Planning for Medical School

Approximately 5% of graduating Southwestern University students enter medical school each year immediately upon graduation. About 70% of students who apply to medical, dental and veterinary programs through the SU pre-medical committee are accepted the first time.

Do I really want to be a doctor?
What’s not to like about a career in medicine? Medicine has prestige, helps people, makes good money and is a known quantity – after all, everyone has been to a doctor. Many students begin college interested in medical careers, but over time and with more exploration, many find other fields which interest them more. Career Services and SU faculty can advise you realistically on whether your credentials show promise for admission to medical school, but only you can decide if that is what you really want to do. Gaining exposure to the health field is crucial for your own decision-making and also shows your commitment to prospective medical schools. Volunteering at local hospitals or clinics, reading about professional schools and medicine as a career, joining one of the campus pre-health organizations, talking with or job-shadowing healthcare professionals and even earning a certification to work part-time in the healthcare (e.g. emergency medical technician, certified nurse’s assistant, pharmacy technician, etc.) are all great ways to explore medicine.

MD or DO?
Before you apply to medical school you should know that there are two types of medical training: Allopathic and Osteopathic. Allopathic medical schools are the traditional medical schools that confer MD degrees. Osteopathic schools confer DO degrees. They are very similar except that Osteopathic schools have additional courses in Osteopathic Manipulative Treatment (OMT). OMTs are manipulative techniques to help heal, relieve pain, and restore range of motion. There are approximately 74,000 DOs in the U.S., about 60% in primary care and the rest in a range of other specialties. The remainder of this handout focuses on the MD. To find out more about Osteopathic Medicine go to www.aacom.org.

What are medical schools looking for?
About 20,631 students nationwide entered medical school in 2015 (according to the Association of American Medical Colleges), 1,629 of whom were in Texas (according to the Texas Medical & Dental Schools Application Service). The average profile of a student accepted into medical school in 2015 was as follows, each of which must be completed with a grade of “C” or better:

- 2 semesters of English
- 2 semesters of Introductory Biology with lab and 2 semesters of Upper-Level Biology
- 2 semesters of Physics with lab (at SU, calculus is a prerequisite for taking physics)
- 1 semester of Biochemistry
- 3.70 GPA (3.64 science GPA) – nationwide; 3.74 GPA – Texas
- 31.4 total MCAT score (10.0 verbal reasoning, 10.5 physical sciences, 10.9 biological sciences) – nationwide; 30.7 total MCAT score (9.7 verbal reasoning, 10.2 physical sciences, 10.7 biological sciences) – Texas
- 1 semester of Biochemistry
- 2 semesters of General Chemistry with lab and 2 semesters of Organic Chemistry with lab
- 2 semesters of Physics with lab (at SU, calculus is a prerequisite for taking physics)
- 1 semester of Biochemistry

Admission to medical school is extremely competitive. Schools will examine your grade point average for both science and non-science courses. These grades and standardized test scores on the Medical College Admission Test (MCAT) are generally the criteria used to make initial selections from the applicant pool, so it is important to develop good study habits in your first year.

In addition to strong numbers, medical schools seek well-rounded applicants with diverse out-of-class experiences, including healthcare- and science-related activities. The essays you write as part of your medical school application, along with supportive letters of recommendation from faculty, will document these experiences. For more information, see our “Applying to Medical School” handout.

Once you move from “applicant” to “interviewee,” your selection is based on overall characteristics including motivation, experience, and communication skills. You need solid interviewing and communication skills. See our “Interviewing for Medical School” handout and schedule a practice medical school interview with a career advisor for more help in this area.

What type of major looks best?
Many applicants believe that medical schools want science majors or that certain programs prefer liberal arts majors. In actuality, medical schools have no preference for what your major is as long as you do well and meet the basic entrance requirements. In Texas about half of applicants are non-science majors (of which psychology is the most common major). We suggest that you choose the major that most interests you for several reasons. First, you are more likely to do well and actually finish the degree in a field of your interest. Second, exploring more broadly provides good insurance if you should happen to change directions or postpone entry. If your chosen major does not include the prerequisite courses for medical school in its curriculum, you must complete them either as science credit hours or elective credit hours. Since many science courses build upon each other, introductory biology and general chemistry are good courses to complete during your first year in order to get through the curriculum in a timely manner. However, be careful and do not overextend yourself, especially if your high school preparation is not as strong as it could be.

What courses are required for medical school?
The minimum entrance requirements for medical school in Texas are as follows, each of which must be completed with a grade of “C” or better:

- 2 semesters of English
- 1 semester of Statistics or Calculus (some schools require statistics, others require statistics OR calculus)
- 2 semesters of Introductory Biology with lab and 2 semesters of Upper-Level Biology
- 2 semesters of General Chemistry with lab and 2 semesters of Organic Chemistry with lab
- 2 semesters of Physics with lab (at SU, calculus is a prerequisite for taking physics)
- 1 semester of Biochemistry

Some medical schools also require additional courses in calculus, comparative morphology, and quantitative analysis; others do not accept AP credits for prerequisite course work. Behavioral sciences questions are now included on the MCAT, and although not required by medical schools currently, Principles of Psychology and Social Patterns and Processes are the two courses at Southwestern that may be helpful in preparing for the MCAT. Always check with medical schools which interest you early in your undergraduate career for specific course requirements.

