

The Medical College Admissions Test

What is the Medical College Admissions Test (MCAT)?

The MCAT is a test used by allopathic, osteopathic, podiatric and some veterinary medical schools as an aid in predicting an applicant's potential for success in the first two years of the medical school curriculum. The MCAT includes four sections or subtests: **Biological Sciences**, **Physical Sciences**, **Verbal Reasoning** and a **Writing Sample**. Two of these standardized, multiple-choice sub-tests are designed to assess facility with scientific problem-solving, critical thinking and understanding of science concepts and principles identified as prerequisite to the study of medicine. The science portions do not measure ability to memorize scientific facts, but are designed to test knowledge of basic concepts through their application to the solution of problems. The Verbal Reasoning section, which features dense and compact written passages, requires the examinee to find specific information in the passage and to identify conflicting points of view. This section draws upon material from the humanities, social and natural sciences; the information necessary to answer questions is presented in each passage. The Writing Sample asks examinees to demonstrate writing and analytical skills through the development of a central idea or topic, requiring the cohesive, logical and clear synthesis of concepts and ideas. Examinees are given 60 minutes to respond to two separate essay questions. Essay topics do not pertain to any technical content in science or to personal experience.

Which courses should I complete before taking the MCAT?

Concepts learned in one-year introductory courses in chemistry, organic chemistry, physics and biology are tested. UCSD students should complete the following UCSD courses (or their equivalent) prior to taking the MCAT.

Chemistry 6A, 6B & 6C (General Chemistry Lab, 6BL, may be helpful)

Organic Chemistry 140A, 140B & 140C, or 141 A, B, C (Organic Chemistry Lab, 143A, may be helpful)

Physics 1A, 1B & 1C (labs are integrated with each lecture course)

or 2A, 2B, 2C, & 2D, or 2AS, 2BS, 2CS & 2DS

or 2A, 2B & 2C, or 2AS, 2BS & 2CS (with independent study of atomic & nuclear structure covered

in D)

or physics majors take the Physics 4 sequence

Biology (BILD) 1 & 2 (with review or independent study of genetics and evolution) Many students, particularly

those who earned AP credit for BILD 1 & 2, should take upper division courses in cell, molecular biology and/or physiology before the MCAT in order to refresh their knowledge of biology and to be

prepared for the problem-solving format of the test.

Graphs, tables, diagrams or other visual representations of information accompany many of the problem sets on the MCAT. Examinees must recognize and use basic principles and methods for data presentation in the sciences. **Introductory science laboratory courses utilize these methods; therefore, it is strongly recommended that prior to the MCAT students take at least one lab course.** While a course in statistics is not required, students must know the basics, e.g., mean, standard deviation, correlations, etc., and be able to utilize these concepts in the interpretation of sample data sets.

Are there more courses which can help me?

Of all MCAT takers nationwide, humanities majors tend to score the highest because the MCAT, like most standardized tests, is a test of reading skills. Reading skills affect performance on each science section as well as on the verbal reasoning section. The MCAT is designed to assess mastery of text comprehension, critical thinking and logical reasoning skills, as well as communication/writing skills. To prepare for the MCAT, students are encouraged to adopt a steady habit of reading in English as much as possible and reading widely. We advise students to select readings that are good examples of argumentative discourse (like editorials and opinion essays) as well as reading narrative writing and expository/informative writing. Those who scored below 600 on the Verbal section of the SAT are strongly advised to focus on improving their skills for the MCAT Verbal Reasoning section. (See Career Services' handout on preparation for the verbal section.) Also, prior to the MCAT, students should complete the **writing courses** at their college to help develop proficiency in writing. Additional courses that require writing and offer feedback on writing might be helpful.

When and where is the MCAT offered?

The MCAT is currently offered in April and August each year. In 2006, the Association of American Medical Colleges (AAMC), plans to phase out the current paper-based, twice-yearly MCAT and, in 2007 phase in a computer-based test (CBT) which will create more frequent testing opportunities. The new CBT MCAT will be field tested on a very large scale in 2005. There are over 600 MCAT sites in North America and 13 international test sites.

When should I take the MCAT?

