

Background

For the student who is considering entering the fields of medicine, dentistry, veterinary medicine, optometry, osteopathic medicine or an allied health profession, it is advantageous to plan an academic program in advance, paying particular attention to timing and scheduling. Competition for admission to all of these programs remains at a high level. There are opportunities in a variety of health care professions and you may wish to look into some of these fields; various descriptive materials are available in the University Career Services Resource Library (Campus Center, First Floor, 1112). The premedical curriculum serves as a strong academic background for both allied health and primary care fields.

Planning ahead has obvious advantages, since students are expected to apply one year before the time they hope to begin classes in medical, dental, veterinary or other graduate programs. If a student wishes to be considered for admission to medical school (*in this document the term medical school will be used to cover medical school, dental school, and veterinary school*) for the year following graduation from college, for example, all premedical courses should be completed by the end of the junior year or, at the very latest, by the end of the summer before the senior year. Admissions tests are mandatory and should be taken in the spring or late summer before the senior year. The tests are based, in large part, on the material covered in the premedical courses, so when the courses are completed determines when the test should be taken.

Admission Requirements

Generally speaking, admissions decisions are based on a combination of academic performance, test results, recommendations, nature and extent of work experience, volunteer or health care related experience, and the applicant's personal qualities, evidence of significant teamwork experience, and whenever possible, community service. Although clinical and research experience is often encouraged, admissions committees are, in fact, more interested in what a person has learned, regardless of what type of work it is or whether or not it has been on a paid or volunteer basis. The prospects for admission are best for those with an academic average of 3.5-3.6 overall and 3.5-3.6 or better in math and science, in combination with above-average scores on the required admission test. These guidelines are based on the assumption that the student has completed all premedical requirements by the time of application and that considerable strength is exhibited in all the admissions criteria described.

Students are encouraged to major in the field that is of the greatest interest and appeal to them as undergraduates. Medical schools neither require nor suggest that a student major in one of the sciences. It is a fact, however, that virtually all of the schools require that at a minimum, regardless of major, an applicant complete the premedical requirements before serious consideration will be given to an application.

Course Preparation

Although schools vary slightly in what they require, the courses listed at the end of this document represent accurately the basic minimum premedical requirements if one is to be at a competitive advantage. In addition to those courses listed, you are strongly advised to take more biology courses if you are not a biology major. Courses strongly recommended are: genetics, cell biology, biochemistry, neurobiology, and immunology. Taking these additional courses will strengthen your background to prepare you for the MCAT, your first years in medical school (based largely on biology course work) and provide the possibility of getting additional recommendations from faculty in upper level courses. If you plan to major in one of the humanities or social sciences, it is strongly recommended that you take more than the minimum number of science courses; that is, at least two additional courses in biology, chemistry or physics. Post baccalaureate students, in particular, are advised to take at least two upper level biology courses in addition to General Biology.

Faculty members in the science departments, members of the premedical committee, and the premedical advisor can all be of assistance and students should consult with them on a regular basis.

The Admissions Process and the Premedical Committee

The premedical committee consists of a small group of faculty and professional staff whose purpose is to assist students when they are at the point of applying to the program they have chosen. Most medical schools recommend that an applicant submit a committee composite evaluation in lieu of a series of individual letters. Before applying, therefore, the student will be interviewed by a committee member who will prepare a composite recommendation based on the academic record, the individual letters of recommendation that the student has collected and on the interview itself. The individual recommendations as well as the committee composite recommendation make up the premedical file which is maintained by the premedical advisor.

The recommendations are forwarded, at the direction of the student, to the medical schools. A written request or an email request to the premedical advisor must be made with enough time to allow for processing and mailing to meet deadlines.

The premedical advisor in the University Advising Center is available to all students interested in learning about the health professions. For those who choose to apply to medical, dental, or veterinary school the premedical advisor works closely with them as they are completing their folders, arranges for the committee interview, and sees that all materials are sent to the medical schools. Students are encouraged to meet with the Premedical Advisor regularly through the entire process from orientation through

acceptance. Recommendation forms and sample personal statements are available from the premedical advisor.

