



PRE-MEDICINE

A guide



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The “Don’t Check the Check Boxes” Check List

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I know this seems overwhelming but we will take it step by step. Overall, it is great advice to not worry about checking boxes and to just be who you are! This is a wonderful approach to getting prepared for medical school. However, it is important to note that many schools have a certain mission to fulfill, and if you lack experience to match with their mission they are unlikely to accept you.

Pre-Medical Timeline: This is a general guideline and should be adapted for your schedule. This is based on my undergraduate university classes and should be adapted to the classes your university offers.

Semester 1:

- ☐ General Chemistry 105 (4.0 credits)
- ☐ PDBio 120 (2.0 credits)

6.0 credits

Take ~9.0 credits
of generals

Semester 2:

- ☐ General Chemistry 106 (3.0 credits)
- ☐ General Chemistry 107 (1.0 credits)
- ☐ Molecular Biology 240 (3.0 credits)
- ☐ Molecular Biology 241 (1.0 credits)

8.0 credits

Take ~6.0 credits
of generals

Semester 3:

- ☐ Physics 105 (3.0 credits)
- ☐ Physics 107 (1.0 credits)
- ☐ Organic Chemistry 352 (3.0 credits)
- ☐ Statistics 121 (3.0 credits)

10.0 credits

Take ~4.0 credits
of generals/
major classes

Semester 4:

- ☐ Physics 106 (3.0 credits)
- ☐ Physics 108 (1.0 credits)
- ☐ Organic Chemistry 352 (3.0 credits)
- ☐ Organic Chemistry 353 (2.0 credits)

9.0 credits

Take ~4.0 credits
of generals/
major classes

Semester 5:

- ☐ Biochemistry 481 (3.0 credits)
- ☐ Cell Biology (3.0 credits)
- ☐ Physiology 305 (3.0 credits)

9.0 credits

Take ~4.0 credits
of generals/
major classes

Semester 6:

- ☐ Human Anatomy 220 (3.0 credits)
- ☐ *Biostatistics 447 (3.0 credits)

6.0 credits

Take ~4.0 credits
of generals/
major classes

Semester 7:

- ☐ Genetics 360 (3.0 credits)
- ☐ Advanced Writing Course (3.0)

6.0 credits

Take ~10.0
generals/ major
classes

Semester 8:

- ☐ *Medical Ethics (3.0 credits)
- ☐ *End of Life Care Sociology 333 (3.0 credits)

6.0 credits

Finish generals/
major classes

* Not a typical pre-requisite classes but are very valuable courses

Medical Volunteering:

What?

Service to a community that is currently sick and being treated for that illness. If the people you serve are not sick, (i.e. a senior center) then it is not considered medical volunteer work. Volunteer work means that your service is unpaid and not compensated.

How?

Simply ask! Volunteer work is not very challenging to get involved in because it is free! I recommend doing a google search and applying for a couple of positions that fit with your schedule.

Why?

If you are dedicated to becoming a physician, you will want to get experiences working with people who are sick. Medical volunteering is much easier to obtain than clinical experience (see page 7) but is a great segway into obtaining paid clinical experience.

Do I need it?

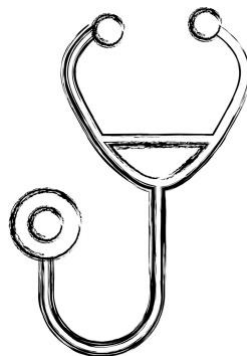
No, of course not. You will not be rejected from any medical school because you lack medical volunteer work. However, it is a great way to show dedication to medicine, find paid work in the medical field, and expose you to different fields.

What counts?

Stocking shelves at the hospital, holding newborns in the NICU, doing crafts at the children's hospital, bringing hospice meals. These are all examples of volunteering in the medical field. There are many others of course, but hopefully this gives you an idea of what things would be considered in this category.

What are my thoughts on this?

Everyone applying for medical school thinks they need to volunteer at a hospital. Myself included. I spent 1 year as an ICU patient-family liaison, most of the time was spent on my phone. I do not recommend this! If you find a medical volunteer position that is impactful, meaningful, and useful... DO IT! But do not feel obligated to check this box. There are many other ways to show your interest in the medical field and your dedication to patients.



Non-Medical Volunteering

What?

Literally any experience where you are donating your time to better your community.

How?

Obtaining volunteer experience can be done in many ways. You can google “volunteer opportunities near me” and you’ll find hundreds of ways to serve. Your university will likely have a service office that you can contact as well.

Why?

