



## A Course of Study for PRE-MEDICAL

### DESCRIPTION

The purpose of pre-medical science course requirements is two-fold:

- To determine the compatibility between the student and science, since medicine academically is the science of the human body **and**
- To provide the pre-medical student with a background on which to launch future studies in the basic medical science" (*Barron's Guide to Medical & Dental Schools*).

### ADMISSION FACTORS

There are several factors considered when you apply to medical school.

1. Overall grade point average.
2. Science grade point average.
3. Score on the Medical College Admission Test (MCAT).
4. Three letters of recommendations.

Before applying to medical school, a student should attend a college or university and complete a Bachelor of Arts degree. Less than 10% of the recent admissions into medical school have not completed a Bachelor of Arts degree.

### PRE-MEDICAL REQUIREMENTS

Please see a counselor for specific recommendations for course work. You should have some idea of where you want to transfer, and which major you want to complete at that school. For example, **Physics 6 and 7** at Santa Monica College will prepare you for the MCAT, but you must complete **Physics 8 and 9 or 1, 2, and 3** if you decide to major in Biology at UCLA.

### "PRE-MEDICAL" IS NOT A MAJOR

The following advice should be heeded by pre-medical students:

- See a Counselor the **first** semester to select a major and work out a program.
- Take English courses early to gain writing skills.
- Check prerequisites and complete them before attempting to enroll in required courses.
- Carefully arrange courses with labs to avoid conflicts.

*The general pre-medical curriculum is as follows: **Biology 21, 22 and 23; Chemistry 11, 12, 21, 22 and 24; English 1 and 2; Math 2** (less than 20 medical schools require more math, but if you choose to complete calculus based physics, you must complete more math); **Physics 6 and 7 or 8 and 9 or 21, 22 and 23***

The following is a list of some popular medical schools. They are listed along with their recommended premedical course of study.

**Reminder:** the courses listed are to serve as a general guideline only. Requirements do vary between schools. It is the student's responsibility to contact medical schools for exact course requirements.

### DUKE UNIVERSITY

Admission requires at least 90 hours of approved college credit, including:

- One year of College English or a university writing course
- One year of Inorganic chemistry
- One year of Organic chemistry
- One year of Physics
- One year of Biology and/or zoology
- One year of Calculus

### JOHNS HOPKINS UNIVERSITY

- One year of College Biology with Lab
- One year of General College Chemistry with Lab
- One year of Organic Chemistry with Lab
- Humanities, Social and Behavioral Sciences
- Mathematics-Calculus or Statistics, one year
- College Physics with Lab, one year

### GEORGETOWN UNIVERSITY

- One year of Biology
- One year of English
- Two years of Chemistry (*through Organic Chemistry*)

**UNIVERSITY OF CALIFORNIA, DAVIS**

- One year of English
- One year of Biological Sciences with lab
- One year of General Chemistry with lab
- One year of Organic Chemistry
- One year of Physics
- One semester of Mathematics for Integral Calculus

**UNIVERSITY OF CALIFORNIA, IRVINE**

- One year of General Chemistry
- One year of Organic Chemistry
- One year of Physics
- One and one-half years of Biology and/or Zoology
- One quarter of college level Calculus
- One semester/two quarters of Biochemistry

**UNIVERSITY OF CALIFORNIA, RIVERSIDE/UNIVERSITY OF CALIFORNIA, LOS ANGELES THOMAS HAIDER PROGRAM IN BIOMEDICAL SCIENCES**

The UCR Thomas Haider Program in Biomedical Sciences provides a unique opportunity for UCR undergraduates to apply for one of the 24 seats available each year in UCR's joint program with the David Geffen School of Medicine at UCLA. The Haider Program has been designed to train physicians for medical careers in service to the people of California, with an emphasis on the needs of the underserved inland, rural, and urban populations. The admission requirements for the Haider Program are identical to those for UCLA's Geffen School of Medicine, but UCR students have a distinct advantage when applying to the Haider Program in that they compete only with other UCR students for those 24 reserved seats in the program. The pool of applicants for UCLA's medical school is much larger than the applicant pool for the Haider Program. For more information and admission criteria, please see:

[http://www.assist.org/cgi-bin/WaReps\\_2/P5Frame.pl?oia=UCR&ia=SMCC&ay=03-04&event=19&dir=1&kind=3dora=UCR=UCLA](http://www.assist.org/cgi-bin/WaReps_2/P5Frame.pl?oia=UCR&ia=SMCC&ay=03-04&event=19&dir=1&kind=3dora=UCR=UCLA)

**UNIVERSITY OF CALIFORNIA, SAN FRANCISCO**

- One year of General Chemistry with lab
- Organic Chemistry
- One year of Physics with lab
- One year of Biology with lab (*including Vertebrate Zoology*)

**UNIVERSITY OF CALIFORNIA, LOS ANGELES**

- One year of college English to include the study of English Composition
- One year of college Physics with lab
- Two years of college Chemistry to include the study of Inorganic Chemistry, Quantitative Analysis and Organic Chemistry with lab
- One year of General Biology with lab
- One year of college Mathematics to include the study of Introductory Calculus and Statistics
- Highly recommended: Spanish, Humanities, and Computer Skills

**UNIVERSITY OF SOUTHERN CALIFORNIA (USC)**

- Two semesters of General Biology with lab
- Two semesters of General Chemistry with lab
- One semester of Organic Chemistry with lab
- Two semesters of Physics with lab
- One semester of Biochemistry
- One course in Molecular Biology: May include Molecular Genetics, Cell and Molecular Biology, Advanced Cell Biology
- 30 semester hours of Social Sciences, Humanities, and English Composition
- *Recommended:* College Math or Calculus; Facility in use of Computers

**MEDICAL SCHOOLS**

<http://www.aamc.org/medicalschoools.htm>