

MCAT GUIDE: From A Transparent 90+ Percentile Scorer

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After taking the MCAT twice and being able to achieve my goal of breaking into the 90th percentile, I want to be able to share what I think worked and what did not work. My guide is by no means the only way to break into the 90th percentile and there is no guarantee that this method will work just because it worked for me. Take everything with a grain of salt, implement personal study tactics that work for you, and keep pushing yourself until you get to where you want.

For those just starting out in the MCAT process, a few main points of clarification may be helpful while reading this. The MCAT exam is scored from a 472 - 528 and a particular score relates to a percentile which gets adjusted each year. There are four sections in the exam, and go in the order of; Chemical and Physical Foundations of Biological Systems (CP), Critical Analysis and Reasoning Skills (CARS), Biological and Biochemical Foundations of Living Systems (BB), and lastly the Psychological, Social, and Biological Foundations of Behavior (PS). You will see people refer to their score as an overall (ex. 500) and a section breakdown (ex. 128/128/128/128). The maximum score in each section is 132, with a low score of 118, hence the range of 472 - 528. For more information, visit [Percentile Ranks for the MCAT Exam](#).

Now, you may be wondering, well what is a good score? The answer to this question is very complex and is dependent on a lot of factors. A particular score does not indicate whether or not you will get into medical school, but it may influence which schools you will apply to. For allopathic (MD) schools, the goal should be above the 80th percentile (510+). Osteopathic (DO) schools tend to have a lower MCAT average around the 50th to 60th percentile (501-504). Using this [Table](#) released by the AAMC in late 2020, it appears the average MCAT score for applicants in the 2020-2021 cycle for MD schools was a 506.4, while the average MCAT score for matriculants (those who got into a MD medical school) was a 511.5. With all this said, a certain score isn't indicative of your abilities or whether or not you will become a doctor. I provide this information to help you prepare, set goals for yourself, and be able to reflect and analyze your own MCAT progress. Always be sure to contact your premed advisor to discuss more details regarding an MCAT score and if you are ready to take the exam and also apply to medical schools.

One last bit of background information is that the MCAT is developed by the American Association of Medical Colleges (AAMC). They provide their own practice bundle which is considered the “gold standard” for MCAT prep. The AAMC has their own test “logic” which will differ from third party companies (other companies that create MCAT prep materials). When I talk about materials, everything is compared to the AAMC material.

My goal is to be as transparent with everyone on my journey to become a physician and the MCAT is one of the major hurdles that must be overcome. I took the MCAT for the first time in 2019 and scored in the 67th percentile with a score of a 506 with a section breakdown of

126/123/128/129. For me, this was not the score I knew I could achieve and therefore I went back to the drawing board, reflected on my study schedule, created a new one, became more disciplined and focused, and retook the MCAT in the fall of 2020. I broke into the 94th percentile with a score of a 517 with a section breakdown of 130/125/132/130. Clearly my CARS section still lacked tremendously, but I was able to improve in all 4 sections and I learned many valuable lessons and study strategies. I aim to share what I did, what resources I used, and any tips I have to help everyone succeed on the MCAT exam.

