

FRESHMAN YEAR

COLLEGE PLANNING GUIDE FOR PRE-MEDS



medschoolcoach.com

Nelcome

Beginning college is an exciting time in a student's life! It may be your first time living away from home, being out on your own, or getting to study what you want. College is also a time to begin planning your future. Many students begin college knowing exactly what they want their career to be. Others have no idea.

For those students who have decided to become a doctor, or are considering it, this guide will allow you to begin planning your journey into medicine. Being a physician is a rewarding career, but also requires dedication, perseverance, and diligence. Planning to apply to medical school should begin early in college, and appropriate preparation must be taken to ensure a successful application.

With less than half of applicants getting admitted to medical school, being an average premed student won't cut it. Yet, more than 90% of students working with MedSchoolCoach get accepted. The need to plan and put together an exceptional application begins now.

Your MedSchoolCoach Physician Advisor and you will work together to plan a fun and fulfilling freshman year of college. Let us help guide you as you progress along your path.



Sahil Mehta MD Founder, MedSchoolCoach



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Did you know?

The earliest documentation for a formal hospital with doctors that treated patients comes from Sri Lanka in the 5th Century B.C.

Now it's your turn!

Overview Of Becoming A Physician

You may have some idea of what the path to becoming a doctor entails. This guide provides the steps and educational requirements you'll need to become a physician.

College – Pre-Med Life

Physicians in the United States must complete a bachelor's degree at a U.S. accredited university. The type of degree can be whatever the student desires, but students must complete specific course requirements to enter medical school. Plus, students should take the <u>Medical School Admissions Test (MCAT)</u> before applying, as it is a critical fact in candidacy evaluation.

In addition to academic requirements, students should participate in certain extracurricular activities such as clinical experience, physician shadowing, research, community service, and leadership activities.

Students wanting to start medical school directly after college should apply during their junior year of college. The application process takes about a year. The application opens in the Spring and matriculation begins the following Fall.

Medical School

Medical school lasts for four years. Most schools structure their program so the first two years, known as M1 and M2, are didactic or classroom learning. Here, students master subjects such as anatomy, physiology, biochemistry, pathophysiology and pharmacology. At the conclusion of the first two years of medical school, students take their first United States Medical Licensing Exam. Known as <u>USMLE Step 1</u>, the exam is a critical factor in evaluation for residency positions.

The final two years of medical school, known as M3 and M4, are typically composed of clinical rotations. This is where students rotate through core clinical environments such as internal medicine, surgery, obstetrics/gynecology, family medicine, and pediatrics.

During the third year (and sometimes fourth), students will take the second USMLE Step 2.

During the fourth year of medical school, students typically take elective courses, where they spend time in clinical settings that interest them. This is also when students apply to residency.

Applying to residency parallels the process of applying to medical school, except that students get "matched" to one program. This means that students apply to programs of their choice, interview at various places, and then the program and the student both rank each other on their preference. In March of their fourth year on Match Day, students find out which program they match into. Not all students match, so positioning yourself as a top candidate is crucial.



Residency

Following graduation from medical school, students are now doctors. They then begin a residency program in their chosen specialty. The first year of residency is referred to as an "internship." Most doctors complete their internship at the same program where they will go to complete their residency. Some interns spend a transitional year at a different program. During internship, doctors complete the third and final USMLE Step 3.

After internship is completed, doctors go on to finish their residency. Residencies are different lengths depending on the type of specialty. For instance, family medicine is three years whereas neurosurgery is seven years. At the end of residency, physicians take their board certification, which is a test designed to demonstrate proficiency in their chosen specialty.

Fellowship

After residency, some physicians choose to complete a fellowship. Fellowships are usually one to two years and provide further specialization in a chosen field.

Attending Physician

After residency (and possibly fellowship) physicians are known as "attendings." Attendings are physicians who are fully licensed and board certified in their specialty and ready to practice on their own.

Did you know?

