Skidmore MCAT Overview & Preparation

Basic Information on the MCAT

- Why take it? It is required of applicants to allopathic (MD) and osteopathic (DO) medical programs. Also, some post-bac programs and podiatric medical (DPM) programs also require the MCAT. It is a meaningful component of the holistic <u>review</u> that programs use to admit applicants into their program.
- How long is the test without accommodations? See below for the individual sections (four total), but in total the test is 6 hours and 15 minutes long.
- How do I get accommodations on the MCAT? Please review the MCAT Accommodations Application Guidelines & Requirements as well as the Overview of MCAT Accommodations.
 - o Note, a current evaluation is needed in addition to previous verification. Please discuss with Student Access Services.
 - o Review process may take up to 60 days and you want to give yourself time to appeal if needed, so please plan accordingly.
- When should I register? You register online. For test dates during the first half of the year (January-June), registration opens in October. For test dates during the second half of the year (July-September), registration open in February. Seats fill-up quickly, so register early, especially to reserve a seat on your desired date at your desired location.
- How much does it cost to take the exam? The <u>regular registration is \$345</u>. If you have financial need, you should apply for the AAMC Fee Assistance Program 2-3 weeks before your desired registration.
- How long should I study for the MCAT? Most applicants prepare by creating a structured study plan with ample time to prepare, including content review and use of practice questions and full-length exams. The reported national average study time is 12 weeks for about 20 hours per week. AAMC How to Create an MCAT Study Plan

Content of the MCAT

The MCAT covers 10 foundational concepts that are tested on the four sections of the MCAT along with four scientific inquiry and reasoning skills.

The Ten Foundational Concepts

- 1. Biomolecules have unique properties that determine how they contribute to the structure and function of cells, and how they participate in the processes necessary to maintain life.
- 2. Highly-organized assemblies of molecules, cells, and organs interact to carry out the functions of living organisms.
- 3. Complex systems of tissues and organs sense the internal and external environments of multicellular organisms, and through integrated functioning, maintain a stable internal environment within an ever-changing external environment.
- 4. Complex living organisms transport materials, sense their environment, process signals, and respond to changes using processes understood in terms of physical principles.
- 5. The principles that govern chemical interactions and reactions form the basis for a broader understanding of the molecular dynamics of living systems.
- 6. Biological, psychological, and socio-cultural factors influence the ways that individuals perceive, think about, and react to the world.
- 7. Biological, psychological, and socio-cultural factors influence behavior and behavior change.
- 8. Psychological, socio-cultural, and biological factors influence the way we think about ourselves and others.
- 9. Cultural and social differences influence well-being.
- 10. Social stratification and access to resources influence well-being.

The Four Scientific Inquiry & Reasoning Skills

- Knowledge of scientific concepts and principles.
- Scientific reasoning and problem-solving.
- Reasoning about the design and execution of research.
- Data-based and statistical reasoning.

Mapping the Ten Foundations, Four Scientific Inquiry & Reasoning Skills, and Skidmore Courses to the MCAT

Chemical & Physical Foundations of Biological Systems (CPFBS)	Critical Analysis & Reasoning Skills (CARS)	Biological & Biochemical Foundations of Living Systems (BBFLS)	Psychological, Social, & Biological Foundations of Behavior (PSBFB)
59 total questions 10 passages with questions 15 discrete questions	53 total questions 9 passages with questions	59 total questions 10 passages with questions 15 discrete questions	59 total questions 10 passages with questions 15 discrete questions
95 minutes Concepts 4-5	90 minutes	95 minutes Concepts 1-3	95 minutes Concepts 6-10
45% General (CH 125 or CH 126) & Organic Chemistry (CH 221 & CH 222) 25% Biochemistry (CH 341 & CH 342) 25% Physics (PY 130 & PY 140)	Reading passages from the humanities and social sciences. There is no specific content knowledge required but rather tests the skills developed in Humanistic Inquiry, Bridge Experience, and Global Cultural Perspective courses in	65% Biology (BI 107 & BI 108) 25% Biochemistry (CH 341 & CH 342) 10% General (CH 125 or CH 126) & Organic Chemistry (CH	65% Psychology (PS 101 or NS 101 or study on own) 30% Social Science (AN 101 or SO 101 or SW 212 or study on own)
the humanities and social sciences. 5% Biology (BI 107 & BI 108) Crientific Locaring and Researing Chille Real	221 & CH 222)	5% Biology (BI 107 & BI 108)	