Materials Used with Brief Explanation

1. [AAMC's "What's on the MCAT Exam" PDF](#) - Free
 - a. This should be every student that is preparing to take the MCAT first stop. The 111 page PDF is full of all the relevant information regarding the MCAT. However, the most important part starts on page 26-100 which provides a detailed list of every topic that could be covered on the MCAT.
 - b. This resource should help guide you when taking notes and to understand the scope of the exam.
2. [Khan Academy \(KA\) Videos](#) - Free
 - a. I solely used KA videos and their MCAT playlist for content review
 - i. I know a lot of people like to use a textbook MCAT series such as the Kaplan series or the Princeton Review series. What I would tell people is that if you do not learn from textbooks, don't force yourself to read these books. These books are also extra money that you will need to spend and in my opinion are not necessary to use if you think videos will be enough. I think KA does a great job explaining the majority of topics covered in the MCAT and splits everything up by section and even subsection.
 - ii. Another important piece of information regarding KA is that they are the only resource that is partnered with the AAMC and thus their material is the most representative of what is actually tested on the MCAT.
 - iii. It is vital to take notes while watching the videos (I will expand on note taking below) and I recommend doing the practice problems that KA provides.
 1. Do the questions for a particular section a day or a few days after you watch the videos, as this will test if you retained the information.
 2. Note: These KA questions are hard and some test information that was not provided in the videos, but they are still good practice nonetheless.
3. [ANKI Flashcard App](#) - Free (Windows and Android) or \$25 on ios
 - a. ANKI is a flashcard app, similar to Quizlet in a sense, but focuses on a spaced repetition algorithm to help keep concepts in one's memory.
 - b. You can either create your own cards (this is definitely recommended, but in my opinion not needed and there is a learning curve to creating these cards) or you can download public decks made by others.
 - i. There are a few "gold standard" decks from MCAT takers that can all be found via google, or on the MCAT or MCATAnki subreddits.
 1. MileDown comprehensive deck
 2. JackSparrow comprehensive deck
 3. Cubene comprehensive deck

4. Ortho528 comprehensive deck
5. Bouras comprehensive deck
- c. I personally used [MileDown](#) deck to completion. This deck does a great job at being concise, uses color coding, and includes fill in the blank cards rather than a long winded answer like some decks do. It also includes relevant links for the concept being tested so you can watch a relevant video if you wish.
 - i. I also used Ortho528 and JackSparrow decks a little bit to see which deck worked for me the most. These decks were good, but not as organized as MileDown in my opinion.
 - ii. I recommend downloading a few decks and seeing what works for you the best before fully committing to one deck.
4. [Jack Westin CARS practice](#) - Free
 - a. The CARS section contains no content but heavily relies on reading and analyzing passages. The best advice to improve on in CARS is to practice, practice, and practice more. Jack Westin offers daily free CARS passages which are in the AAMC testing format.
 - i. Note: the AAMC CARS practice is the best as the AAMC has their own logic in how to come to answers. All 3rd party companies are slightly different from AAMC, but I found Jack Westin to be fairly accurate and for free, it was definitely useful.
5. [UWorld](#) - 3 month access for \$239
 - a. UWorld is in my opinion, along with many students who write reviews on the MCAT, the best 3rd party resource for MCAT prep. UWorld provides over 2,000 questions on all of the sections covered in the MCAT and provides detailed answers and explanations for their questions.
 - i. This resource is definitely expensive, but seriously it is worth it. I would purchase it after content review (KA videos and note taking is done) and after you take a sample practice exam (Blueprint free full length preferably). I say this because you will only have UWorld access for 3 months.
 - ii. I would give yourself 6-8 weeks to complete all of these questions along with taking thorough notes on what you practiced.
6. [Blueprint Practice Exams](#) - 6 practice exam access for \$149
 - a. Practice exams are a must, and although the AAMC full length (FL) exams are the most representative to the real exam, taking more practice exams and building endurance is vital. I personally used Blueprint for extra practice exams and it appears to be the “best” 3rd party exams according to many test takers on forums. Blueprint offers a *free* ½ length diagnostic exam along with 1 full length exam. The next 5 exams that you get for \$149 are mostly great. I think they are harder than the AAMC practice and the CARS in the Blueprint exams are of a slightly

different logic, but they are still worth it for the endurance and to encounter more difficult questions.

- b. Note: Since the FL1 from Blueprint is free, and I believe you can find other free FL from Altius and The Princeton Review, if you do not want to buy all of the resources in this list, I would take out the Blueprint bundle first.

