



Jane Rockwood
Health Professions Advisor

Pre-Medicine Information Sheet

According to the [Oxford Advanced Learner's Dictionary](#), medicine is defined as “the science or practice of the diagnosis, treatment and prevention of disease.” There are two paths to practicing medicine and becoming a doctor – [allopathic medical school](#) and [osteopathic medical school](#). These are followed by residency in a [specialization](#).

Prerequisite Courses

Prerequisite courses can vary on a school-by-school basis. Please check the prerequisites for schools to which you hope to apply. Prerequisite courses for allopathic medical schools can be found at the [Association of American Medical Colleges Medical School Admission Requirements](#). Prerequisite courses for osteopathic medical schools can be found in the [Osteopathic Medical College Information Book](#) starting on page 34.

The following courses are required by most medical schools in the United States as the **minimum** background needed for acceptance into medical school.

Medical School Prerequisites	Mason Courses
Biology 2 semesters with labs	BIOL 213/Cell Biology (includes the lab) BIOL 311/Genetics (includes the lab)
General Chemistry 2 semesters with labs	CHEM 211 and CHEM 213 CHEM 212 and CHEM 214
Organic Chemistry 2 semesters with labs	CHEM 313 and CHEM 315 CHEM 314 and CHEM 318
Biochemistry 1 semester	BIOL 483 or CHEM 463
College Physics, 2 semesters with labs	PHYS 243 and PHYS 244 PHYS 245 and PHYS 246
Statistics	BIOL 214 or STAT 250
English 2 semesters	ENGH 101 ENGH 302
Psychology 1 semester	PSYC 100
Sociology 1 Semester	SOCI 101

Required and recommended coursework can vary by school.

Many allopathic and osteopathic schools continue to require 2 semesters of organic chemistry.

Some schools require college math and others require one or two semesters of calculus or one semester of calculus and one semester of statistics.

Additionally, some schools require two semesters of English.

Schools vary as to whether they will accept Advanced Placement, community college or online coursework to meet prerequisites.

Any undergraduate major is appropriate for medical school. It is very important, however, to do well in science courses and to take sufficient biology, chemistry, physics, statistics, psychology, and sociology courses to prepare adequately for the MCAT.

The Medical College Admissions Test (MCAT)

According to up to the Association of American Medical Colleges (AAMC), the “Medical College Admission Test (MCAT®) is a standardized, multiple-choice examination designed to assess your problem solving, critical thinking, and knowledge of natural, behavioral, and social science concepts and principles prerequisite to the study of medicine.” Information regarding the current [MCAT](#) is available online.

The MCAT exam is offered multiple times of the year. Students are encouraged to take the MCAT when they are fully prepared

Applying to Medical School

Admission to medical school is very competitive. The percentage of applicants who are accepted varies from year to year but is generally less than 50% of the applicant pool. Accepted applicants nationally have an overall undergraduate grade point average of 3.6 and above. Accepted applicants also have good scores on the MCAT.

Students who feel they have realistic potential for acceptance to medical school should plan carefully to improve their chances. Some helpful guidelines are:

- Apply early (late spring) of the year before the expected year of matriculation;
- Submit an application to schools that best match your strengths;
- Obtain practical clinical experience in a medical setting;
- Volunteer to work with underserved populations;
- Consider involvement in empirical research.

Central Application Services

Students applying to allopathic medical schools submit application materials through the American Medical College Application Service (AMCAS). Information regarding the AMCAS [application](#) process can be found online



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Students applying to osteopathic medical schools submit application materials through the American Association of Colleges of Osteopathic Medicine Application Service (AACOMAS). Information regarding the [AACOMAS application process](#) can be found online.

Pre-Medicine Advising

The information contained in this information sheet should be discussed with [the Health Professions Advisor](#). The availability of these health professions advising opportunities is announced through the [HEALTHPROFESSIONS-L listserv](#) for Mason students.

Students must still be advised in their department regarding their major.

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