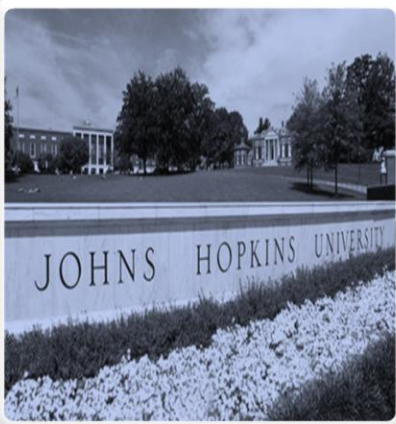


GUIDE ONE

Pre-Med and Pre-Health Planning

Johns Hopkins University



**WHAT ARE SCHOOLS
LOOKING FOR?**



PRE-MED PREREQUISITES



PLANNING REMINDERS

Office of Pre-Professional Programs and Advising
<http://studentaffairs.jhu.edu/preprofadvising/>

Introduction

In *Guide One: Pre-Med and Pre-Health Planning*, we provide an introductory overview for those who intend to apply to allopathic (MD), physician-scientist (MD-PhD), osteopathic (DO), and dental (DDS, DMD) programs. **The academic policies and recommendations in this document, however, primarily apply to incoming students from the Class of 2029.** If you are not a first-year student, please speak to a Pre-Professional Advisor if you have questions about your specific circumstances.

In this guide, “medical school” refers to allopathic (MD), physician-scientist (MD-PhD), osteopathic (DO), and dental (DDS, DMD) programs. In addition, each of these career options have dedicated web pages with important information on the Pre-Professional Office website:

- [Allopathic Medical School](#)
- [MD-PhD Programs](#)
- [Osteopathic Medical School](#)
- [Dental School](#)



Guidelines for the Health Professions

Whether you are interested in pre-med, pre-dental, pre-vet, pre-nursing, or any other potential health career, it is important to follow general guidelines as you prepare for your future health professions school application.



Pre-Med Prerequisites

Since many of our pre-health students are interested in applying to medical school, the following information specifically pertains to pre-medical coursework. However, many health professions graduate programs follow similar academic guidelines. Students interested in professions other than medicine should make an appointment with the appropriate advisor per the [Pre-Professional Advising website](#).

JHU does not have one standard set of classes that will help you fulfill course requirements for medical school. We recommend students consider the following **general guidelines** for completing pre-medical course requirements. Please consult with [KSAS Academic Advising](#) or [WSE Undergraduate Advising](#) if you have questions regarding the appropriate courses to take as a first-year student.

We **RECOMMEND** JHU students complete the following coursework (or the equivalent of). However, please note that the following recommendations will vary depending on AP credit.

Chemistry	<ul style="list-style-type: none">• 2 courses in general (inorganic) chemistry with associated labs• 2 courses in organic chemistry with one associated lab (JHU offers <u>one</u> 3-credit organic chemistry lab)
Biology	<ul style="list-style-type: none">• 2 courses in biology with associated labs
Biochemistry	<ul style="list-style-type: none">• 1 course in biochemistry (lab requirements vary)
Math	<ul style="list-style-type: none">• 1 course in calculus• 1 course in statistics
Physics	<ul style="list-style-type: none">• 2 courses in general physics with associated labs (<i>Calculus I</i> and <i>Calculus II</i> are co-requisites for <i>General Physics I</i> and <i>General Physics II</i> at JHU)
English/Writing Intensive	<ul style="list-style-type: none">• 2 writing intensive courses<ul style="list-style-type: none">• One course preferably taken in the English Department, Writing Seminars Department, or University Writing Program.• A second course can be taken in the English Department, Writing Seminars Department, or University Writing Program OR from other humanities or social sciences departments such as Philosophy, History, Anthropology, etc.
Social Sciences	<ul style="list-style-type: none">• 2 courses that emphasize social and behavioral science principles• <i>We recommend taking Introduction to Psychology and Introduction to Sociology to provide a solid foundation for the MCAT</i>

Caveats for Course Planning

1. **Varying course requirements:** Course requirements often vary among medical schools. Therefore, **it is simply not possible for you to meet every pre-med requirement for every medical school in the U.S.** What is most important is to consider the coursework and academic background necessary to best prepare for medical school and to perform well on the MCAT. You must research individual medical school requirements to ensure you have completed all prerequisite coursework.

2. **AP and IB Credit:** Policies regarding AP and IB credit are inconsistent across medical schools, so most students must complete additional coursework even if they have AP or IB credit on their transcript.

- If you have AP or IB credit for an introductory **science sequence** for medical school, **you are advised to take at least one additional course in that area.**
- However, if you have AP/IB biology credit, **you will need two biology classes with labs.**

In general, it is acceptable to forfeit your AP or IB credit if you feel more comfortable reviewing the material and strengthening your knowledge in an introductory college course in preparation for the MCAT.

3. **Biochemistry:** A background in biochemistry is essential for MCAT preparation and is a requirement of medical schools. Most JHU students take *Biochemistry* from the Department of Biology. However, please check biochemistry course options with your WSE or KSAS academic advisor if you are majoring in Biomedical Engineering, Materials Science (Biomaterials track), Biophysics, Chemistry, or Public Health Studies.

