therefore, preference for admission is given to members of the Church. However, it is a firm policy of the admissions committee to admit individuals who desire a faith-based education and demonstrate a commitment to Christian principles. No candidate is accepted on the basis of religious affiliation alone.

Loma Linda University School of Pharmacy (LLUSP) offers a full-time, four-year professional program leading to the PharmD degree. No undergraduate courses are taught at LLUSP, and we do not accept transfer students from other pharmacy programs.

Cerritos College – Pre-Pharmacy – Revised Spring 2023
11110 Alondra Blvd., Norwalk, CA 90650

CERRITOS COLLEGE PRE-PHARMACY CAREER PATHWAY

Loma Linda University – School of Pharmacy – (cont.)

To be eligible for admission, applicants must have a minimum cumulative undergraduate as well as cumulative science/math GPA of 2.75 at the time of application. Applications from individuals with GPA's below 2.75 will not be reviewed for admission. A Baccalaureate degree is highly recommended. Prerequisites must be completed by the end of spring term prior to matriculation. Prerequisites must be completed with letter grade of 'C' or better and Pass/No Pass courses will not be accepted to fulfill prerequisites.

The School of Pharmacy uses the Pharmacy College Application Service (PharmCAS). You may visit the PharmCAS website for more information about this service, www.pharmcas.org. Applicant must submit a PharmCAS application and complete the LLUSP Supplemental application by the program deadline.

ADDITIONAL REQUIREMENTS FOR ADMISSION

| | | | |
|-----------------|-----|--|---|
| MICR | 200 | Principles & Applications Microbiology | 5 |
| PHYS | 101 | General Physics | 4 |
| and PHYS | 102 | General Physics | 4 |

Three letters of recommendation are also required.

The following courses are not required but will further prepare students for the rigorous curriculum provided at LLUSP and should be considered whenever possible: Cellular and Molecular Biology, Genomics, Human Genetics, Histology, Immunology, and Physiology.

Recommended Pharmacy Experience

It is highly recommended that applicants obtain volunteer or paid pharmacy work experience.

University of California – San Diego – School of Pharmacy

www.pharmacy.ucsd.edu

The UCSD Skaggs School of Pharmacy and Pharmaceutical Sciences will accept 60 students into each entering class. The Admissions Committee is looking for applicants who have demonstrated strong academic ability, particularly in the pre-requisite coursework, but also in their entire academic career.

Prior to matriculation into the UCSD Skaggs School of Pharmacy and Pharmaceutical Sciences, all accepted applicants must have completed the requirements for the bachelor's degree (B.S. or B.A.).

Applicants who have not earned a degree or who will not have earned one prior to the start of classes in the Fall will not be considered. Students currently enrolled in a community college must transfer to a four-year college or university so as to complete the requirements for the bachelor's degree. A four-year college or university is one that is accredited to award bachelor's degrees. Enrollment in a community college does not satisfy this requirement. A minimum overall grade point average (GPA) of 3.0 is required to apply. The ability to express oneself clearly in both oral and written English is essential. Also, proficiency in a foreign language, such as Spanish, is considered highly desirable.

CERRITOS COLLEGE

PRE-PHARMACY

CAREER PATHWAY

University of California – San Diego – School of Pharmacy – (cont.)

A profile of applicants interviewed for enrollment for fall 2016 reveals that 809 applications were received. Of those applicants, 249 were granted an interview and their average overall GPA was 3.71.

A solid understanding of the fundamental sciences is essential for the study of the pharmaceutical and biomedical sciences. Applicants are required to have successfully completed, with an average grade point average of 3.0 or better in each category, the following pre-requisite science coursework:

| | | | |
|----------------|-----|---|-----|
| ECON | 201 | Principles of Macroeconomics | 3 |
| <i>or</i> ECON | 202 | Principles of Microeconomics | (3) |
| MATH | 190 | Analytic Geometry and Calculus II | 4 |
| PHYS | 201 | Engineering Physics | 4 |
| <i>or</i> PHYS | 101 | General Physics | (4) |
| PHYS | 202 | Engineering Physics | 4 |
| <i>or</i> PHYS | 102 | General Physics | (4) |
| PSYC | 101 | General Introductory Psychology | 3 |
| <i>or</i> SOC | 101 | Introductory Sociology Principles | (3) |
| <i>or</i> ANTH | 100 | Cultural Anthropology | (3) |
| COMM | 130 | Introduction to Communications Studies | 3 |
| <i>or</i> COMM | 103 | Argumentation, Persuasion and Critical Thinking | (3) |

It is also strongly recommended that students take upper division courses in Biochemistry, Physiology and Cellular and Molecular Biology. These courses will better prepare the first year UCSD Pharmacy student.