For the entering medical school class of 2020-2021, there were 53,030 medical school applicants with 22,239 applicants matriculated – this converts to a 42% acceptance rate!

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Personal Branding

One of the most important things you must do to best position yourself for medical school is to brand yourself. You must define and present yourself as uniquely qualified as a future medical school applicant and physician.

Strategically Pick Your Experiences

Figuring out your brand early on enables you to strategically determine extracurriculars and even academics you wish to participate in. For instance, if your brand is a passion for children, you may want to explore the possibility of shadowing or scribing with a pediatrician, tutoring underprivileged elementary school students and doing research in ADHD. Alternatively, if you decide you are passionate about caring for communities, you may want to consider majoring in public health and participating in extracurriculars that are community focused.

Later, when you are applying to medical school, your brand will directly impact your personal statement, secondary essays, and interviews.

Most pre-meds don't realize they need to brand themselves. Yet, branding is the first and most fundamental step in setting yourself apart from the competition. Therefore, it must begin as soon as possible during college. By the time you're already applying to medical school, it may be too late.

To determine your personal brand, first think granularly about why you're passionate about becoming a physician. And if possible, envision yourself practicing as one.

- Are you passionate about cardiovascular research?
- Do you want to care for a geriatric population?
- Will you utilize a public health approach with your future patients?





Personal branding comes in four primary forms:

- 1. Area of Interest The most common form of branding is based on your area of interest, such as neurology or surgery. But you don't have to know your specialty to have a brand. Identify what else are you interested passionately about.
- 2. Approach to Medicine Identify an approach to medicine you're interested in, such as preventive care or public health.
- 3. Demographics Identify a demographic you're interested in, such as underserved communities, or those with physical disabilities.
- 4. Specific Medical Issues Identify a medical issue you're interested in, such as medical innovation or cancer treatment.

Ideally, your personal brand will consist of a unique combination of these variables that ties back to your passions, experiences, and interests.

Did you know?

There are many ways to differentiate yourself, but gender may not be one of them. Beginning in 2019, females (50.5%) and males (49.5%) accounted for almost the exact same percentage of medical school students.



Choosing A Major

Let's talk about how to go about choosing a major!

There is a common misconception that a pre-med must major in something science-related. However, the truth is that you can major in whatever you like. If you are interested in music, that is fine to pursue. Business? That's ok too. The main factor for picking a major is that you should be passionate about it.

No matter your major, you still have to be diligent about completing the specific courses required by medical schools. These requirements frequently overlap with science major requirements, which is why many pre-meds decide to pursue a science degree.





Pros and Cons of Choosing a Science Major vs. a Non-Science Major

Whatever a student decides to major in is fine. However, choosing one is important to plan an academic path. A lack of planning often leads to missed prerequisite courses or poor academic performance.

Science Major (e.g., biology, chemistry, biochemistry, physiology)

Pros	Cons
Medical school prerequisites with the major requirements can be completed.	Field of study is limited.
It is possible to have a greater science knowledge base that can be helpful for the MCAT and medical school.	Some of the coursework will be repeated in medical school.
Many students are interested in science.	Science majors tend to be difficult.

Non-Science Major (e.g., literature, music, social sciences)

Pros	Cons
Students can pursue their own interests.	There is less overlap between medical school prerequisites and major requirements.
Allows for different field and interests before medical school.	It can take longer for student to complete all requirements.
Medical schools can view students as more diversified.	You may not use the aspects learned of their degree in medicine.

I decided to major in psychology because I wanted to understand what motivates human behavior. It was one of the best decisions I ever made.

Dr. Ziggy Yoediono, Psychiatrist and Physician Advisor at MedSchoolCoach

Planning Medical School Prerequisite Courses

Each medical school has slightly different course requirements. There are several classes you should plan on taking to meet almost every school's expectation. Provided are the general course requirements.

1 Semester Typically Required:	1 Year Typically Required:
 Biochemistry Statistics Sociology Psychology 	 General Biology, with lab General Chemistry, with lab Organic Chemistry, with lab Physics, with lab English Math, including calculus

In general, one year equals two semesters or three quarters.