7. [AAMC MCAT Official Prep Online-Only Bundle](#) - \$268.80

- a. If there is only one MCAT resource that you can buy, this is the one. It is unfortunate that you have to pay to take the exam and then pay another close to \$300 for the most representative prep, but it is what it is. This bundle provides 4 full length exams along with a sample which is another full length exam but it does not provide you with a score. It also includes a section bank for the CP, BB and PS section. It has an official guide which includes questions for CP, BB, CARS, and PS. It has question packs for biology (2), chemistry, physics, and CARS (2). It comes with online flashcards and finally a new CARS diagnostic tool.
- b. It is important to note that most students use the AAMC material in the last month of the MCAT preparation as it is the most representative of the real exam you will see on the test date. These full length exams will give you a great idea of where you will (probably) score on your real exam. Most people say that you will score +/- 3 points from your average of the four full length AAMC exams (assuming you took them in the last month or so of your preparation). If your practice exam scores, especially the AAMC ones, are not where you want to be scoring, I would consider pushing back your exam until you are ready and are reaching your target score.
- c. Note: AAMC does have a financial assistance program on their website to help with costs if you fit the criteria. I highly recommend looking into this if the cost for purchasing this resource is holding you back from doing so.

Generalized Tips

1. Study how you normally study
 - a. The MCAT is a beast of an exam and it may feel overwhelming at first, but you must treat it just like another class. If you study the best by reading a textbook than taking notes after, do that. If watching videos is your method of studying, stick with that. If you hand write notes for your classes, handwrite your MCAT notes.
 - b. For my first attempt at the MCAT I decided I would type my notes even though I had always written all of my notes out. I switched up my method because I thought handwriting all of my notes would take too long. Though this was technically true, I realized I did not learn as well when typing my notes. On my second attempt, I did what I knew best. I hand wrote my notes, and I honestly attribute my score increase to this small change.
2. Create a schedule and follow it
 - a. As mentioned, the MCAT is a large exam and can feel overwhelming. It is important to plan out what you will study everyday, what concepts you want to cover, what hours you will spend studying, when you will implement practice questions, and when you will take practice exams. I personally used an excel sheet that I would fill out every month with what I would cover each day for that month.
 - i. I think it is vital to generate your own schedule that works with your life schedule and your study habits, and thus I am going to refrain from sharing my complete schedule. However, I will share a few notes regarding how I scheduled my day for both a content review day and a practice question day.
 1. Content Review Day
 - a. After reading the MCAT PDF on what is on the MCAT, you will realize that there are topics associated with a numerical value and subcategory (ex. Category 1A is related to the “structure and function of proteins and their constituent amino acids.”)
 - b. I would look at Khan Academy and see how many videos are associated with that category.
 - i. Depending on the number of videos I would allocate 1-3 days for a particular category.
 1. Ex. On Monday I would do 1A, Tuesday and Wednesday do 1B, Thursday 1C, and Friday I would start 1D, Saturday would be a flex day, and Sunday would be a day off.

- a. A flex day would be allocated so I could finish whatever I did not get to or get a head start on the next sections.
 - ii. I would watch a video and take notes on the video and repeat this for around 6 hours per day.
 - iii. I would then spend an hour doing CARS practice via Jack Westin.
 - iv. I would then lastly spend an hour or so on Khan Academy questions that they provide for each content category. I would do questions from a topic I watched videos on a few days ago to test my knowledge.
- 2. Practice Question Day
 - a. At the point of practicing each and every day, you should be using ANKI cards.
 - i. I think I did 100 new ANKI cards per day (this may be too much, but you will get a groove for how many new cards you can do per day).
 - ii. I would start my day completing my ANKI cards (new and review cards) which would take 1-2 hours.
 - b. After these two hours or so (and a little break), I would start doing UWorld.
 - i. I would do 50 UWorld questions at a time, untimed and not on the tutor mode, meaning you will not get the answers right away.
 - 1. I would do all these questions on ONE subsection (ex. Amino Acids, Enzymes, etc.)
 - 2. I would try and complete these 50 questions in 60-90 minutes.
 - ii. The reason I would do a large quantity of questions in one specific subsection was so that after I completed them, I could take notes on EVERY question and label those notes under the specific section so I could review it in the future.
 - 1. This note taking process would take 2-3 hours.