As a future physician, you are expected to care about others, and care about the world around you. You are entering a field where selfishness does not fly. You will make plenty of money in the medical field, but no amount of money is worth leaving your children at 3 AM to take care of strangers. You **MUST** like people, and care about their well-being. Being willing to serve others, even when you’re busy, is the best way to gain this compassion and to show your dedication.

Do I need it?

YES. You need this. If you don’t have service experience, I dare say that you will not get in to medical school.

What counts?

Singing to the elderly, being an unpaid camp counselor, teaching a free class, offering tutoring hours to underserved children, taking notes for disabled students, being a peer-mentor, cooking meals for members of your church, conducting charity runs, etc. Any charity work that you are doing to people who are not sick/ in the hospital.

What are my thoughts on this?

You need to have many hours. I don’t like giving a specific number because we go back to not checking a box. Depending on your application, I recommend at least 200 hours. Now, the biggest mistake is when students do not participate consistently in an activity. When you apply to medical school, you get 15 spots to put your experiences. Saying you spent 3 hours serving at a homeless shelter is unimpactful. Pick 1 or 2 meaningful activities and stay involved, even if it only occurs 1X/month. If you spent 1 hour each month serving meals at the homeless shelter for 3 years... THAT is impactful.



Shadowing

What?

The act of following a physician around during a typical day seeing and treating patients.

How?

You must find a physician, and then ask them to shadow. The hardest part is finding a physician, but just recognize that all you need to do is find ONE and then you'll meet many. A great way to find a DO physician is to use the site "Find your DO" and start sending emails/texts until you find one to shadow. Otherwise, it is important to make connections. Go to your pre-medical club, talk to upper classmen, ask your pre-medical advisor. Don't be afraid to ask physicians if you can shadow them!

Why?

If you're going to dedicate at least 7 years of your life to becoming a doctor, you need to understand what a doctor actually does. The life of a physician is not accurately represented in Grey's Anatomy! You need to see what the daily life is, and if you can see yourself doing that!

Do I need it?

100% yes.

What counts?

Shadowing any DO or MD physician. Nurses, PA's, DNP's, PharmD, etc do not count at all.

What are my thoughts on this?

Physician shadowing is essential. You must have it. However, it is the MOST passive thing on your application. You are not showcasing your skills so, while it is necessary, it is not really that impressive. Essentially, you should spend maybe 15 hours per year of undergrad shadowing a physician and then consider it good. (I applied with a total of 64 hours.)

It is crucial that you shadow a variety of physicians as well. It is the best way to get a feel for which specialty you may do. I recommend seeing 4-5 different specialties.

Physicians are also a GREAT place to get letters of recommendations! It looks great to have a medical doctor vouching for your character. If you happen to click with a physician you're shadowing, don't hesitate to ask them after at least 2 times of shadowing. Also, if you are planning on applying to DO school, most require you to have a letter from a DO.



Research

What?

This is non-class based, hypothesis driven research we are talking about. This is mostly obtained through identifying research done at your undergraduate university and finding a way to get involved.

How?

Similar to finding a physician to shadow, it is hard to find opportunities to do research. You must be willing to get out of your comfort zone and ask a professor to give you a chance. Once you're in a lab, make sure you are spending enough time to make the experience meaningful. You must be willing to accept that you are still learning, but also be confident to find projects to get involved in. Ultimately, research is one of those things you'll want evidence of. In other words, the long term goal is to develop critical thinking skills, and then showcase those skills by presenting at a research conference or getting on a published paper.

Why?

The skills you develop while doing research are much different than those obtained by simply doing well in classes. It requires significant analysis of error and critical thinking to overcome error. Most medical schools want students who are able to think outside of the box and research is an amazing way to show this skill.

Do I need it?

Mostly a yes. Again, your entire application is who you are. So if you cannot think of anything worse in this world than research, then maybe you shouldn't do it! But I would make sure you compensate the rest of your application to make up for not having research. You want to "stand out" in one way or another, especially if you need to compensate for a different area that you are lower in. For example, my MCAT was my weakest aspect of my application but my research background was so strong that it ended up not being a big deal!

What counts?

Any non-class based hypothesis driven research. Yes you can do research not in a lab, for example you may be able to find clinical research opportunities at a local hospital. Most undergraduate research is done in a lab!

What are my thoughts on this?

I think that I wouldn't be the same without having done research. It is the best way to learn how to think and how to overcome failure. I love research and I do recommend doing at least some. But, don't waste your time in a lab. Try to at least present your research at a conference to show for your time.



Patient Care (Clinical Experience)

What?

Hands on care of people who are sick. This is different than medical volunteering because you are directly responsible for the patient in front of you.

How?