With so many science course requirements, many applicants choose a science major so that those courses will be included in their degree preparation. Science major or not, course planning is crucial. Start by planning out your freshman year. Look at your course catalog and see which of the above classes are offered during the Spring and Fall semesters (or quarters).

Prerequisites should be completed by the Spring of your junior year for two reasons:

- 1. MCAT Timing Most medical school applicants take the MCAT during their junior year, therefore, it is crucial to have these courses completed before then.
- 2. Insight into Grades Medical schools like to see that you have completed prerequisites when applying so they can see your grades. This enables them to assess your knowledge base and proficiency. If you haven't completed a required course before applying, the admissions committee can't evaluate your grade. Completing the courses reassures medical schools that you will be ready to matriculate if offered an acceptance.

INSIDER TIP:

As a freshman who is transitioning to college life, avoid class overload. Begin taking medical school pre-requisite courses, and balance them with light course load or easy general education requirements.



After reviewing your school's course catalog, fill in the courses you plan to take freshman year. Include medical school prerequisite courses, those needed to fulfill your degree, and any required classes.

Course Title	Number of Units	Class Schedule

Course Title	Number of Units	Class Schedule

SUMMER SEMESTER OR QUARTER (IF APPLICABLE)

Course Title	Number of Units	Class Schedule

FALL SEMESTER

SPRING SEMESTER

Core Extracurricular Activities

During your freshman year, begin planning your extracurricular activities and participating in them, if possible.

Though you can also participate in clubs or sports that interest you, activities medical schools look for most frequently in an applicant are of the utmost importance. Think about where to find these activities and list out your ideas for getting started. Some notes about pre-med extracurricular activities:

- **Consider that longitudinal experiences are the best** Medical schools like to see that you can dedicate yourself to a particular activity and stick with it. Find opportunities you can start your freshman year and continue all the way through graduation.
- Do something you like Pick something you enjoy so you are motivated to continue it long-term. If you start an activity that you dislike, stop, and find another one that you will enjoy more.
- **Be consistent** Similar to having a long experience, do the activity often and consistently. It looks much better on your application if you have been volunteering with an organization every week for a few years, rather than sporadically during your studies.
- **Develop a brand** It is more compelling to medical school admission committees if you have a brand to your extracurricular activities. Do activities that are related or have a common goal in mind. For example, if you are really interested in public health, you could volunteer at a community clinic while doing research on infectious disease. Or maybe you are really pulled towards pediatrics, where volunteering at a children's hospital while raising funds for childhood cancer can connect your activities.

Coordinate your activities with your interests to help an admissions committee learn more about your personal and professional goals in your application.





Clinical Experience

Medical schools want proof you have some experience in medicine and have an idea of what it is like to be a physician. This is why being exposed to clinical medicine and shadowing is so important. Gain clinical experiences directly interacting with patients as early as possible. It can include, but is not limited to:

- **Scribing** Performing documentation in the EHR, gathering information for the patient's visit, and partnering with the physician to deliver efficient patient care.
- **EMT** Emergency medical technicians gives emergency care to people outside of or on the way to the hospital, often in ambulances.
- **Clinical Research** Scientific investigation that studies health and how to prevent, diagnose and treat illness.
- **Hospital Volunteering** This is less recommended, since the level of patient interaction and responsibility is not in-depth. Plus, since many applicants do this, it may fail to differentiate you significantly.

Start thinking about local opportunities and write down some ideas on where to start below. Do you have a local hospital you can contact about volunteering opportunities? Is there a university hospital attached to your college? Do you know a physician that would let you volunteer in their office?

Organization Name	Description	Contact Info

Research

The students that have the most success finding research opportunities are those that start looking for positions early. Freshman year is not too early to start seeking research opportunities at your university.