What is the MCAT and when should I take it?
The MCAT (Medical College Admission Test) is a standardized, computerized examination designed to assess problem-solving and critical thinking skills, in addition to the examinee’s
knowledge of science concepts and principles needed for the study of medicine. The titles of the sections of the current exam are Biological and Biochemical Foundations of Living Systems; Chemical and Physical Foundations of Biological Systems; Psychological, Social, and Biological Foundations of Behavior; and Critical Analysis and Reasoning Skills. The latest you should plan to take the MCAT if you want to go directly to medical school after graduation is in the spring of your junior year of college, so that you can apply (and interview) early. You will need to have taken the requisite pre-med coursework by the time you take the MCAT in order to do well on the exam. Most students also take some kind of prep class from a test-prep provider. Never take the actual MCAT for practice. For further information about the MCAT, see the Pre-Medical Resources section below.

What timeline should I be following?

First-Year: Depending on your high school preparation, begin the academic requirements for med school your first semester. In the best-case scenario, you would start with introductory biology, calculus or statistics and general chemistry. Make an appointment with Dr. Keny Bruns, SU’s faculty pre-med advisor, to introduce yourself. Also communicate with your academic advisor and/or Career Services to get advice. Get your feet on the ground solidly in terms of your academics and then begin investigating out-of-class experiences to round out your overall educational process.

Sophomore: Continue building a solid academic record. Acquire out-of-class experience in volunteer, leadership, research and clinical settings. Review your progress with your advisors to make sure you are staying on track.

Junior: In addition to your academics and out-of-class pursuits, during your junior year you will typically apply to medical school, including soliciting letters of recommendation, writing your personal statement, preparing for and taking the MCAT and applying at the earliest possible opportunity (usually June of your junior year). See our “Applying to Medical School” handout for more details.

Senior: Your application will typically be completed by the start of senior year, or at least early in the fall semester. In the fall you will be interviewing and awaiting responses in the spring. Do a practice interview with Career Services before your actual interviews begin. See our “Interviewing for Medical School” handout for more details. Continuing to do well in your courses and building on your out-of-class experiences is crucial, especially if you end up waiting to apply or reapplying.

For a more detailed timeline, visit: [www.studentdoctor.net](https://www.studentdoctor.net)

How fast can I get into medical school? Of all those accepted to medical school, at least 98% will have attained a bachelor’s degree before they enter. While a bachelor’s degree is technically not required to apply to medical school, the disadvantages of not earning a bachelor’s degree are that you may miss out on the best parts of college (the social interactions and unrelated courses that provide depth and lifelong memories) and, again, you have no insurance should something go awry. It is rare that a student will have competitive enough grades, MCAT scores, extracurricular activities, and maturity to be admitted to medical school with only 90 credit hours. We strongly recommend that you take your time. Plan to take a full four years of coursework and strive to do well in all the courses you take. For elective courses, find some that are interesting to you but also that may be unfamiliar to you, to help “round out” your education. Medical schools give much more credibility to this type of record.

Should I plan for a “gap year”? Today, most graduate and professional school programs see more applicants who have worked after college before beginning graduate study, including medical schools. For medical school applicants, the advantages of a gap year or two include being able to take more time to acquire necessary application requirements (pre-reqs, volunteerism, clinical experience, etc.) while maintaining a strong academic record, gaining more maturity and life experience, and possibly saving up money. The downside of a gap year is the additional time before you’re out practicing as a physician.

How fast can I get out of medical school? Medical schools require four years of study. The first two years have traditionally been spent in concentrated learning of anatomy and basic sciences (unless you attend Baylor College of Medicine, which has condensed the classroom experience to 18 months). The third and fourth years have incorporated clinical rotations and patient care. Some colleges are beginning to incorporate patient care into the first two years as well. After finishing “undergraduate medical education,” depending on your specialization, you could be in residency (i.e. “graduate medical education”) an additional three to seven years.

What can I do now? Learn as much as you can about medicine and other health-related fields by reading, watching public TV specials, and interviewing and shadowing doctors. Volunteer weekends or apply to work next summer in a hospital or clinic. Develop your study habits and increase your reading efficiency. Be active in pre-health profession clubs. Attend workshops offered on campus. Get to know the pre-med advisor and be proactive to ask what next steps you can be working on. Keep good records of your experiences that will make it easier to relate them on applications in the future.

Pre-Medical Resources

- SU Pre-Med Advisor: Dr. Keny Bruns, [brunks@southwestern.edu](mailto:brunks@southwestern.edu), in the chemistry department is the faculty pre-med advisor on campus and chair of the campus Pre-Med Committee, which writes letters of recommendation for students.

Career Services also provides general pre-med advising, reviews resumes, applications and essays and offers practice medical school interviews. Periodically we provide access to healthcare professionals via on-campus events and off-campus job shadowing so that you can explore career options. We also host a number of medical-school-related events each semester, such as free practice MCAT, MCAT information session and workshops on medical school application and interviewing.

Alpha Epsilon Delta (pre-health) and Beta Beta Beta (biology) are campus honor and professional societies that sponsor various pre-med-related events. Other resources include:

- Association of American Medical Colleges: [www.aamc.org](http://www.aamc.org)
- American Association of Colleges of Osteopathic Medicine: [www.aacom.org](http://www.aacom.org)
- AAMC’s Applying Docs: [www.aamc.org/students/applying/](http://www.aamc.org/students/applying/)
- Official MCAT Website: [https://www.aamc.org/students/applying/mcat/](https://www.aamc.org/students/applying/mcat/)
- The Student Doctor Network: [www.studentdoctor.net](https://www.studentdoctor.net)