- c. I would then do some CARS practice, if I did not do UWorld CARS practice throughout the day.

3. Practice Exam Day

- a. A practice exam day should only consist of a practice exam
 - i. I would recommend starting at the time that you will take your actual exam, and take it in “real testing conditions.”
 - 1. This means, do not pause the exam, do not look anything up, and take only the breaks allowed.
 - b. The day following a practice exam, I would take a rest day.
 - c. After the rest day, I would take a day to review the entire exam.
 - i. You could review the exam over 4 days (1 section per day) if you would prefer to only review an exam for 2-3 hours per day and then spend other time doing UWorld or other practice questions.
 - 1. I ended up shifting to this method.
 - ii. A disclaimer I am going to make is that I was studying full time (8+ hours a day). I, fortunately did not have anything else going on with my life (I had just graduated and also it was during the COVID-19 pandemic).
 - 1. I would highly recommend studying in the summer and not during the semester if you are still in school.
 - 2. If you are able to study full time, I would recommend doing this.
 - a. You will be able to volunteer for a few hours a week while studying full time and I recommend doing this as well.
 - 3. If you must work or you are still in school, your study timeline will be extended as you will not be able to spend 8+ hours studying per day.
 - a. I would stretch to a 6 month study plan with 1-2 hours of studying per work night and extended study sessions on your days off.
 - 4. On average, I would say 500 hours of studying is how many hours most students put into studying for the MCAT exam.
- ### 3. Be disciplined, but don't go insane
- a. Once you create a schedule, stick with it. Do not set crazy expectations like 15 hour study days, or studying every single day for 3 months straight. You need breaks, you need days that you do not think about the MCAT, or you will get

burnt out very quickly. I would try not to exceed 8 hours a day if you are studying full time and I would give yourself one rest day per week.

- i. Note: there will be some days you want to put an extra hour in to finish a concept, or you may want to complete your ANKI cards on your day off so you do not have double the next day - this is okay. I did this, but similarly there were times I took 2 days off at a time. Be flexible to a certain extent.

4. Be honest with yourself

- a. With a schedule, it is important to record what you do every day. For each day in my excel sheet, I had a note section where I recorded how long I studied for, what I completed, how I did on practice, and where I put my general thoughts on the day. If there was a concept I needed more time with, I put this and I altered my schedule for the week. Do not rush through things just to follow your original schedule. Be honest with yourself because you are only lying to yourself if you say you are proficient at a topic when internally you know you need more time with it.
- b. This tip also has a more large scale point to it. If you are approaching your test date and you are not ready or not scoring in your target range on practice exams, postpone your exam. I will be the first to tell you that I should have not taken my first attempt MCAT when I did. It will be extremely hard to push your test date back since you'll want to get it over with or you will convince yourself that the actual test will be better/ easier than your practice ones. It won't be. Don't be afraid of others judging you for postponing your exam. Only you know what's best for you, this is your path to medical school, no one else's.

5. Practice, practice, and practice more

- a. The MCAT has an incredible scope of content that is tested and I think many students get stuck in the content review phase of studying. Though it is important to have a good foundation of content knowledge, practicing and applying that knowledge is where you will truly start to learn the material. It is easy to memorize a concept, a pathway, or a term, but remember the MCAT is mostly passage based questions where you have to reason through what you are given and use your knowledge on top of that. You learn how to do this through practice. That is a main reason why it is vital to complement the KA videos with the practice questions they provide. This is why UWorld is a great resource and also why taking practice exams are more helpful than going back and reading a chapter or watching a video again. Of course, having a foundation is key and content review is necessary, but I would say around $\frac{2}{3}$ of MCAT studying should be practice and only $\frac{1}{3}$ should be content review.
 - i. Note: Content review is when you are not actively practicing as much and when you are either watching KA videos or reading a textbook along with

taking notes. Most people do this for 6-8 weeks and then do practice for 8 weeks following. This is why a 3-4 month study schedule (if you can devote full time studying) is an ideal time frame.

