Advice on MCAT Preparation for SIE Students

The more you know about the MCAT, and the earlier you begin to familiarize yourself with it, the more successful you will be. Below is a listing of Dr. Presson’s advice. If you have any suggestions or requests for improvement, contact Dr. Presson via email at jpresson@umd.edu.

The Importance of the MCAT for Admission:

The MCAT is one of the three legs below upon which your application to medical school depends on:

1. High grades in a range of rigorous science courses
2. High quality, consistent clinical experience interacting with patients and physicians
3. A high MCAT score

The knowledge of what MCAT score needed is still in a state of flux, given the few years of data on the new MCAT. SIE recommends for you to aim for a score in the 80th percentile, although students with lower scores certainly do get admitted. To attain a high MCAT score, SIE provides an intensive list of recommended courses. UMD faculty have examined the content of the MCAT in detail. The courses recommended by SIE cover the large breadth of topics potentially seen on any given MCAT. This material may be able to be learned on your own. However, for most students, mastering the content is more productive while in a structured course.

Overall Preparation Guide:

- **Start Early:** You do not have to do intensive content review early, but you should begin looking at MCAT material as soon as you start taking courses in SIE. This will help you to understand the logic of the SIE recommended course plan, and help you see what information you learn will be applied on the exam.

- **Plan for 4 to 6 months of intensive preparation:** You cannot expect to complete your “studying” for the MCAT in 2 to 3 months. Beyond the large breadth of content coverage, the MCAT requires you to apply what you know in interdisciplinary contexts. These skills cannot be mastered in this short amount of time. It is important to set aside time to intensively review and complete practice tests.

- **Take your time:** Understandably, SIE students are often in a hurry. Students feel that they MUST matriculate to medical school as soon as possible to get on with their goals. For most students, a rushed timeline does not work. Medical schools want high quality, well prepared applicants, rather than applicants who were obviously in a hurry. Many students want to squeeze in summer courses, skip over courses they took before but did poorly in, or to simply speed up the process. When in a hurry, take the long way. If you take short cuts, you are not likely to reach your goal.

Use Association of American Medical Colleges (AAMC) Material:

- I would not disparage commercial products, but AAMC wrote the exam. Their material is the only material that is truly pertinent. Take time to explore the AAMC website (https://www.aamc.org) and their MCAT page at https://students-residents.aamc.org/applying-medical-school/taking-mcat-exam. A list of AAMC materials that are either free or for purchase is below.
• **Medical School Admission Requirements (MSAR)** will help you identify schools through their online database and compare information such as what MCAT score the school typically look for when reviewing. See: [https://students-residents.aamc.org/applying-medical-school/applying-medical-school-process/deciding-where-apply](https://students-residents.aamc.org/applying-medical-school/applying-medical-school-process/deciding-where-apply).

• **Everything about the MCAT**: See [https://students-residents.aamc.org/applying-medical-school/taking-mcat-exam](https://students-residents.aamc.org/applying-medical-school/taking-mcat-exam).

• **What’s on the MCAT Exam?** This page provides a detailed list of overall topics covered on the MCAT in PDF and graphical format. It will help you focus on course content, and appreciate the topics and rigor in SIE courses. You will need to learn some content on your own as not all of the content will be taught in courses. See: [https://students-residents.aamc.org/applying-medical-school/article/whats-mcat-exam](https://students-residents.aamc.org/applying-medical-school/article/whats-mcat-exam).
  
  - The best source for content review is college level textbooks. You can use your past college science textbooks, or buy old or used editions online. To find material you feel less confident about, use the index, table of contents, and figures in the textbook.
  
  - As seen in the MCAT content guide, the MCAT content requires more understanding of concepts, mechanism, processes, and overarching principles, than isolated facts.
  
  - When going through the content list, cross out any topics you believe you understand well and focus on the topics you do NOT understand.
  
  - If topics you do not understand have already been covered in your courses, gradually begin reviewing these topics primarily using textbooks. Plan and time your review on these topics.
  
  - If topics will be covered in your future courses, pay close attention to them when they come up.
  
  - Again, do NOT expect all of the content to be covered in SIE courses. SIE courses are the best source for learning content, but are basic science courses not MCAT prep courses.

**Read, Read, Read:**

- **Read broadly through the critical reasoning section.** Find diverse, but different material to read in areas of which you are not familiar with. Convince yourself to do it more.

- **Read and critique research papers in basic science, especially in biological, life sciences, and biomedical.** The MCAT practice exams have summaries of research papers you must read, understand, and critique. A list of articles from which the summaries are from is available. SIE offers seminar courses in scientific reading at least once a year to help students prepare. A good approach to practice reading would be to choose a basic research topics that is of interest to you from a course. Ask the faculty for suggested research papers you can utilize to begin reading in a particular area. Use google scholar and the UMD research port to view and download research papers.

**AAMC Practice MCAT Material:**

- If this list is not clear to you, Dr. Presson can annotate the list for you. See: [https://students-residents.aamc.org/applying-medical-school/article/online-practice-mcat-exam](https://students-residents.aamc.org/applying-medical-school/article/online-practice-mcat-exam).
• It is strongly suggested that you purchase practice items early and get a feeling for the kinds of questions in each section. Once purchased, each assessment can be entered multiple times if you judiciously plan each purchase to get the most out of them. During practice, you have the option to turn on answer explanations telling you why AAMC picked the answer. Since the assessments are structured almost exactly like the actual MCAT Exam, you can get use to the format. This can be cumbersome to navigate, but still very useful.

• Below is a possible time table when using AAMC practice material. Pay attention to what AAMC calls each practice assessment.
  1. Topic section banks
  2. Free mini test e-book
  3. Official guide questions
  4. Sample test

• 3 to 4 months before taking the MCAT exam, it is strongly suggested to use both full length practice tests to the fullest. Do not get too early on the full length practice tests. Instead, use other practice material as full simulations of the real exam while getting closer to your test date. At least once, be sure to work completely through the practice test in order to simulate the actual test.

• AAMC has contracted with Kahn Academy to produce practice material that is of high quality and free. This is also a good practice material source. See: https://www.khanacademy.org/test-prep/mcat.

UMD MCAT Preparation Program:
• The UMD MCAT Preparation Program is offered every spring (January – early April). The MCAT Prep Program involves material review done by PhD faculty and AAMC practice material. See mcatprep.umc.edu.