

# PRE-MEDICAL

## Pathway Information

There is no “best” major for pre-medical students. Biology is the most common major, as it provides a strong foundation and more of the required course work applies toward the major. However, other majors can be acceptable. Pursue a major that helps you excel.

Consult a pre-medical advisor about your individual plan, and to check with your medical school for their requirements. While at GSW, be sure to build credentials in scholarship, leadership, community service, and clinical experience, as well as shadowing in the various settings of the profession.

### REQUIRED AND RECOMMENDED COURSES

#### Pre-Medical Requirements:

- Principles of Biology I & II  
BIOL 2107K & 2108K (8 hrs)
- Principles of Chemistry I & II  
CHEM 1211/L & 1212/L (8 hrs)
- Organic Chemistry I & II  
CHEM 3301/L & 3302/L (8 hrs)
- Intro to Physics I & II  
PHYS 1111/L & 1112/L (8 hrs)
- Composition I & II  
ENGL 1101 & 1102 (6 hrs)
- Biochemistry  
CHEM 4410 (3 hrs)
- Elementary Statistics  
MATH 1401 (3 hrs)

Note: All lab courses should be taken face-to-face.

#### Recommended Pre-Medical Courses:

- Animal Physiology\*  
BIOL 4400 (4 hrs)
- Genetics  
BIOL 4200 (3 hrs)
- Foundations in Microbiology  
BIOL 2260K (4 hrs)
- Intro to Psychology  
PSYC 1101 (3 hrs)
- Intro to Sociology  
SOC 1101 (3 hrs)

### ADVISOR INFORMATION

#### Primary Advisor:

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Professor  
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#### Alternate Advisor:

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### TIMELINE

Many of the required courses are sequence courses that have prerequisites and are not offered every semester. For example, you cannot take Organic Chemistry without successfully completing both Principles of Chemistry courses and their associated labs. You can't take Principles of Chemistry I without the pre-requisite/co-requisite Mathematics course. Organic Chemistry I is only offered in Fall and the Organic Chemistry II only in Spring.

### MEDICAL COLLEGE ADMISSION TEST (MCAT) AND GPA EXPECTATIONS

The Medical College Admission Test (MCAT) is required for admission into medical school and is offered multiple times per year at a cost of \$320. You should plan to take the exam only once. You may retake the exam if you believe your score doesn't accurately reflect your knowledge –i.e. if it is significantly different than what you have consistently scored on practice exams. However, retakes are limited and should be considered very carefully. You will receive your score a month after the exam date. If you have time in your schedule, take the recommended pre-professional courses as they will be very helpful for the exam. The minimum MCAT score for most medical schools is 500, or in the 85<sup>th</sup> percentile.

You should plan to take at least 5-6 full length practice exams (~\$40 each) since this is the best way to prepare and to gauge your progress. Commercial prep courses (~\$2000) can provide structure for studying, but you can succeed on the MCAT without them.

The ideal medical school applicant will have a 3.7 cumulative GPA or higher and a science GPA or 3.7 or higher.

### SHADOWING, VOLUNTEERING AND RESEARCH EXPERIENCE

You are expected to spend time shadowing a physician to experience the doctor/patient interaction, and should plan to begin shadowing as soon as possible. This experience demonstrates that you understand the profession, but there is no specific hour requirement. While it is helpful to shadow a specialty that you are interested in, any physician shadowing is better than none. You should try to get a variety of experiences with physicians in various fields in order to understand the breadth of the medical profession. Ideally, you should build a good relationship with at least one M.D. or D.O. so that you may request a letter of evaluation.

While shadowing is important, students need to aim for more hands-on clinical experience. It is ideal to have a history of ongoing volunteer or paid work engaging with patients relating to their care. The goal is to develop a passion for patient care and build on your reasons for pursuing medicine.

Volunteering in the community is another important part of the application. Being involved in service shows commitment to your community, provides an opportunity to learn about social issues less familiar to you. Medical schools want to see depth of commitment and substantial involvement and leadership in the community. Volunteering can be done in a variety of setting such as Habitat for Humanity, or anything else that you are passionate about.

There are many benefits to getting involved in undergraduate research, and the majority of successful applicants to medical school do have research experience. You are highly encouraged to pursue research opportunities. You should plan to dedicate at least a year to a specific project or lab, and you must be able to discuss your research at various levels (“elevator speech” and in-depth). For Biology majors the required capstone research project fulfills is expectation. For M.D. and Ph.D. programs, you will need to be

substantially more involved in research. If you are not interested in research at all, you would be better served dedicating your time to other activities which you are passionate about such as volunteering or shadowing.

### LETTERS OF EVALUATION

Most medical schools require at least three letters of evaluation, but specific requirements do vary between schools. Ideally, you should try to get two letters from hard science faculty since this is a common requirement. Research mentors do not always count for these letters since some schools draw a distinction between mentorship and classroom instruction. Regardless, you should always plan to include a letter from your research mentor.

At GSW, it is easy to build a close relationship with faculty due to the small class sizes. You have the opportunity to work one-on-one with faculty both inside and outside of the classroom. A letter of recommendation has a greater value if it is from faculty that can address more than your grades in a course. You must be mindful of this and do your best to foster a strong relationship with faculty.

A letter from an M.D. or D.O. is strongly encouraged as is a letter from a non-science faculty member. For additional letters, ask someone who will write the most compelling letter (volunteer coordinator, faculty, employer, etc.).