6. Reviewing is key

- a. This concept piggybacks the idea of practice, practice, and more practice. There is equal, if not more, importance in reviewing all your practice questions. Correct or incorrect, you should give a second look at every question you do. There are multiple reasons to do this. First, this tactic will help you know what concepts you know and do not know. If you get a concept wrong, say for example an amino acid question, you directly have identified a weakness that you have. You can now set time to study this concept. Secondly, reviewing enables you to read why an answer is right and why the others are wrong. Identifying the correct reasoning for an answer is key as it will speed up the process for finding correct answers on future practice questions. This will also allow you to see trends of why certain answer choices are wrong, or even trends of what questions are often asked. Thirdly, reviewing questions indirectly allows you to create new questions. Say there is an amino acid question and even if you got it right and you understand it, you can use this question and manipulate it to see what could have been asked to make a different answer choice correct. Lastly, review correct questions because sometimes you may guess, or select an answer for the wrong reason. If you do not review these questions you will cement a wrong reasoning in your brain which may negatively impact your answering for a future question.
- b. To add on to this point, when reviewing practice exams or just any questions in general (UWorld questions for example), it is important to be actively reviewing the questions rather than passively reviewing. What I mean by this is that you should not just be reading the questions and the explanations given then move to the next question. It is vital to be taking notes on your reviews! This is something I did not do on my first attempt at the MCAT and it definitely showed. I tricked myself in thinking I was reviewing, but in reality I was just glossing over the questions. When taking notes, it is important to be taking notes on the topics covered, and any information that the question provides. Using the amino acid question further, maybe reviewing this question showed you that you do not know all the amino acid one letter terms. Write these down! Try and keep your review notes organized, you can create a sheet for each section and even a subsection so that when you want to do an overall review on your notes right before your exam, you can quickly find the sheet where you took amino acid notes etc.

7. Do not give up

- a. The MCAT is challenging and that is definitely an understatement. I remember taking my first diagnosis exam and scoring in the 490s. Even after content review

my first time around I was barely breaking above 500. There were many practice exams I did worse on than my previous practice exam. There were days that I could barely study or focus. There were days where I would get “easy” questions wrong. There were many days that I just wanted to give up. It was frustrating, but it is vital to keep sight on the end goal and your dream. Take it day by day, month by month. You will have off days, but try and keep progressing. Whatever happens, do not let the MCAT defeat you.

Section Specific Tips

1. CP

- a. The CP section in my eyes is split into 4 major categories: general chemistry, organic chemistry, physics, and biochemistry.
 - i. General Chemistry
 1. I would personally say this is the most important category in the CP section and is often overlooked. General chemistry is often thought to be not as challenging compared to organic chemistry or physics and therefore I know from personal experience, that this section gets a quick pass and as a result can be detrimental.
 - a. There are a few formulas in this section that it is vital to know and know how to use them. These include your pH, K_a , pK_a and related formulas.
 - b. There are a few “must know” facts such as your strong acids and bases which will make pH questions much easier.
 - c. Titrations are also very common, so understand how these work and questions related to it are helpful.
 2. UWorld is the best resource for this section in my opinion as it forces you to complete the questions and test yourself.
 - a. Make sure you are reviewing all of these questions in depth using the method I explained above.
 - b. Test yourself on frequently seen formulas, write them down every week to see if you can remember them.
 3. In short, for this section, do not overlook it simply because it is “general” chemistry!
 - ii. Organic Chemistry
 1. This along with physics are both highly dreaded topics in this section. Fortunately, from my experience and looking at the percentage breakdown of how much organic chemistry is covered on the MCAT exam, it is not as much as one would think. Organic chemistry is a very complex subject and is often dreaded in undergrad. The MCAT tests the basics of organic chemistry, such as naming molecules, identifying basic reactions, and many topics learned in an organic chemistry lab. Don’t stress over the small and rare reactions you learned in class, focus on the big picture and the most common reactions. Think about how certain atoms or functional groups impact a molecule’s physical properties and know the common reagents for reactions. I recommend drawing out reactions when studying for this section, don’t try and do everything in your head.