The best research activities include designing and executing your own project, presenting a poster, and getting published. However, many students do not have this in-depth of a research experience, and that's ok. The whole point is to try to find some research opportunity where you work with a principal investigator (PI) and use the scientific method to conduct an experiment. Most pre-meds will do basic science research, usually exploring some biological or chemical process. Some that participate in research opportunity is continuing a project and being involved in the process.

Finding a research opportunity can be difficult. Here are some tips to find research activities more easily:

- **Research** Research your professors online and see if there are any projects that they are working on that may be of interest to you. If so, contact them and try to set up a meeting.
- **Engage** Talk to your college counselor and see if they know of any ongoing projects that are accepting students.
- **Get Involved** Join the chemistry, biology or other on-campus clubs that may be able to connect you with research opportunities.
- Visit In-Person Meet with the science department chair and ask him or her about projects that may accept students.

Use the table below to take notes on possible opportunities, and then explore them. Aim for an opportunity that will last a long time and that you can actively contribute to.

Research Opportunities

Department	Professor Name	Contact Info



Physician Shadowing

Shadowing is a different activity from clinical experience, even though it may be similar. Shadowing involves a student visiting a physician's practice and observing their day-to-day activities. This can be done in an outpatient clinic, such as an office, or an inpatient setting, such as a hospital. The key to finding shadowing opportunities is to be persistent. It often takes multiple emails and phone calls to multiple physician offices to find opportunities. Here are some tips to find shadowing opportunities:

- Start Local Look for local doctor offices or hospitals and reach out to them to discuss shadowing.
- **Network** Leverage family or friend as contacts within your network if you can. If you know someone that is a physician that is willing to let you shadow, take advantage.
- **Extend Your Breadth** Shadow physicians in various specialties and practice settings, such as outpatient facilities and hospitals.
- Go Online Digital shadowing opportunities assist when finding in-person opportunities are challenging. The MedSchoolCoach Virtual Clinical Education provides dozens of real physicians that can be shadowed. These types of opportunities should not replace in-person experiences, when they are possible.

Use the following chart to write down possible contacts for shadowing. Remember to keep in contact with the physician office if you do not hear back immediately. Be persistent.

Shadowing Opportunities

Department	Professor Name	Contact Info

Community Service

Being a physician requires a degree of altruism. This is because physicians sacrifice many aspects of their personal life to serve and care for patients. There is a significant degree of selfless service, and medical school admission committees want to ensure their students are willing to give to others without necessarily receiving any benefit in return. This is where community service comes in.

Community service involves working with those less privileged or using your time or skills to help others in some way. There are tons of different community service activities that you can participate in, and they don't necessarily have to be related to medicine. Here are some possible community service opportunities to consider:

- Volunteering at a homeless shelter or food bank
- Volunteer tutoring
- Big Brothers/Big Sisters mentor
- Free medical clinic volunteer
- Building for Habitat for Humanity
- Nursing home companion

The goal of your community service activity should be to serve others while enjoying what you do. Don't pick an activity only because you think it will look good on your medical school application. Pick an activity that you are interested in and will contributing your time to.

Start researching service activities near you. Talk to your family and friends to see if they have any organizations they currently volunteer with. Consider talking with campus clubs, as they often participate in various service-related events.

Use the chart below to start brainstorming different ideas that interest you.

Community Service Opportunities

Organization	Available Times	Description



Leadership

A physician is often regarded as the leader of the medical team. They frequently lead groups of other professionals to care for a patient or coordinate their care. There are several qualities required to be a successful leader, including having integrity, being hard-working, and having the ability to communicate effectively and delegate tasks. The best way to show medical schools that you have these characteristics is to demonstrate them through experiences.

Leadership can be shown in a variety of ways. Whether you are the president of a school club or manage fundraising events, leadership can be demonstrated by any activity where you work to coordinate the efforts of multiple people to achieve a certain goal.

