

PHYSICIAN ASSISTANT MAJOR DUAL DEGREE B.S./ M.S.

The College of Arts and Sciences, Department of Biological Sciences and the School of Health and Medical Sciences (SHMS) offer a 3+3 dual degree program leading to a Bachelor of Science in Biology and a Master of Science in Physician Assistant (B.S./M.S.).

This six-year program offers an opportunity for high-performing students to study in a traditional liberal arts environment as well as in diverse clinical settings.

Physician assistants (PAs) are healthcare professionals licensed to practice medicine with physician supervision. As part of their comprehensive responsibilities, PAs conduct physical exams, diagnose and treat illnesses, order and interpret tests, counsel on preventive health care, assist in surgery, and prescribe treatments. Within the physician-PA relationship, physician assistants exercise autonomy in medical decision making and provide a broad range of diagnostic and therapeutic services. A PA's practice may also include education, research, and administrative services. PAs are found in all areas of medicine. They practice in the areas of primary care medicine (family medicine, internal medicine, pediatrics, and obstetrics and gynecology) as well as in surgery and the surgical subspecialties.

At the conclusion of the junior year, students in good standing in the dual degree track will be invited to begin their graduate studies in the PA program during their senior year. Students who are not eligible for admission into the dual degree program may apply for entry to the PA program in the general applicant pool. Requirements for application to the PA program can be found in the Graduate Catalogue.

The Bachelor of Science in Biology is awarded at the completion of four years of work and the Master of Science in Physician Assistant is awarded at the completion of the sixth year of study.

Admission Criteria

The dual degree program offers students an opportunity to begin the graduate professional phase of their PA education in their senior year (see "Application Process" section below for further details). Consideration for admission to the program is open to applicants who have successfully completed a high school college preparatory curriculum, including courses in the social sciences, biology, mathematics, physics, English, a foreign language and chemistry. The Scholastic Assessment Test (SAT) scores are required of all applicants. International students must submit Test of English as a Foreign Language (TOEFL) scores.

Prerequisite Undergraduate Coursework

The following prerequisite undergraduate coursework is designed to provide a solid foundation for the study of clinical medicine. All of the prerequisite courses must be completed by June 1st of the junior year. All prerequisite courses must be completed with a grade of "B" or higher upon the initial completion of the course.

Code	Title	Hours
BIOL 1211	General Biology- Organisms	3
BIOL 1212	General Biology-Organisms Lab	1

BIOL 1222	General Biology-Cell	3
BIOL 1223	General Biology-Cell Lab	1
BIOL 3334	Anatomy and Physiology I	3
BIOL 3335	Anatomy and Physiology I lab	1
BIOL 3336	Human Anatomy and Physio II	3
BIOL 3337	Human Anatomy and Phys II Lab	1
BIOL 3411	Microbiology	4
CHEM 1123	General Chemistry I	3
CHEM 1125	General Chemistry Lab I	1
CHEM 1124	General Chemistry II	3
CHEM 1126	General Chemistry II Lab	1
MATH 2111	Statistics for Science Majors	4
PSYC 1101	Introduction to Psychology *	3

* Students with AP Psychology credit must either take PSYC 1101 Introduction to Psychology here and forfeit their AP credit, or take PSYC 2214 Mental Health to satisfy this prerequisite requirement.

** Students must achieve the required minimum Mathematics Placement Examination score enabling them to enroll in Pre-calculus or a higher level of Mathematics in their Fall semester of their freshman year. Students who fail to do so will be out of sequence in their dual degree program's curriculum and off track with their ability to complete the undergraduate portion of their dual degree program in the required timeframe. This will disqualify the student from transitioning to the graduate portion of their dual degree program in the School of Health and Medical Sciences.

Note that College Level Examination Program (CLEP), Advanced Placement (AP), and International Baccalaureate (IB) credits cannot substitute for any prerequisite course requirements for admission. Prerequisite courses taken at another institution prior to matriculation at Seton Hall University (except Anatomy & Physiology I and II and Microbiology) may be accepted, and those transfer grades will be calculated in the prerequisite GPA.

Academic Standards for Graduate Program Progression

Students must demonstrate that they are prepared to meet the demands of the PA program to be considered for progression into the graduate professional phase of the program. Students must complete all of their college core, University core and biology dual degree requirements in the first three years of their undergraduate curriculum. Students must:

- achieve and maintain cumulative and prerequisite GPAs of 3.5 at the conclusion of the freshman, sophomore and junior years
- complete all prerequisite courses listed above with a B or better upon initial completion of the course
- avoid violations of policies in the Student Handbook related to discipline, academic honesty, and residence life

Failure to meet these requirements will result in immediate dismissal from consideration for the dual degree program. GPA requirements are exact and will not be rounded to determine eligibility. No exceptions will be made to any dual degree admission requirements. Students dismissed from the dual degree program will have their major automatically changed from BIOP to USCI. Students must then consult with their advisors to select a new major. Students who have been dismissed are

welcome to apply to the PA program as part of the general applicant pool. Requirements for application to the PA program as a general pool applicant can be found in the Graduate Catalogue.

All BIOP dual degree students should consult with the Assistant Director of Advising for Dual Degree Programs in SHMS for academic advising.

Transfer Policy

Students may apply to transfer into the undergraduate portion of the B.S./M.S. dual degree program either as freshmen or sophomores only. All such applications must demonstrate outstanding academic ability, must have met the undergraduate academic standards described above, and will be considered on a space-available, case-by-case basis. Transfer admission into the program is extremely selective due to a limited number of seats available in the graduate professional phase of the program. Note that the following prerequisite courses must be taken at Seton Hall University even if previously taken elsewhere: Anatomy and Physiology I and II, and Microbiology.