iii. Physics

1. Similar to organic chemistry, physics is not a huge portion of the exam. It can be daunting when you realize how many formulas there are that you “should” know for the MCAT exam. My tip is don’t be afraid of the physics section and definitely do not overlook it. Don’t try and just memorize the formulas, understand the terms and variables in them. Once you learn the reason to use a formula, you will be able to understand the related formulas. I recommend regularly doing flashcards with the formulas and even writing out one formula and then think and write out all the related formulas. Mnemonics are also extremely helpful for physics, such as a mnemonic for the electromagnetic spectrum. Many mnemonics, for physics and all sections, can be found online but it may be more beneficial to make one up that you can remember.

iv. Biochemistry

1. This is the most important topic on the MCAT based on sheer percentage as biochemistry can be seen in the chemistry and physical science section along with the biology section. For the chemistry section, the biochemistry tested will be more related to enzyme kinetics, enzyme mechanisms, and analysis of charts and tables. This is compared to the biochemistry in the biology section which focuses more on metabolic pathways and hormone regulation. I highly recommend knowing the enzyme kinetic equations (ex. K_m , V_{Max} , K_{Cat} , etc.) and how they are related/intertwined. Additionally, know what these terms mean and how they are found on graphs or in tables. For this section, practice will help you identify trends, so UWorld and practice exams are great!
- b. Overall, the CP section is often highly dreaded due to the amount of formulas and information being asked. There are a few general tips for this section. First off, get comfortable doing math, more specifically MCAT math. The MCAT does not allow a calculator and thus all math needs to be, and is asked in a way, to be done in your head or on a piece of paper. Rounding numbers will be your best friend. For example, gravity on the MCAT is no longer 9.8 m/s^2 , it is rounded to 10 m/s^2 . The answer choices for math questions are drastically different and thus rounding to whole numbers to easily multiply or divide should get you to an answer that is “close enough” to an answer choice. In addition to mental math, units and unit analysis is an essential concept to know. There are times where a question with math in it can be completed without doing any math simply by knowing how to convert units or knowing the unit for the answer. It is important to know how to go from grams to micrograms, or joules to newtons. By mastering mental math

and unit conversions, the CP section becomes incredibly easier to tackle in my opinion. The other general tip I would have is not to overlook any topics in this section, but also do not study too much of the minor details. Study organic chemistry and physics even if you think you are “bad” at those subjects, do not assume general chemistry is easy, and do not forget to understand all the formulas that could be asked.

2. CARS

- a. CARS stands for Critical Analysis and Reasoning Skills. This section requires no background knowledge and does not relate to science. There is no formal “studying” such as reading a book or watching a video to learn a concept as you can with the other sections. CARS is a very unique section which can either be very stressful, or can be a walk in the park. For me, CARS was the hardest section and the most dreaded section. However, although I never really “cracked the code” of CARS, I did see improvement in my CARS scores.
- b. To start, do not overlook CARS. Do not think “this section isn’t related to science, so I do not need to practice it.” Do not be like me. Practice, practice, and practice. I highly recommend doing at least 1 practice passage per day, but would extend this to doing 3 per day, especially if CARS is a challenge for you. Jack Westin and Khan Academy are your go to resources for free CARS practice before you use the AAMC material.
 - i. There are three major points to CARS success in my opinion. Understanding the passage, seeking the logic within the system, and timing.
 1. The first part of CARS practice is understanding how to read a CARS passage. When starting off in this section, take your time and read to understand the main idea. Ask yourself, what is the purpose of the passage, what is the author trying to say, and what is their tone and opinion on the matter?
 2. The first part leads into the second part directly, which is to figure out what the CARS logic is. Though, this is more prevalent when you start AAMC CARS material, determining trends and frequently asked questions will help you read for the answers.
 - a. This may seem easy at first and can be done by just practice, however reviewing CARS passages is the major key here. After doing CARS passages, whether it be a single daily passage or an entire full length practice exam, it is important to treat the CARS section just like the others. Go back and review the passages, the answer choices, and what you selected. Go through correct and incorrect answers. Answer these questions: what is the main idea of

