

Counseling Services - College of the Siskiyous

Pre-Med Advising

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Source: http://advisingservices.ucdavis.edu/advising/hsa/handouts/premedical_preparation_ucdavis.html

Preparation for medical school involves, first and foremost, completion of certain required courses and taking the Medical College Admission Test (MCAT). After meeting these basic requirements, students with diverse records and backgrounds apply to medical school and are accepted. Although there is no "formula" or direct path that leads to acceptance, the most competitive applicants are well prepared in several areas.

Major

You can major in any undergraduate degree area provided that you include required pre-medical prerequisites in your course of study and do well in them. In the past, successful applicants have majored in many non-science subjects such as economics, philosophy, and international relations, as well as the more common science majors such as physiology, biochemistry, and biological sciences. You should major in what interests you. Most students, however, do major in science since this ensures that there will be a great deal of overlap between courses required for their major and those required for medical school; it makes course planning easier. Those choosing non-science majors often make their choice for breadth and do very well in the applicant pool. Your major does not matter unless you have weak science grades or are a transfer student (see advisor for more information if this is your situation).

Course Requirements

Specific course prerequisites vary somewhat for each medical school but the following courses will fulfill all that are generally required. The course numbers in parentheses indicate the usual courses taken at College of the Siskiyous but other courses may fulfill the requirements. Please see the university website or catalogs for more specific information. For community college students, refer to assist.org, an online information system for articulation of courses between California Community Colleges and CSU and UC campuses.

Inorganic Chemistry: 1 year with laboratory. **(COS: CHEM 1A + CHEM 1B)**

Organic Chemistry: 1 year with laboratory. **(Take at a university)**

Mathematics: 1 year of calculus/college math for only ~25% of schools; please check individual med schools.
(COS: MATH 2 or MATH 4 or MATH 10)

Physics: 1 year with laboratory. **(COS: PHYS 2A + PHYS 2B)**

Biology: 1 year with laboratory. Botany is not required by med schools nor is it on the MCAT, but it is required for many majors. If your major does not require Botany, you may choose to take another BIO course +lab.
(COS: BIO 1 + BIO 2)

English: 1 year. Any college level courses in Composition or Literature. **(COS: ENGL 1A + ENGL 1C)**

Additional Requirements for California Med Schools

UC Davis requires an additional half year (2 quarters) of upper division courses in biochemistry, molecular biology, cell biology, and/or genetics.

UCI requires a year of biology for Biology majors **plus** 2 quarters of upper division biology/zoology (no botany) which can be used as part of the one year of biology requirement; labs are not required.

UCLA requires one course in statistics.

UCSD does not accept BIS 104, biochemistry, or botany courses to fulfill the one year of biology requirement.

USC requires one course in molecular biology, plus one course in biochemistry.

All required courses must be taken for a grade, **NOT** on a Passed/Not Passed basis, and have a grade of C or better. If courses are repeated, **BOTH** grades go into your AMCAS* GPA (i.e. different than most colleges' policy) but AACOMAS* only includes the higher grades.

The Medical College Admissions Test (MCAT)

The MCAT examination includes four sections: Physical Sciences, Verbal Reasoning, Biological Sciences, and a Writing Sample. Currently, the actual test time is 5 hours and 45 minutes. In 2006, it will be given in April and August. Beginning in 2007, it is expected that the exam will be entirely computer-administered and be offered 20-22 times a year.

Chemistry is included in both the Biological and Physical Sciences sections. You should take the MCAT **at least one year before** you plan to enter medical school--but earlier is better. At the earliest this will be in your third (junior) year but many take it in their 4th year or later. As a general guideline, you should **take the MCAT when you are ready** rather than at a pre-conceived time. You should have completed all general prerequisites (except calculus and Bio Sci 1C, as these topics do not appear on the MCAT) and **you may also want to complete courses in Genetics (BIS 101), Biochemistry (BIS 102) and Physiology (NPB 101) prior to taking the MCAT**. Although no **specific** English courses will prepare you for the English half of the MCAT, we recommend that you complete your English courses prior to the MCAT and be sure that you have well-developed reading (speedy) and writing skills. Most science majors find the Verbal Reasoning section the most challenging on the MCAT and it is difficult to develop the skill you will need in a short period of time. Start now by reading a lot outside of science!

Never take the MCAT for practice! Most applicants prepare for the MCAT using commercial test preparation materials and practice exams, and we encourage you to take the MCAT when you are scoring at or above the scores you hope to get on the MCAT because scores rarely go up on test day... You should then plan to apply based on when you have competitive scores rather than when you graduate, although you will need to complete your bachelor's degree prior to matriculation into medical school. Please see an HSA advisor to discuss the timing of this important examination as well as specific course preparation. Complete the online application to [register for the MCAT](#). Applications are usually available the first week in February, but check the website for updates.

Extracurricular Activities

There is a wide range of experience possible in this area but it is very important for a competitive applicant to have extracurricular activities. Often, students must support themselves and work becomes their primary (but not only) extracurricular activity. Clinical experience (i.e. where you observe physicians treating patients) is expected and is considered critical because medical schools want to be certain that you have knowledge of the field and the job of a physician. Most applicants have research experience as well. Research or clinical experiences that you initiate or develop yourself are particularly rewarding and are viewed very positively by admission committees. Community and campus service, participation in organized sports or arts, leadership, and well-developed personal interests are all important in the admission process.

Application Process

Most allopathic medical schools belong to a centralized application service ([AMCAS*](#)) that allows you to apply through one initial application online. You can apply to all but one of the osteopathic medical schools through a separate online application service ([AACOMAS*](#)). All medical schools in Texas (MD and DO) are a part of a third application service ([TMSAS*](#)) found on the web. HSA offers a workshop each year in late April or early May to explain the application process in detail. Applications are submitted approximately 12-15 months before enrolling in medical school.

About the [Professional Letter Service \(PLS\)](#) Service

The PLS is a letter of recommendation service for UC Davis students and alumni who are applying to schools/programs in the health professions, law or business programs. PLS stores, copies and sends your recommendation letters to support your applications for admission to multiple professional schools. You may keep a maximum of eight letters in your file and have up to fifteen mailings/uploadings for \$125. Your PLS file is good for three years after the year you open your file.

"Secondaries" (or supplementary applications) are requests by [AMCAS](#) and [AACOMAS](#) schools for additional information and fees. Non-AMCAS schools (e.g. foreign medical schools) usually have a single application. The final stage of the application process is the personal interview. If a school offers you an interview it means they are seriously considering you.

***AMCAS** - American Medical College Application Service (allopathic)

***AACOMAS** - American Association of Colleges of Osteopathic Medicine Application Service (osteopathic)

***TMSAS** - Texas Medical and Dental Schools Application Service (allopathic and osteopathic in TX)