Scientific Inquiry and Reasoning Skills Required for CPFBS, BBFLS, and PSBFB Sections
Knowledge of Scientific Concepts and Principles
Scientific Reasoning and Problem Solving
Reasoning about the Design and Execution of Research
Data-Based and Statistical Reasoning

MCAT Timing

- Please <u>review timeline and process</u> for applying to medical school and use the <u>HPAC</u> <u>Interview and Application Timeline Excel Spreadsheet</u>.
- The MCAT is offered in January, then in March through September (no tests October-December or February).
- Take the MCAT no later than early May of your application year if you want to know your score before applying. This will maximize your chances of interviews and acceptances. Medical school interview invitations are offered on a rolling basis—an earlier application means a higher likelihood of interviews and acceptances. The MD application (called the AMCAS) opens in May with the earliest date to submit in early June. MCAT scores are released approximately one month after the exam, so an early May MCAT date means you can apply early in June, knowing your MCAT score.
- If you take the MCAT later than early May of the application year, maximize your chances for interviews and offers by submitting the application in early June without an MCAT score. The application verification process does not require an MCAT score so the application can be processed prior to score release.

Considerations When to Take the MCAT Exam

Timing	Advantages	Disadvantages			
Regardless of other considerations, you want to tak	te the MCAT when you are ready to do	· · · · · · · · · · · · · · · · · · ·			
you take it more than once, you want to make sure you are position to do better on the next MCAT exam.					
Prior to Year Applying (Year or More before HPAC interview)	Scores available before application submission and, if necessary, have time to retake the MCAT after meaningful studying. More time can be devoted to preparing other application materials over the upcoming year.	May rush studying and completing pre-requisite courses, so score may be suboptimal. If you decide to take two gap years, your score may expire (good for three years).			
Summer/Fall of Application Year (Summer/Fall before HPAC Interview)	Fewer time commitments over the summer allows time to focus final studying before taking. Scores available before application submission and, if necessary, have time to retake the MCAT after meaningful studying. More time can be devoted to preparing other materials over the rest of the academic year.	Need to finish pre-requisite courses ahead of time. May impact other summer activities also important for your application (e.g., research, internships, volunteering, work, etc.)			
January through March of Application Year (Ahead of HPAC Interview)	Scores available before application submission and, if necessary, have time to retake the MCAT before application submitted or verified. Still allows time to focus on developing other application materials. Allows for extended studying for the MCAT (summer to when you take it). More likely to have completed prerequisite courses.	Need to coordinate MCAT studying with course work and activities along with taking the MCAT while taking classes. Less time to study ahead of retaking the MCAT. Retake is more for a bad day rather than not being prepared.			
April through Early May of Application Year (Right Before HPAC Interview)	Score are available before application submission Allows extended studying for the MCAT (summer to when you take it). More likely to have completed prerequisite courses.	MCAT studying is while you are also preparing your materials and for your HPAC interview along with taking courses along with taking the MCAT during the semester. Not realistic to restudy and retake the MCAT in a timely manner for application cycle.			
Mid-May through early June of Application Year (Right After HPAC Interview)	More time to study. More likely to have completed pre-requisite courses.	Must juggle MCAT study with finals and completing application(s) as well as preparing for the HPAC interview.			

		Application should be submitted before MCAT score is released to increase odds of being accepted. Unrealistic to restudy and retake in a timely manner for this application cycle. Could lead to later screening, interview invites, and offers.
June through July of Application Year (After HPAC Interview)	Time to focus on studying after classes have ended.	MCAT studying and exam while also submitting primary and secondary applications. Application should be submitted before MCAT score is released to increase odds of being accepted. Not enough time to restudy and retake the MCAT in a timely manner for this application cycle. Likely will delay screening and interviews, decreasing odds of an offer and if accepted also likely delayed.