University of California, San Francisco – School of Pharmacy

<http://pharmacy.ucsf.edu>

The minimum grade point average to apply is 2.80. Also, the School of Pharmacy has a minimum requirement of 62 semester units. Although this is the absolute minimum requirement, in recent years a large majority of successful applicants have held bachelor's degrees usually in Biology, Biochemistry, or Chemistry. The average grade point average of all accepted students entering in fall 2017 is about 3.53. Each year, less than about 1.6% of admitted students enter directly from a California Community College. In recent years UCSF Phar.D. program accepted 122- 127 students.

The School of Pharmacy uses the Pharmacy College Application Service (PharmCAS). You may visit the PharmCAS website for more information about this service, www.pharmacas.org. Applicant must submit a PharmCAS application and complete the application by the program deadline. The School of Pharmacy does not require the Pharmacy College Admissions Test (PCAT). The PCAT is optional. If you believe the PCAT provides evidence of your academic preparedness for the UCSF PharmD program, you are encouraged to take the PCAT and submit your scores to PharmCAS. For more information on the PCAT as an option, contact our PharmD program admissions office.

CERRITOS COLLEGE

PRE-PHARMACY CAREER PATHWAY

University of California, San Francisco – School of Pharmacy – (cont.)

| | | | |
|----------------|-----|---|-----|
| A&P | 201 | Human Physiology | 5 |
| ECON | 201 | Principles of Macroeconomics | 3 |
| <i>or</i> ECON | 202 | Principles of Microeconomics | (3) |
| PSYC | 101 | General Introductory Psychology | 3 |
| <i>or</i> SOC | 101 | Introductory Sociology Principles | (3) |
| <i>or</i> ANTH | 100 | Cultural Anthropology | (3) |
| COMM | 130 | Public Speaking | 3 |
| <i>or</i> COMM | 103 | Argumentation, Persuasion and Critical Thinking | (3) |
| MATH | 112 | Elementary Statistics | (4) |
| MICRO | 200 | Principles and Applications of Microbiology | (5) |

University of Pacific

<http://www.pacific.edu/Academics/Schools-and-Colleges/Thomas-J-Long-School-of-Pharmacy-and-Health-Sciences/Academics/Doctor-of-Pharmacy.html>

Although a Bachelor's degree is not required, a degree can make an applicant more competitive, and in recent years a strong majority of the successful applicants have had degrees. A minimum of 68 semester units of college level coursework is required for admission to the Pharm D. program. There is no absolute GPA cutoff. Admission is competitive and is based on a number of factors in addition to GPA, including Bachelor's degree, science grades, strength of curriculum, extracurricular, community service, leadership qualities, pharmacy experience, recommendations, essay, interview results, and demonstration of your ability to succeed in 17 units or more per semester. Competition can vary from year to year depending upon the size and strength of the applicant pool. Recommended electives include anatomy, genetics, physiology, microbiology, biochemistry, analytical chemistry and physical chemistry.

| | | | |
|----------------|-----|---|-----|
| A&P | 201 | Human Physiology | 4 |
| ECON | 201 | Principles of Macroeconomics | 3 |
| ECON | 101 | Principles of Microeconomics | 3 |
| MATH | 116 | Calculus for Managerial, Biological and Social Sciences | 4 |
| MATH | 170 | Analytical Geometry and Calculus I | (4) |
| PHYS | 101 | General Physics | 4 |
| <i>or</i> PHYS | 201 | Engineering Physics | (4) |
| PSYC | 101 | General Introductory Psychology | 3 |
| <i>or</i> PSYC | 271 | Abnormal Psychology | (3) |
| COMM | 130 | Public Speaking | 3 |

University of Southern California

<http://pharmacyschool.usc.edu/>

A Bachelor's degree is required prior to entrance. A minimum of 3.0 cumulative grade point average in all college work and Pre-pharmacy requirements is required for consideration for an interview. It is highly recommended that math and science courses be completed during the regular academic year and not during a summer term. Distance learning or online coursework is not acceptable for prerequisite courses in biology, chemistry and physics.

CERRITOS COLLEGE

PRE-PHARMACY

CAREER PATHWAY

University of Southern California – (cont.)