the passage, what type of question is it, why did you select the answer you did, if it was correct, why was it correct. If it was incorrect, why was it incorrect and why was the answer correct, and lastly why are the incorrect answers incorrect. I started this far too late, but once I did, I saw improvement. I tracked these questions in an excel sheet so I could then analyze trends and then find the logic of passages.

3. Lastly, the major hardship of this section is timing. Reading 9 passages in 90 minutes is no joke. That equates to 10 minutes per passage on average, although shorter passages with less questions may be 8 minutes while longer passages will take 12 minutes.
 - a. There is no magical way to go through a CARS passage. It is important to experiment with different tactics, such as reading the questions first, skimming the passage, reading the passage slowly then going through the questions quicker, highlighting key words, or even writing down key ideas and notes while reading. Experiment, if one method isn't working for you, try something new before it is too late.
 - c. All in all, the CARS section should be treated just as the others. Do not overlook it, and do not tell yourself you can't get better at this section because there is no scientific content associated with it. Practice this as much as the other sections, if not more. Review all your practice questions, re-read passages to pick up key sentences that you may have missed the first time around.

3. BB

- a. The Biological and Biochemical Foundation of Living Systems section is similar to the CP section in the sense that there are multiple subsections within the larger section. These subsections include basic biology (DNA, genes, and cells), microbiology, anatomy (organ systems), and biochemistry.
 - i. Basic Biology
 1. Basic Biology doesn't infer that it is easy, rather it is the general chemistry of biology. These are the topics that are crucial to know regarding biology and provide an important foundation to the more complex topics in the overarching section. The concepts that I consider very important to know in this section include, but are not limited to, amino acids, DNA and the central dogma, cell division, and genetics and genome analysis.

- ii. Microbiology
 - 1. Microbiology is a small portion of this section, but should not be overlooked. Some important concepts to think about include but is not limited to, viruses, bacteria, and how they relate and how they differ. It is also important to know the immune system on a very broad level. Do not stress if you did not have a microbiology course. The AAMC PDF on what is on the MCAT will present all the specific concepts that you need to know. Khan academy does a great job covering these topics as well.
- iii. Anatomy
 - 1. Similarly to the microbiology subsection, this is a small portion, but is important. It is not necessary to know every little detail regarding anatomy, but there are some major organ systems that are frequently tested. Personally, I think the renal system is the most important to learn and understand. Know exactly what is going on within a nephron, how is blood filtered and how does this turn into urine. What is absorbed and what is excreted and where does this occur.
- iv. Biochemistry
 - 1. The biochemistry tested in this section is the same as the biochemistry tested in the CP section. You may experience more “biology” compared to the CP section biochemistry, such as hormones and hormone regulation, glycolysis, and all of the other important biochemical pathways such as; gluconeogenesis, the Krebs cycle, the PPP pathway, fermentation, and the electron transport chain.
- v. General Tip for this section
 - 1. The number one tip that I would encourage students to learn regarding this section would be how to analyze biological passages, graphs, and tables. These passages are extremely complex and oftentimes provides far too much information that is not necessary to know for the questions. I would recommend skimming through the passages and gaining a brief understanding of what is being presented. Do not study the graphs and tables until a question appears regarding it. If and when a question asks regarding a graph or table, make sure you are paying attention to the axes, title, key, and trend lines.
- b. Overall, this section can be very daunting when you start reading the passages. Remember, the passages often contain more information than you need and contain confusing sentences or terms to confuse you. Learn to overlook these