Here are some things to think about when beginning to build leadership skills:

- What activities are you participating in that you can grow into a leadership position? For example, can you become a volunteer coordinator or grow an organization that you are already participating in?
- Are there clubs on campus you are interested in assuming a leadership position with, such as a secretary or president?
- What community activities can you lead? Can you lead a city clean-up or coordinate tutoring for underprivileged elementary students? Think outside the box and lead an activity that you are passionate about.

Look for leadership positions both within and outside your current activities. Get creative and have fun while developing the traits that will make you a successful physician.

INSIDER TIP:

A physician is a leader. Leadership as a pre-med looks good on your application and prepares you for to be a future physician.

Think about the characteristics to be a strong leader: Effective communication skills, organization, and determination. Begin to embody these characteristics as you progress through your undergraduate studies.



Extended Extracurricular Activities

Beyond the core extracurriculars that medical schools look for in applicants, in college, there are many other opportunities that students should explore based on their interests.

School Clubs

School clubs can be a great way to meet people and network to find other opportunities. While getting involved in clubs is encouraged, be careful to not overextend yourself by joining too many and stretching your participation thin. Instead, find a few clubs that really interest you. Ramp up your involvement with those select few.

Greek Life

Many college students have an interest in joining either a sorority or fraternity. Joining can provide different social networks and offer various philanthropic events. Research the Greek family you are thinking of joining and talk to its members. Focus on a family that has controlled, responsible social events and has different outreach opportunities.

Study Abroad & Volunteer Internationally

Spending some time in a different country can be a great way to gain multiple perspectives and understand various cultures. Medical schools like to see candidates with international experience, either through studying abroad or volunteering in a different country. Talk to your school clubs about opportunities associated with the university or consider asking community organizations (e.g., church, free clinic) about international philanthropic trips. Most students participate in international work during their sophomore or junior year. However, looking for opportunities during freshman year will let you identify potential interests and select a trip that best fits you.





Collegiate Sports

Participating in a sport is a great way to demonstrate many different characteristics to medical schools, including teamwork and communication skills, commitment and resilience, and leadership for those in a captain role. Plus, sports help keep you healthy and energized from the physical activity. If you played a sport in high school and want to continue or are considering joining a team, do so. Sports can be a great mental and physical outlet, while significantly growing the interpersonal skills needed for medical school.

Arts

Many applicants have interests in the arts, including music, acting, or creating various types of artwork. Having such an interest can be a great way to keep active outside of the pre-med path, while also enabling you to express yourself creatively. Medical schools like to know about different interests and talents that you possess. If you have an interest, continue to pursue it.

Work Experience

Some college students must work to pay for expenses, while some choose to take paid positions for extra income. It is fine to take a job, as working often teaches responsibility, teamwork and determination. Consider that an hour spent on an relevant extracurricular could be more valuable in the long run than the dollars earned in a casual collegiate part-time job. And also make sure you have time to focus on your academics, as your journey toward becoming a physician must remain your top priority.

Having hobbies or participating in extended extracurricular activities is totally appropriate. Just be sure to keep focused academically and perform well in your courses.

Did you know?

During a pre-med internship, you could work 80 hours per week or more. The work ethic and dedication required to become a doctor begin now!

How To Succeed As A Pre-Med

Get Comfortable

College can be a big transition for many students, and it is important to ease into your new situation. Moving away from home, living in a new city, sharing a dorm with new people, and taking college courses can all be initially overwhelming.

Instead of putting a ton of pressure on yourself, ease into this transition. Try to make friends, learn about your surroundings, and consider taking a lighter course load the first semester. If you are comfortable with your environment and there is less stress outside of your academic commitments, then you will be more likely do to well in your courses.

Choose Your Friends Wisely

It can be beneficial to have friends that have similar goals as you. Together, you can support and encourage each other. Plus, you can help each other stay focused on your goals while having fun together and minimizing distractions.

Figure Out What Studying Method Works for You

Each student has a different method for effective studying. For instance, some like studying by themselves, while others like studying in groups. Try out different methods and find what is most effective for you. Then be consistent and continue using what works.