The Career Resource Library, (CC 1112), contains materials that describe health care professions including medicine, dentistry and veterinary medicine and more than 30 other allied health professions. Additional information is available on educational requirements, job outlook, salaries and descriptions of the work.

Required Standardized Tests

Standardized test scores are one of the critical elements in admissions decisions and students are advised to undertake systematic preparation for these tests. Effective preparation is predicated on completion of all premedical requirements, review of the fundamentals of natural sciences and mathematics and intensive practice in taking sample tests. The necessary course background and careful preparation for the test are critically important. The Medical College Admission Test (MCAT) is entirely computer based and is given about twenty times a year. All dental schools require the DAT and Veterinary schools require the VCAT or GRE.

General Sequence of Premedical Preparation

Freshman, Sophomore, and Junior Years

- Completion of premedical courses.
- Consultation with the Premedical Advisor on a regular basis.
- By the end of the junior year, students will be expected to have secured at the least 4 letters of recommendation. The recommended distribution is 3 or more for premedical courses, 1 or 2 for social sciences or humanities courses, 1 or 2 from an employer or supervisor, if possible. Recommendation forms are available in University Career Services and are returned to this office where a folder is set up for each student. It is often best to request recommendations from faculty members as courses are completed rather than wait until the end of junior year to collect all the recommendations.

Junior Year

- Registration for the April MCAT if coursework is complete or about to be completed and enough time has been spent in preparation for the exam.

- April—Information is available online for the medical school and dental school application services, AMCAS and AADSAS. The majority of the medical schools and all of the dental schools utilize these services. Early submission of these forms is always a good idea. If you are planning to apply to schools that don't utilize these particular application services, check to see if they have their own application services and follow their directions for submission, if the program you're interested in uses its own application be sure to request the application as early as possible.
- March-June—Meet with the Premedical Advisor to check on the status of your folder and discuss timing of the committee review, applications and choice of schools.
- June, July, August, and September—Each student who has a completed folder will be scheduled for an interview with the Premedical Committee and the composite recommendation will then be prepared.
- June and July—Applications for individual schools and for AMCAS and AADSAS should be completed on line.
- Late summer-early fall—You will likely be asked to complete secondary application forms. You will be required to send a fee with the secondary application and will be asked to have the Premedical Advisor send your composite packet. You will need to make a written or email request to do this.

Senior Year

- If you plan to take an August or early fall test, be sure to check registration deadlines over the summer. Applications should be sent electronically well before the stated program deadline dates, so that schools await only the test scores.
- September-February—During this time schools interview applicants who are serious candidates. You will begin to receive acceptances and rejections during these months. The later your completed application was received the later you are likely to hear from the schools.

This sample schedule is intended to serve only as a possible model with certain key elements that all people considering medical school need to know. Each student should work out a program that makes sense in terms of his or her individual interests and abilities, work schedule, time spent commuting, family obligations, and other such considerations. There is no magic formula! The best route is one where you are prepared with the appropriate information, timelines and a realistic understanding of the process. Clearly you have the greatest advantage if you prepare a strong application, have premedical committee support, and apply early.

Basic Premedical Course Requirements

English 101 and 102: Freshman English I and II (or equivalent)

Mathematics

You should plan to complete two semesters of mathematics coursework. Depending on your mathematical background, completion of Mathematics 115 (Basic Algebra) or Mathematics 130 (Pre-calculus) is required prior to enrollment in Mathematics 140 (Calculus I). You should be aware that some of the most competitive programs require two semesters of calculus. Mathematics 141 (Calculus II).

Biology 111 and 112: General Biology I and II

Chemistry 115 Chemical Principles I and Chemistry 117 Chemical Principles Lab I
Chemistry 116 Chemical Principles II and Chemistry 118 Chemistry Principles Lab II

Chemistry 253 and 254: Organic Chemistry I and II

Physics 107 and 108: College Physics I and II

(This is non-calculus physics that requires familiarity with algebra and trigonometry)

Physics 181 and 182 (laboratory)

or

Physics 113 and 114: Fundamentals of Physics I and II

Physics 181 and 182 (laboratory)

These courses accurately represent the basic minimum requirements for admission to medical school. Plan to meet at least once each semester with the Premedical Advisor.

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