Getting a paid job is the best way to obtain this because you are compensated for your time. I recommend getting phlebotomy certified or obtaining a different certification such as CNA, MA, X-ray tech, etc. Then apply for jobs like you would anywhere else.

Why?

It is important that you know how to interact with sick people. Also, you should know if you actually like to be around sick people! Being a doctor is not always easy and doing patient care can give you a small taste of what it's like.

Do I need it?

Yes. Either this or medical volunteering really are necessary. I think this is more important because it is an active position you have. You need to know why you want to be a doctor and actually providing care to a patient is the best way to find this out. I brought up my experience as an MA in every single interview.

What counts?

Anything that fits these criteria: 1) YOU are providing care, 2) The person you're treating is sick. Being a phlebotomist, PT tech, EKG/EEG technician, CNA, medical assistant, hospice worker, etc. are all great examples of clinical experience.

What are my thoughts on this?

Find a paid job where you get some good experience. Try to work for at least a year and make sure you enjoy it. I love being a phlebotomist and its great practice to work with patients who are scared and do my best to entertain them during the procedure.

Don't be afraid to reach out and ask for a job. There doesn't need to be a job posting for you to get a job! I got a job as a medical assistant by walking into a small family practice clinic and asking to volunteer. Three weeks later they told me I was doing a great job and asked if I could fill in as a medical assistant for their other MA who was going on maternity leave. When she returned, they hired me full-time!



Leadership Experience

What?

Literally any position where you are required to make decisions and you help others make those decisions. There is a specific place on the medical school application where you can list leadership, but you can also include it in any other category.

How?

You need to first be involved in an activity: sports, club, volunteer position, etc. As you work and show your dedication you will find opportunities to lead your peers.

Why?

Physicians are quite literally the leader of the healthcare team and it is important to get practice in this field. This does not mean you have to have a type A hardcore personality to be a doctor. But you will need experience making decisions and helping to guide a group to be successful.

Do I need it?

In some sense you do. You will want to have at least 1 or 2 experiences where you are in charge of a group of people. It does not have to be a stand-alone category (like the student body president) but even getting an officer position in your club or organizing a charity event shows good leadership skills.

What counts?

Student council, club presidencies, teaching assistant positions, leading a research project, being a peer-mentor, being a tutor, leading a volunteer effort. Anything where you are guiding a group.

What are my thoughts on this?

This is truly one of those concepts that you should not try to check the box on. You do not want to walk into a random club and ask to be involved in leadership. Over time as you work on your extracurricular activities you will naturally find positions where you can act as a leader. Document what your position is and what you do. Having leadership experience is not only valuable for medical school, but also for obtaining any job.



Hobbies

What?

I hope you know what your hobbies are. However, I understand that as a pre-medical student it can be hard to stay involved in the things that once brought you joy. As you're reading this I want you to name **out loud** one thing that has nothing to do with school or medicine that you enjoy. Hopefully you've done that thing at least once in the last few weeks. If not, take this afternoon off and do that thing. Juggling your schedule is so challenging but in order to stay mentally sharp and physically fit, you must do the things that bring you joy. Go on a hike, go swimming, cook a meal, paint a picture, read a book. Do something that makes you, YOU.

How?

Just do it. – Nike

Why?

If we wanted robot physicians we would have invented them by now. We want human patients because of the necessary ability to connect with the human experience. Part of the human experience is doing what you enjoy without any obligation. I promise that you will be much more successful if you force time into your schedule to enjoy being who you are.

Do I need it?

Yes. And, there is a section on the primary medical school application for your hobbies. I recommend listing one to show that you are a real true human being who can connect with others.

What counts?

Anything. As long as it doesn't have to do with studying or medicine. I know what you're thinking, "Medicine is my hobby, it's my passion!" I know, it's mine too! But you can find at least 1 thing in your life that is different. After a long and painful week of working at the hospital or losing a patient, you will need to have other hobbies and passions to recover with. Plus, you'll connect much better with people if you have unique hobbies!

What are my thoughts on this?

I know it's hard. But look at your schedule and make time every single week to do something you love. You'll have a break down if you go for too long without being reminded of the small successes in life. Plus, believe it or not, your medical school interviews are much more likely to bring up your hobbies and non-medical life in an interview than any other thing you've done.



The MCAT

What?

The Medical College Admission Test. This is the test you take to get into medical school. There are four sections: Chemical and Physical Foundations of Biology (CP), Critical Analysis and Reasoning (CARS), Biological and Biochemical Foundations (BB), and Psychological, Social, and Biological Foundations of Behavior (PS).

How?