Pre- pharmacy requirements in the following areas must be repeated if they are 9 years or older at the time the application is submitted: mammalian physiology, microbiology, molecular biology, biochemistry and organic chemistry (full year). These courses must be repeated at a four-year college/university. The class profile for the entering class of fall 2017, 192 students were admitted and enrolled from an applicant pool of 692. The average cumulative grade point average for enrolling students was 3.49.

The School of Pharmacy uses the Pharmacy College Application Service (PharmCAS). You may visit the PharmCAS website for more information about this service, www.pharmcas.org.

Applicant must submit a PharmCAS application and complete the USC School of Pharmacy Supplemental application by the program deadline. Also, The School of Pharmacy Office of Admissions uses an interview process to make determinations on admissions. The interview consists of two parts: an oral interview and a writing test. The purpose of the interview is to assess your oral communication skills, writing skills, leadership ability, and your motivation or potential to be a pharmacist.

| | | | |
|----------------|-----|---|-----|
| A&P | 201 | Human Physiology | 4 |
| ECON | 202 | Principles of Microeconomics | 3 |
| MATH | 112 | Elementary Statistics | 4 |
| or PSYC | 210 | Elementary Statistics | (4) |
| MICR | 200 | Principles & Applications of Microbiology | 5 |
| PSYC | 101 | General Introductory Psychology | 3 |
| or SOC | 101 | Introductory Sociology Principles | (3) |
| COMM | 100 | Introduction to Communication Studies | 3 |
| or COMM | 120 | Interpersonal Communication | (3) |
| or COMM | 130 | Public Speaking | (3) |

HUMANITIES/FINE ARTS: Two Additional courses 3-3

The following **required** upper division courses are not offered at Cerritos College, but must be taken at another college or university: Biochemistry and Molecular Biology.

Western University of Health Sciences, College of Pharmacy Formerly known as College of Osteopathic Medicine of the Pacific www.westernu.edu/pharmacy/

Minimum of 60 semester units is required. Candidates who have received a baccalaureate degree will be considered more favorably than applicants who have fulfilled only minimum requirements.

The minimum overall and science grade point average will be 2.75. Complete prerequisites with a "C" or better. All prerequisites must be completed by the end of the spring term prior to matriculation.

For the entering class of fall 2020, 108 students were admitted from an applicant pool of 1,046 students. The average cumulative grade point average was 3.20 and the average science grade point average was 3.07.

CERRITOS COLLEGE

PRE-PHARMACY

CAREER PATHWAY

Western University of Health Sciences, College of Pharmacy – (cont.)

Applicants must submit an application by March 1 of the year prior to admission and participate in an admission interview and assessment of written and verbal communication skills.

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|----------------|-----|---|-----|
| A&P | 200 | Human Anatomy | 5 |
| A&P | 201 | Human Physiology | 5 |
| MATH | 190 | Analytic Geometry and Calculus II | 4 |
| MICR | 200 | Principles & Applications of Microbiology | 5 |
| COMM | 130 | Public Speaking | 3 |
| <i>or</i> COMM | 103 | Argumentation, Persuasion and Critical Thinking | (3) |

In addition to the required courses listed the student must have at least 20 additional units from Natural Sciences, Humanities/Fine Arts, and Behavioral and Social Sciences. Electives must be met from at least two of the three following areas: Public Speaking/Debate, Social Sciences, to include Economics and Physics.

The following **required** coursework is not offered at Cerritos College, but must be taken at another college or university: Two semesters of Biochemistry or one semester of Biochemistry plus one semester of Molecular Biology.

Advanced Placement, Transfer of Credit, CLEP or Credit for Experiential Learning is not recognized by the program.

THE REQUIREMENTS FOR PHARMACY SCHOOLS ARE SUBJECT TO CHANGE WITHOUT NOTICE. CAREER OPPORTUNITIES:

Changes in health care delivery are giving the role of pharmacist a new dimension: significant responsibility as a member of the health team with direct patient care. Hospital pharmacists work on educating patients on safe use of drugs, advising prescribers about the appropriate dosing and following patient's response to usage. Career advancement exists in administration and research. In addition to dispensing medications, community pharmacists guide patients in non-prescription drugs and being alert to adverse pharmacies. Industrial Pharmacists may work in research and development including the formulation, evaluation, packaging and quality control of drugs. Some pharmacists are employed by governmental agencies such as narcotic divisions, food and drug evaluation and regulation, and public health.