

Pre-Physician Assistant Program in the Biology Department at Winthrop University

INTRODUCTION

Physician Assistants (PA) practice medicine by examining patients, diagnosing illness, and prescribing medicine. They work on teams with physicians, and their supervision by the physician varies based on state policies.¹ Several schools offer the Masters in Physician Assistant degree, including The [Medical University of South Carolina \(MUSC\)](#) and [The University of South Carolina \(USC\)](#). These programs require a bachelor's degree in order to apply.^{2,3}

Students interested in pursuing a career as a PA may major in any area, but still need to complete a list of prerequisites. The Biology program provides the best set of classes to prepare you for PA school and includes all of the prerequisites. If you choose a different program then you will need to make sure you include the prerequisites as part of your general curriculum. In addition, admission to physician assistant programs is highly competitive so students will need to maintain a strong GPA. For example, students must maintain a 3.0 or higher cumulative and science course GPA (known as BCPM) including **Biology, Chemistry, Physics, and Math** for application to USC's and MUSC's PA programs.^{2,3} Use the [GPA calculator](#) to calculate your science course GPA. Just include all of your science courses (Biology, Chemistry, Physics, and Math) and none of your general education courses.

Some programs also require students to take the GRE (Graduate Record Exam); MUSC does not and USC does require the GRE. Students must also complete hands-on patient care experience. For example, USC recommends at least 2,000 hours and MUSC recommends >1000 hours.^{2,3} Students may consider BIOL 461 or BIOL 463 for internship credit, which will document the number of clinical hours obtained. However, students can receive hours on their own time as well. Students are encouraged to review each program's requirements regarding which clinical experiences count towards hours for their admission process.

COURSEWORK

The following are only guidelines; students should consult their advisors and programs of interest to plan their academic schedule.

Biology:

General Biology I and II with labs (BIOL 220, 222, 221, 223) *required*

Microbiology **with lab** (BIOL 310) *required*

Genetics (BIOL 316 or 317) *sometimes required*

Human Anatomy and Physiology with labs (BIOL 307, 308) *required*

Chemistry:

General Chemistry with lab (CHEM 201, 202, and 204; OR CHEM 211 and 204) *required*

Organic Chemistry with lab (CHEM 301) *sometimes required*

Biochemistry (CHEM 323) *sometimes required*

Additional Courses:

Statistics (MATH 141/241) *required*

General Psychology (PSYC 101) *required*

Medical Terminology (NUTR 227) *required*

WHAT ELSE YOU CAN DO TO PREPARE FOR PA SCHOOL

The admissions process for PA school is highly competitive. Winthrop offers several opportunities for you to gain experience and skills that will help prepare you for PA school and distinguish yourself as an applicant. You should speak to an advisor about identifying opportunities at Winthrop and in the community. Opportunities available within the Biology Department include:

- Internships (BIOL 461 or 463)
- Undergraduate Research (BIOL 370, 371, 450H, 470, 471, 472)
- Bench to Bedside Program
- Tri-Beta Honors Society
- Honors Program and Honors Thesis
- Pre-Health Professions Student Organization Membership/Leadership
- SEA-PHAGES Program
- Health Professions Connection Blackboard Organization (provides supplemental advising and other helpful information, resources, and services for students planning to go into health professions)

Notes:

(1) Physician Assistants (2022). Bureau of Labor Statistics. Retrieved from: <https://www.bls.gov/ooh/healthcare/physician-assistants.htm#tab-1>.

(2) MS in Physician Assistant Studies. Medical University of South Carolina (2022). Retrieved from: <https://chp.musc.edu/academics/physician-assistant>.

(3) Physician Assistant Admission. University of South Carolina School of Medicine (2022). Retrieved from: https://sc.edu/study/colleges_schools/medicine/education/graduate_programs/physician_assistant/admission/index.php.