How to Prepare for the MCAT

• Coursework: The premedical prerequisites - Biology (BI 107 & 108), General Chemistry (CH 125 or CH 126), Organic Chemistry (CH 221 & CH 222), Physics (PY 130 & PY 140), and Biochemistry (CH 341 & CH 342) - will provide a strong scientific foundation for the CPFBS and BBFLS sections. However, some content you may need to learn more than is covered in those courses through studying on your own or taking additional coursework (e.g., a 24X biology course). For the Psychological and Social Foundations, we encourage students to take a relevant behavioral (PS 101 or NS 101) and or social science (AN 101, SO 101, or SW 212 as well as potentially Bridge Experience courses) courses or study the material on your own. No single pair of courses will cover exactly what will be on the MCAT PSBFB section. Please discuss with our HPAC advisor. Humanistic Inquiry, Global Cultural Perspective, and Bridge Experience courses will help with the CARS section.

Content Review:

- The AAMC is the official test administrator and their materials will most closely simulate the actual exam. They offer <u>numerous free resources</u> and others for a fee.
- Please review the <u>HPAC Standardized Testing</u> page for additional resources and links to test preparation companies.
 - Note AAMC supports the free <u>Khan Academy MCAT tutorials</u>.

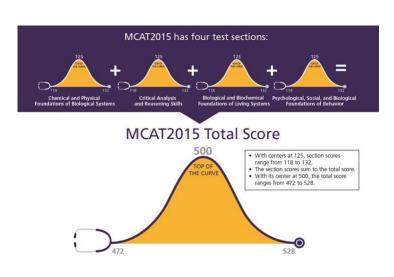
- A range of test preparation companies exist. Compare them based on multiple factors that include:
 - cost;
 - duration;
 - type of instruction (online, in person, group, individual);
 - the amount of personalized support;
 - nature of prep books;
 - access to question banks and practice tests; and
 - the amount of focus on strategies vs. content.
- Typically, you will want a structured study plan with ample time to prepare, including content review and use of practice questions and full-length exams (equivalent on average to studying for 20 hrs/wk for 12 weeks). <u>AAMC How to Create an MCAT Study Plan</u>

Practice Tests:

- Most examinees take a diagnostic test early in their test prep to gain familiarity with the content and format, then use additional practice exams to guide their continued content review.
- Our applicants report taking an average of 8-10 practice exams. Take exams until your scores are stabilizing in a range that will make you competitive for schools of interest.
- <u>AAMC Full-length exams and practice questions</u> are often noted as very helpful.
- Many prep companies offer free preparation materials that are shared through their mailing lists.

MCAT Scoring

Each of the four sections is scored from a low of 118 to a high of 132. The section scores are combined to create a total score that will range from 472-528. Scores are reported along with confidence bands and percentile ranks that reflect information about your score relative to other examinees – a score of 500 will be at or near the 50th percentile.



From https://students-residents.aamc.org/mcat-scores/mcat-exam-score-scale

MCAT Scores and Acceptances

<u>AAMC Facts</u> has additional details on scores of those applying and those who matriculated into medical school, including a table of <u>Acceptance Rate by GPA/MCAT Score</u>. In summary in recent years for those matriculating into medical school (44% of all those who applied):

- Mean overall GPA 3.79 ± 0.23
- Mean overall MCAT 511.8 ± 6.7

CPFBS: 127.9 ± 2.3 CARS: 126.9 ± 2.3 BBFLS: 128.1 ± 2.1 PSBFB: 128.9 ± 2.0

For <u>Skidmore students</u> in recent years who matriculated into medical school (80-82% in recent year, 60-62% on the first attempt), we have the following data:

- Mean Skidmore GPA 3.65 ± 0.25 (median 3.72), range: 2.85 to 4.00
- Mean overall MCAT 509 ± 7 (median 511), range: 492-526
 - CPFBS: 127 ± 2 (127), range: 121-132
 CARS: 127 ± 2, (127), range: 122-131
 - o BBFLS: 128 ± 2 (127), range: 122-132
 - o PSBFB: 128 ± 2 (128), range: 123-131