4. **Upper-Level Science Courses:** Although upper-level BCPM courses (ex. Genetics, Virology, Microbiology, etc.) are not required for the MCAT, they can provide additional foundational understanding in preparation for medical school curricula. Some schools may highly recommend or require some upper level courses. It is your responsibility to be familiar with the requirement for each health professions school to which you will apply.

5. **Math/Statistics:** *Calculus I* and *Calculus II* are co-requisites to the physics sequence at Johns Hopkins. In addition to calculus, it is suggested you enroll in a statistics class in preparation for the MCAT and as a requirement for medical schools.

6. **Humanities and Social Sciences:** It is important to demonstrate interests beyond the sciences, as medical schools want to see that applicants have diverse intellectual interests. In light of the content on the MCAT, pre-meds are advised to consider courses that emphasize ethics, philosophy, cross-cultural studies, the arts, and public health.

7. **Letter Grades:** All pre-medical requirements must be taken for a letter grade, and for most medical schools, you must earn a “C” or higher in those courses. **Do not take pre-med courses or requirements pass/fail (S/U).**

8. **Find balance:** Although you need a strong GPA for medical school admissions, trying to maintain a *perfect* GPA may prevent you from pursuing experiences outside of the classroom that will help build a strong application. The key is to **find balance** between your academics and extra-curricular activities.

9. **Other Considerations:** Click [here](#) for our recommendations about **prerequisite** courses, **summer science courses**, **online coursework**, and taking courses “S/U” (pass/fail).

The English/Writing Intensive Requirement

Ultimately, it is at the discretion of a medical or dental school to determine whether a particular course meets their English or writing intensive requirement, and it is your responsibility to be familiar with the requirement for each medical/dental school to which you will apply. However, we recommend the following guidelines for choosing classes to fulfill the requirement:

Complete two (2) writing-intensive courses.

- One writing-intensive course should preferably be taken in the English Department, Writing Seminars Department, or University Writing Program.
- A second writing-intensive course can be taken in the English Department, Writing Seminars Department, or University Writing Program, **OR** it can be taken from other humanities or social sciences departments such as Philosophy, History, Anthropology, etc.

Choosing a Major

One of the biggest pre-med myths is that you must major in the sciences to get into medical school. **This is NOT true.** Each year, JHU graduates majoring in humanities and social science subjects are accepted into medical school. It is important that you choose a major that reflects your genuine academic interests rather than a major you think “looks good” to medical schools. **Choose a major you are passionate about!** Whether that major is Anthropology, Biomedical Engineering, Molecular and Cellular Biology, Medicine, Science and the Humanities, Public Health Studies, Writing Seminars, or something else entirely, keep in mind all students who apply to medical school must complete their pre-medical prerequisites in addition to the requirements of their major.



Pre-Health 101

All first and second-year students interested in applying to health professions schools are **required** to attend a Pre-Health 101 meeting prior to their first individual Pre-Professional advising appointment. Pre-Health 101 is a 60-minute small group session offered during the fall and spring semesters that focuses on the understanding of qualities and requirements of pre-health students. Pre-Health 101 registration information is shared with students via email at the beginning of each academic semester.

Summer Before College

We appreciate how eager students are to begin their pre-med journey, and we're looking forward to assisting you with your questions and concerns. However, we hope you take the time to enjoy the summer by spending it with friends and family, relaxing, pursuing hobbies, traveling, etc. The next four years of college will become busier, and it is not necessary or expected that you begin pursuing pre-med experiences prior to matriculation. So, enjoy your summer, have fun, and we'll see you in the fall!

In Closing

Navigating your way through academic requirements at The Johns Hopkins University takes careful planning and patience. If you are pursuing a health professions career, the academic planning process requires adaptability and flexibility. We encourage you to seek input from your advisors to devise a plan that is appropriate for your emerging academic and professional goals.

Johns Hopkins University
Office of Pre-Professional Programs and Advising
Phone: 410-516-4140 **Email:** preprofessional@jhu.edu
<http://studentaffairs.jhu.edu/preprofadvising/>

Planning Reminders

Sign up for the Pre-Health Listserv

All incoming first-year and transfer students who indicate a pre-health interest in the New Student Advising Form are automatically added to our pre-health email listserv before fall classes begin. If you are reading this Guide after mid-August and did not indicate a pre-health interest in your form, please visit the Pre-Professional Advising Office's [website](#) to sign up for the appropriate listserv.

- ☐ Attend a Pre-Health 101 meeting. All pre-health first-years (and sophomores that did not attend Pre-Health 101 in their first year) must attend **one** Pre-Health 101 meeting before they can schedule an individual Pre-Professional advising appointment.
- ☐ Explore volunteer and community service [opportunities](#).
- ☐ Explore [research](#) opportunities. Think of research from the perspective of discovery, investigation, and inquiry. It can include anything from wet lab, bench research, clinical research, public health research, humanities research, etc.
- ☐ Consider [studying abroad](#), during Intersession, summer, or a semester.
- ☐ Get to know your faculty, research principal investigators (PIs), supervisors, and other mentors; they will be good resources for your future [letters of evaluation](#).
- ☐ Work on developing strong [study skills](#). Be aware that the study habits that worked well for you in high school may need to be honed or improved upon in college.
- ☐ Attend relevant programs and events (announced through our listserv).
- ☐ Follow us on social media @jhuprehealth.