

Pre-Medical and Other Health Professional Programs



California State University, Dominguez Hills (CSUDH)

Program

An important component of the CSUDH undergraduate curriculum is the preparation of students for medical and other health professional programs, e.g. dentistry, pharmacy, veterinary medicine, etc. This preparation can include a major in the sciences as well as a major in other disciplines, e.g. music, history, English, etc. In fact, a “well rounded” education is viewed very favorably by many health professional school admissions committees, so for even those who major in a science, it is important to obtain a broad liberal arts education by taking electives in the humanities, fine arts and social and behavioral sciences. However, it must be recognized that majoring in a non-science discipline **does** require completing, and doing well, in the science courses that are pre-requisites for admissions to the health professional schools.

Since many of the professional health schools (e.g. medicine, dentistry, pharmacy, optometry and podiatry) require similar courses as requirements for admissions, this sheet describes the CSUDH courses for “pre-health professional” programs.

Generally, the requirements for these health professional schools include one-year lecture and laboratory in general chemistry, organic chemistry, physics, general biology and math.

In addition, medical schools may recommend additional courses in embryology, genetics and biochemistry.

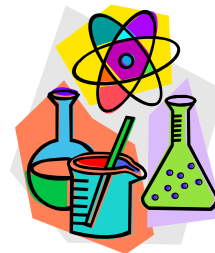
To reiterate, students **must** meet these requirements in addition to those of their major.

Students who already have a bachelor’s degree in an area other than the sciences may, of course, fulfill the minimum requirements for entrance into these health schools by completing the core requirements through a post-baccalaureate program or even a second bachelor’s degree.

Faculty in the sciences, i.e. biology, chemistry and physics often teach the required courses. At CSUDH, students taking these courses benefit from small class size, close instructor contact and active advising programs.

Academic Advising

Regardless of their major, pre-professional health students should be advised by a faculty member with knowledge of the admission requirements of the health professional schools so as to assist them in planning a



program that will fulfill the entrance requirements for the professional school.

Since the entrance requirements vary, it is important that the student works with the advisor to determine the specific requirements of each school to which they plan to apply.

Community College transfer students often complete some of the lower division required courses at their community college. However, they should consult with the Pre-health advisor, the Advising Center and the University Catalog for the requirements.

Dr. Thomas Landefeld, from the biology department, has been designated as the CSUDH Pre-health Advisor. Students who are interested in a career in the health professions should make an appointment with him at any stage of their education, preferably as early as possible once they have made that decision.

Contact

For further information, you can contact Dr. Landefeld directly at (310) 243-3528 or through the Biology Department (310-243-3381).

Pre-Health Requirements and Recommendations



It is strongly advised that you check individual schools for their requirements and recommendations as some schools may have specific requirements for their programs.

The following list represents some general requirements.

Required courses:

- 1 year general biology with lab (e.g. BIO 120/122)
- 1 year general chemistry with lab (e.g. CHE 110/112)
- 1 year organic chemistry with lab (e.g. CHE 310/311/312/313)
- 1 year college math - many schools are requiring statistics and calculus (e.g. MAT 131/MAT 171 or 191)
- 1 year physics with lab (e.g. PHY 120/122 or PHY 130/132) while some schools may specify a calculus based-physics
- 1 year college English (composition)

Recommended courses:

- Biochemistry with lab (e.g. CHE 450/451) – **strongly** recommended
- Spanish (particularly for CA and TX schools, but others may also recommend) – strongly recommended
- Cellular and molecular biology, endocrinology, microbiology, immunology, genetics, developmental biology, psychology

Other recommendations:

- Dentistry – psychology (may be required), sculpture or fine arts or drafting
- Optometry – psychology (made be required), physiology, neurophysiology
- Veterinary – animal/human nutrition, vertebrate physiology (usually a letter is required from veterinarian)
- Pharmacy--- economics and composition (often required); experience in a pharmacy (may be required)
- Osteopathic medicine– A letter of recommendation from a D.O. (usually required)

Additional Experiences that strengthen an application:

- Scientific laboratory research
- Hospital/health care volunteer and/or work experiences
- Physician shadowing

An excellent “general” site for health careers is www.explorehealthcareers.org

It is critical that you speak to the Pre-health advisor to not only discuss your specific career plan but also to better prepare your application regarding such things as a personal statement, obtaining letters of recommendation and choosing schools. However, in addition, the student must familiarize themselves with as much information as possible regarding not only the health professional schools but also about the career itself.