Seek Help

If you find yourself struggling either personally or academically, fine someone to turn to. Talk to a counselor or close friend or family member to get advice and perspective. Lots of other people have gone down the medical path before you. If you are struggling, it is absolutely appropriate to turn to others for help.



Take Time for Yourself

College can be stressful and time consuming. It can be easy for students to neglect their own personal care, which can lead to more stress and anxiety. Be sure to eat healthy, exercise and take periodic breaks from studying.

Remember: It's a Marathon, Not a Sprint

Becoming a physician takes a lot of time and dedication. Each step on this path is unique, but requires consistent focus and diligence. As a freshman, instead of focusing on the USMLE exam or residency matching, focus on what is in front of you – such as an essay, an upcoming project, or your final exams. Keep your ultimate goal in mind, but focus on each step to persevere and continue along this arduous path.

Did you know?

Harvard University has the largest academic library in the world. It has 6 million digitized items, 20 million volumes, and 400 million manuscripts!

Pre-Med Resources

<u>Association of American Medical Colleges</u> – Familiarize yourself with the AAMC site because it has amazing resources for pre-meds, whether you're a freshman still pondering medicine as a career or a junior applying to medical school.

AAMC sections most valuable to freshmen:

- <u>Deciding on a Career in Medicine</u> Get a basic overview of what it takes to become a doctor.
- <u>Aspiring Docs Fact Sheets</u> Learn how to get medically related experience, how to navigate the application process, and what it's like to be a medical student.
- <u>Anatomy of an Applicant</u> These are the 15 core competencies that demonstrate your preparedness for medical school.
- <u>Paying for Medical School</u> Learn about financial aid options for financing medical school and making it affordable.
- <u>Aspiring Docs Diaries</u> This is an AAMC program where bloggers who are pre-meds, medical students and residents share their personal experiences. You can even apply to be a blogger yourself.

<u>American Medical College Application Service</u> – Most U.S. medical schools use AMCAS as their primary application method for their first-year entering classes. Even though you may not be using AMCAS until your junior year, you should familiarize yourself with it.

<u>American Medical Student Association</u> – AMSA is a student-governed, national organization committed to representing the concerns of physicians-in-training. AMSA members are medical students, premedical students, interns, residents and practicing physicians. Most colleges have an AMSA chapter. See if your college does, and if so, strongly consider joining. Such chapters provide great pre-med resources and networking.

<u>Future Health Professionals</u> – Formerly called Health Occupations Students of America (HOSA), this is the largest student organization in preparing students to enter the healthcare field.

<u>Alpha Epsilon Delta</u> – AED is the U.S. health pre-professional honor society and service organization. It must be joined through a local chapter at your school.

<u>Prospective Doctor</u> – Powered by MedSchoolCoach, this site provides free resources for students considering or pursuing careers as physician. As a freshman, start by exploring <u>pre-med academics</u> and <u>extracurriculars</u>.



<u>MedSchoolCoach</u> – When it's time to begin applying to medical school or studying for the MCAT, MedSchoolCoach has top 99th percentile tutors and advisors who have served on admission committees ready to give you personalized coaching.

<u>#PreMeds</u> – This is the private Facebook group of MedSchoolCoach and Prospective Doctor. In this community, share your stories, ask questions, and give and get advice from other premeds.

<u>The Student Doctor Network</u> – SDN offers free resources for students interested in medicine. It's a dense website and many of the resources are better suited for juniors. Still, its message board forum is quite popular, and the site is a great way to get questions answered from other students with similar interests.

<u>Medical School Directory</u> – To get a sense of what medical schools are looking for in their applicants, or if you already have an interest in some medical schools, explore their websites. This interactive map lets you explore every accredited MD and DO medical school in the United States. You may also wish to explore <u>Caribbean medical schools</u>, too.

MedSchoolCoach on social media:





MedSchoolCoach is here to help pre-med students like you every step of the way to help them achieve their medical school dreams.

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STUDENTS LOVE US