You can take the MCAT as soon as you have completed the courses listed above (with the possible exception of Chem 140C), but not later than one year before entering medical school. If you opt to take the test in August of the year in which you apply you may find that you are invited for interviews later than your peers who took it earlier. Plan to take the MCAT early to avoid delaying your application.

Take the MCAT when you are prepared to do your best. Plan to take it only once (not like you may have done with the SAT). If repeated, the second set of scores will be considered. MCAT scores up to three years old at the time of application *may be* acceptable to medical schools. Check Medical School Admission Requirements (MSAR), published by the AAMC, or osteopathic medical college catalogs, available in the Career Services' library for current information on the oldest MCAT scores accepted by individual schools, or visit their respective Web sites for detailed information (www.aamc.org and www.aacom.org). Pre-podiatry students should check with individual podiatry schools for the oldest MCAT test accepted for application consideration (see www.aacpm.org for details).

What scores do I need to be competitive for admission?

Both science sections and the verbal reasoning section of the MCAT have scores ranges from 0-15. 8 or 9 is usually the mean. Medical schools which grant the MD typically look for an average of 10, some expect higher, while D.O. and D.P.M. programs may accept slightly lower scores. Most medical schools' mean MCAT scores are reported by the AAMC in the MSAR (Medical School Admission Requirements). You should check the average score for each school to which you plan to apply keeping in mind that the average serves as a quideline not a prediction of your potential for success in admission.

How do I register for the MCAT?

Register via the Association of American Medical College (AAMC) Website, http://www.aamc.org/students/mcat/registration.htm.

How should I prepare for the MCAT?

Don't take the word of others; get to know the test yourself. We strongly recommend that you become thoroughly familiar with the MCAT as you start taking your pre-medical courses. It's easy to do. Download your own free copy of the AAMC's **MCAT Student Manual at** http://www.aamc.org/students/mcat/studentmanual/start.htm. The **Manual** will familiarize you with the MCAT and you'll learn what topics are covered. Test-taking suggestions and the reasoning skills required for each of the MCAT sections are described. The **Manual** also contains samples illustrating the various types of questions included in each test section. For each sample question, an explanation describes the reasoning used to determine the correct answer. In the science sections, focus on understanding basic concepts, not on memorizing facts.

Once you have completed the pre-medical courses listed above and reviewed the *Manual* thorough**ly**, *practice taking the MCAT* (unofficially, of course). In simulated test-taking situations, complete full-length practice MCATs. The AAMC offers both online and in print a series of MCAT practice tests with solutions. One online practice test with solutions is free. Costs for additional tests begin at \$40. Combination packages costs up to \$80. Once a practice test is completed and scored, you will be able to assess the skills you need to improve and the topics you need to study. In addition to four previously administered, full-length MCATs, MCAT Practice Online (available from the AAMC at www.e-mcat.com) offers in-depth diagnostic feedback, comprehensive solutions for every item, daily test-taking tips and a discussion board. Identify possible weak areas in knowledge or test-taking strategy.

Should I take a commercial preparation course?

After you have assessed your current level of knowledge and test-taking skills consider your motivation, commitment to the study process, self-discipline, organizational ability and self-confidence. If you have no time to organize your study and review, a prep course can be useful and if you spend a lot of money to take a course you may be more motivated to study.

Participating in a commercial course should be viewed only as a means to help structure and augment self-study. Commercial test preparation **services** offer courses that usually begin eight to fifteen weeks before the test date. Interested students are advised to compare programs because fees and course formats differ. Find one that matches your budget, learning style and time constraints. Some services will give partial fee waivers or discounts to students who receive financial aid. Listed below are some test preparation providers. We make no endorsements.

Whether you prepare on your own, in a study group or through a preparation course, your MCAT performance will depend most on the knowledge and skills you have developed over time and your familiarity and comfort with the test. Be sure to take many practice tests. As you practice, if you choose a wrong answer, understand why you chose it and why it was wrong. Practice builds confidence, lessens excessive stress and helps develop speed and timing.

Columbia Review (home study) www.columbiareview.com
Princeton Review: www.review.com
Kaplan Educational Center: www.kaplan.com
ExamKrackers: www.examkrackers.com

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