You sign up online several months before taking the exam. I recommend planning a time to take it early on in your career. I personally recommend doing one of two options: studying over the summer for 3 months (fully immersed, meaning doing no other activities) and taking it in August. Or, studying for 6 months and taking it in March of the cycle you are applying. Everyone at BYU takes it in May and I personally find it ridiculous, even though that is what I did. After March my motivation was decreasing along with my grades. I lost sleep, energy, and purpose. ~6 months of dedicated study is enough for anyone! Don't do more than that! Plus, taking it in May gets mixed in with finals and research conferences and graduation, etc. Do yourself a favor and take the MCAT when you have time to just think about it.

Why?

It is required for medical school entrance. Each section is worth 132 points. Earning 125 on each section will get you a 500 on the test overall. A 500 score is a 50th percentile score and may be possible to enter a DO school but highly unlikely to enter an MD school with this score. Most MD schools will prefer an MCAT score of ~505+. Highly competitive schools will look for ~512+. The scores range from 472-528 and are on a bell curve.

Do I need it?

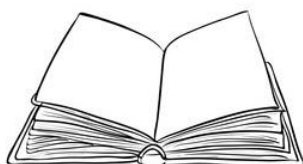
Yes.

What counts?

Well, only the MCAT counts. Buy practice tests from the AAMC (the people who write the test) and use those for practice. Then buy the real test and take it.

What are my thoughts on this?

The test is over-rated and so is everyone who thinks they need a 520+. You need to put in time to studying, take the test, and be proud of your score. You will get into medical school. Do not let this test overwhelm you or deter you from your dreams. I personally purchased a prep program (Altius) and in retrospect I think the better option would have been to save \$3,000, buy the 10 Altius practice tests AND their book, and self-study.



The Applications

What?

The Primary application is done through a service called AMCAS. DO schools use AACOMAS. Texas schools use TMDSAS. Each of these require a personal statement, list of extracurricular activities (15 maximum), manual entering of your grades, submission of your letters of recommendation, and lots of dollars ☹

Secondary applications are emailed to you from individual schools

How?

Log onto each of the portals listed above. They do not open until 1 month before the cycle starts. (May 1 for AMCAS, April for TMDSAS). I recommend going on and looking at the current cycle application to get an idea of what you will be filling out.

Why?

This is how you pick schools you want to go to and then apply there.

Do I need it?

Yes. I recommend getting your application in AS EARLY AS POSSIBLE. Get all of your affairs together early on, and apply within the week of the primary application opening. When you are emailed a secondary application, aim to submit it within 2 weeks maximum. Schools offer interviews on a rolling admissions so if they send interviews to people and run out of spots, you will be last on the list if you are late!

What counts?

Only the official applications.

What are my thoughts on this?

I enjoyed the process of applying a lot. It is a lot of waiting and very stressful but also a lot of fun. If you are organized and prepared, you will do fine. Make an excel spreadsheet and keep on top of your secondary applications. They are stressful! If you are interested, contact me and I will send you the spreadsheets/documents I made to stay organized and you can mimic them for yourself! abisanatomy@gmail.com



The Interview

What?

This is the final stage in the application process. After submitting secondary applications, you wait to hear from schools about interviewing. You will receive an email with a link to the application portal where you can schedule your interview. The dates you can choose are usually 2-3 weeks away, so flights get expensive.

How?

Having a solid application will make schools want to interview you. Remember, <5% of applicants at each school are interviewed, so go in confident and proud!

Why?

The interview is the best place to show who you are. Do some practice questions with your family and friends, maybe a mock interview with a physician, but go in confident that they want to get to know the real you.

Do I need it?

Yes. And skype/phone interviews are not a thing. If you want to get in, you will fly to their school and meet them.

What counts?

They are looking to see if you are personable, friendly, communicative, empathetic, and generally the type of student they want to have at their school. Don't worry, you ARE!! Be prepared and confident and have fun with it! *IMPORTANT TIP* the other interviewees are not your competition, they are your potential future classmates! Be nice to them and enjoy getting to know them!

What are my thoughts on this?

Women: Wear a pant or skirt suit. Black/Navy/Grey. Wear a professional (modest) shirt of any color underneath. Minimal and simple jewelry if any (simple diamond studs or pearl necklace will suffice). Wear heels for your interview, I promise they look so much better. Bring a plain black bag to carry a pair of professional flats in and wear them on your tour. Also bring some deodorant, chapstick, etc.

Men: Suit: Black/Navy/Grey. Shirt: Any color as long as it is professional. Match your tie with your shirt. Wear shoes that look nice and don't clash. I promise, what you wear does matter.

The interviews are my favorite part of it! Go and enjoy the campus and the people! You're interviewing them just as much as they are interviewing you!