difficult aspects of these biology passages. It is more important to know what is happening such as, is there regulation of a gene occurring. If so, it may be useful to draw out the pathway. What is regulating the gene? Is there upregulation or inhibition? If you take the information given in the passages step by step, it will be easier to grasp what is being asked. Once again, skip tables and graphs until a question comes up about it. When one does, take time to analyze the graph and eliminate wrong answers. Do not overlook “low yield” topics such as anatomy and microbiology. You will be surprised how many discrete questions you will get on these topics. Last but not least, know your amino acids and nucleotides in and out. Know the one letter, the three letter, the structure, and important information on all of the amino acids. Know the nucleotide structure and how they differ from one another. These two topics are the most heavily tested in this section in my opinion.

4. PS

- a. The Psychology, Social and Biological Foundations of Behavior section of the MCAT is interesting. Oftentimes students have not taken a psychology or sociology course as they are not required for medical school, and this is perfectly okay. The PS section is notorious for being definition and term heavy. However, this is not always the case and there appears to be a shift more towards a PS section that has more passage analysis. The AAMC PDF on what is on the MCAT does a wonderful job listing every topic that the PS section could cover. With this information, it is vital to go and watch the Khan Academy videos on psychology and sociology. From there, after taking notes on the videos, ANKI will be your best friend. Since there are many terms you just need to recognize and know their definition, using ANKI to memorize them is extremely beneficial. UWorld also provides great questions for the PS section to help you familiarize yourself with the terms that will be tested.
 - i. Some small specific tips that I have for this section would be to create mnemonics, try and associate related terms to one another, and be able to identify the main idea of a passage when you are reading it.
 1. Mnemonics are extremely useful, especially when having to remember some psychosocial stages of development such as Erikson’s or Kohlberg’s. Many mnemonics can be found on YouTube or Reddit, but I encourage you to make your own that will stick in your brain!
 2. There are many related topics and terms in the PS section. For example, prejudice, discrimination, and stereotyping are all related to one another, or the terms related to the Gestalt Laws. Associating terms with one another enables you to eliminate answers if related terms are all given as choices and a non-related

term is the fourth option. Additionally, it will allow you to remember terms that you may forget if you just try and memorize the definition alone. This leads into another point, do not *just* memorize terms. This will not get you that far. You need to know the “why” behind the terms and how to know when they are an answer to a question.

3. The point above segways into being able to analyze the PS passages. As I mentioned, the PS section is shifting to more analysis based rather than regurgitation of definitions. Treat this section like CARS in the sense that you need to know the main idea of the passage. You need to be able to go back to the passage to confirm answers and eliminate incorrect answer choices. You must look for nuances in the passage that will make certain answer choices wrong. Pay attention to the small details as they can completely throw off your thought process!
- b. Overall, this section is unique to the other two content-heavy sections (CP and BB). ANKI will be extremely useful for this specific section to memorize terms. However, it is important to do many practice questions and review all of them fully! Take note of terms and overarching topics that you continuously forget.

Final Thoughts

The MCAT is an exam that takes time, dedication, and motivation to reach your goal score. Do not get discouraged on practice scores, do not be frustrated at yourself when you do not remember a term or a formula. Learn from your mistakes and keep pushing forward. Do not slack, do not tell yourself that something is not important (such as organic chemistry or physics). Take the time to learn these topics, you will not regret it. Be honest with yourself and take the exam when you are ready. Do not compare yourself to others, do not just follow what others are doing. Pave your own path to success and do what works for you. The MCAT is challenging but it is a required part of the journey to become a physician. Though this exam may bring you down from time to time, don't lose sight of the end goal. Do not give up. You will become a doctor, keep working hard! Goodluck!