

Pathway to
Medical School
B.S. in Biology

INTRODUCTION

Many students enter the B.S. in Biology program with a desire to apply to medical school. A B.S. in Biology prepares students to apply to medical school by offering all prerequisite courses typically required by medical schools as either major requirements or electives. As entrance into medical schools is competitive, students will benefit by meeting additional qualifications to increase their likelihood of acceptance into medical school. This is a road map that details the steps a typical student may take in developing a competitive resume and application. It is based upon the observations of faculty within the biology department who have successfully mentored students who were accepted into medical schools. Please note that these requirements and recommendations are based upon minimum requirements and recommendations of medical schools in Georgia and the region.

TYPICAL REQUIREMENTS FOR ADMISSION TO MED SCHOOLS:

Listed below are common prerequisites of medical schools, but it is important to explore specific requirements of schools you are interested in attending. Courses whose material is included on the MCAT are **bolded** below and should be completed before taking the MCAT.

- One year of **General Biology** courses with 2 semesters of labs regardless of previous AP credit.
- One year of General Chemistry and one year of **Organic Chemistry and Biochemistry**. AP credit cannot be used for this requirement.
- One year of **Physics** courses with 2 semesters of labs. AP credit may be used.
- One year of English courses. AP credit may be used.
- One semester of Statistics. Some medical schools may also require calculus. AP credit may be used.
- Multiple letters of recommendation with at least one from a physician.
- A recent (<3 years old) MCAT exam score. Early decision candidates will need to complete the MCAT prior to the start of their senior year.
- A strong GPA, generally greater than 3.5.
- Shadowing experience with a physician.

TYPICAL RECOMMENDATIONS FOR ADMISSION TO MED SCHOOLS:

Many medical schools have additional recommendations for application to their programs. Courses whose material is included on the MCAT are **bolded** below and should be completed before taking the MCAT.

- Coursework related to biology that includes **anatomy, physiology, cell biology, molecular biology**, genetics, immunology, and microbiology.
- Coursework that includes **psychology, sociology, behavioral science**, social science, and the humanities.
- Research experience as an undergraduate.

OTHER CONSIDERATIONS:

Because acceptance to medical school is competitive, students may need to other relevant experiences to enhance their application. While not specifically required for application, the following may help distinguish a student:

- Foreign language proficiency
- Leadership experiences and service, such as volunteering in a medical setting
- Work experiences in a medical setting
- A minor in a field that is not biology or chemistry.

YOU CAN GO ANYWHERE FROM HERE

MAPPING YOUR JOURNEY FROM BIOLOGY TO MEDICAL SCHOOL

Freshman (1st) Year

Recommended Courses:

BIOL 1107 Introductory Biology I
BIOL 1108 Introductory Biology II
CHEM 1211 General Chemistry I
CHEM 1212 General Chemistry II
ENGL 1101 Composition I
ENGL 1102 Composition and Literature

Summer: Begin collecting relevant experience related to medical field. This can include volunteering at medical and healthcare facilities, shadowing physicians, and summer internships and fellowships. Gaining experience early on is important for leveraging this experience to gain additional opportunities later.

Sophomore (2nd) Year

Recommended Courses:

CHEM 2211 Organic Chemistry I
CHEM 2212 Organic Chemistry II
STAT 2000 Elementary Statistics
PHYS 1111 College Physics I
PHYS 1112 College Physics II
Additional coursework in Psychology and Social Sciences¹

Spring: Apply to summer internship/fellowship programs. Deadlines are often in January and February, and applications require a letter of recommendation.

Summer: Participate in a summer internship or fellowship or continue shadowing and volunteering.

Junior (3rd) Year

Recommended Courses:

BIOL 3101 Genetics
BIOL 3102 Cell Biology
CHEM 4115 Biochemistry
BIOL 1111 Human Anatomy and Physiology I
BIOL 1112 Human Anatomy and Physiology II
Coursework in Psychology and Social Sciences¹
Additional BIOL coursework as offered²

Spring: Complete MCAT in spring prior to submission of application. Apply to pathway to medical school programs through regional Area Health Education Center (if a Georgia resident) or apply to summer internship/fellowship programs. Deadlines are often in January and February, and applications require a letter of recommendation.

Summer: Submit med school application, usually by June. Submit secondary application two weeks later. Students continue shadowing and volunteering, acquiring experiences with different physicians in a variety of medical areas to diversity their experience.

Senior (4th) Year

Recommended Courses:

BIOL 4980 Independent Research
BIOL 4990 Senior Research Capstone
Additional BIOL coursework as offered²

August: Begin independent research project with a faculty member.

August through early November: Interviews conducted by medical school.

November: Submit transcripts.

December: Final deadlines for filing application materials and beginning of admission decisions.

Spring: Begin planning for a possible gap year before admission into medical school, which is common. Apply to internships and fellowships associated with the biomedical and health sciences that seek graduating seniors. Consider application to graduate programs in the biomedical sciences or pre-clinical programs and complete the GRE. Set up shadowing and volunteer opportunities for the summer. Consider other opportunities that provide additional experience, such as EMT or medical scribes.

¹Psychology and social science courses are recommended for students preparing to take the MCAT.

²Many BIOL 3000+ courses are offered once every two years. Students should enroll in any relevant course when offered during the junior and senior years.

The Biology Department at YHC offers 3 B.S. programs in biology, environmental science, and environmental education and leadership. Graduates have pursued careers in medicine, nursing, physical therapy, veterinary sciences, physicians assistant, wildlife biology, ecology, zoology, environmental health and more. For more information, contact the department chair, Dr. Johnathan Davis (jgdavis@yhc.edu).