Healthcare Experience Requirement

Students participating in the dual degree program are required to complete a minimum of 100 hours observing or participating in the delivery of healthcare in a clinical environment during their freshman, sophomore and/or junior years. It is recommended that at least 25 of 100 hours should be completed with a licensed PA. This requirement may be met through paid or volunteer experiences. Past experiences that students have used to meet this requirement include but are not limited to: shadowing a PA or physician in an office or hospital; volunteering or working as an emergency medical technician; working as a nurse, nurse's aide, respiratory therapist, paramedic, athletic trainer or other healthcare provider, or volunteering in a healthcare facility. The healthcare experience is intended to strengthen interpersonal skills and to develop an understanding of the role of a healthcare provider. Students are required to arrange their own healthcare experience. Doing so helps to demonstrate the level of commitment and motivation necessary to become a PA. Documentation indicating the completion of a minimum of 100 hours of healthcare experience must be provided to the Department of Physician Assistant by June 1st prior to entering the graduate professional phase of the program.

Progression into the Graduate Professional Phase

Students in good standing in the dual degree track who meet all requirements above will be invited to begin the PA curriculum during their senior year. Students who are not eligible for admission into the dual degree program may apply for entry to the PA program in the general applicant pool. Requirements for application to the PA program can be found in the Graduate Catalogue.

The entire six-year curriculum for students in the dual degree program may be seen below. Additional information related to the graduate professional phase of the program, including accreditation information and course descriptions, can be found in the Graduate Catalogue.

The PA program is a full-time, lock-step program; i.e., students must follow the prescribed sequence of courses. Dual degree students in their fourth/senior year (first year of graduate professional study when taking PAFY courses) are subject to SHMS grading policies. Successful completion of each course taken in SHMS in the fourth/senior year with a passing grade of C or higher is mandatory, along with a cumulative GPA of 3.0 or higher. Any grade below this standard is an automatic failure (F

grade) and will result in academic probation with suspension. Students on academic probation with suspension will be given the following two options:

1. Wait for the course to be offered again (typically the following year) and repeat the course to earn a B or higher, while still maintaining the required cumulative GPA of 3.0 or higher. Choosing this option will result in the student being placed on program suspension, and no other SHMS courses may be taken until the student has successfully repeated the failed course to earn a B or higher, otherwise the student may be dismissed from the program. The F grade will remain on the student's undergraduate transcript. Please consult with Financial Aid to determine if student loans will go into repayment during this period.
2. Close out the undergraduate degree (typically the following semester) before continuing in the graduate professional program. Choosing this option will result in the F grade remaining on the student's undergraduate transcript. The student will be required to repeat the failed course at the graduate level (GMPA) the next time it is offered, paying the graduate tuition rate, and must earn a B or higher and still maintain the required cumulative GPA of 3.0 or higher, otherwise the student may be dismissed from the program. No other SHMS courses may be taken until the student has successfully repeated the failed course. Please consult with Financial Aid to determine if student loans will go into repayment during this period.

Students will only have one opportunity to repeat a failed course, and failure to earn a B or higher could result in the recommendation of dismissal from the program.

Link to College Core requirement (<http://catalogue.shu.edu/undergraduate/college-arts-sciences/core-curriculum/>).

Course	Title	Hours
First Year		
First Semester		
BIOL 1211	General Biology- Organisms	3
BIOL 1212	General Biology-Organisms Lab	1
CHEM 1123	General Chemistry I	3
CHEM 1125	General Chemistry Lab I	1
CORE 1001	University Life	1
CORE 1101	Journey of Transformation	3
MATH 1401	Calculus I	4
		Hours
		16
Second Semester		
BIOL 1222	General Biology-Cell	3
BIOL 1223	General Biology-Cell Lab	1
CHEM 1124	General Chemistry II	3
CHEM 1126	General Chemistry II Lab	1
ENGL 1201	Core English I	3
MATH 2111	Statistics for Science Majors	4
Arts and Sciences Diversity Requirement		3
Arts and Sciences Communication Requirement *		
		Hours
		18
Summer		
Suggested health care experience time **		
		Hours
		0
Second Year		
First Semester		
BIOL 2221	Genetics	3
BIOL 2222	Genetics Lab	1
CHEM 2321	Organic Chemistry I	3

CHEM 2315	Organic Chemistry I-Lab	1
ENGL 1202	Core English II	3
PSYC 1101	Introduction to Psychology	3
Arts and Sciences Core ***		3
Hours		17
Second Semester		
BIOL 2238	Cell Biology	3
BIOL 2239	Cell Biology Lab	1
CHEM 2322	Organic Chemistry II	3
CHEM 2316	Organic Chemistry II-Lab	1
CORE 2101	Christianity and Cult in Dial.	3
Arts and Sciences Core ***		6
Hours		17
Summer		
Suggested health care experience time **		
Hours		0
Third Year		
First Semester		
BIOL 3334	Anatomy and Physiology I	3
BIOL 3335	Anatomy and Physiology I lab	1
BIOL 3411	Microbiology	4
PHYS 1701	General Physics I	3
PHYS 1811	Physics Laboratory I	1
Arts and Sciences Core ***		6
Hours		18
Second Semester		
BIOL 3336	Human Anatomy and Physio II	3
BIOL 3337	Human Anatomy and Phys II Lab	1
CORE 3XXX: Engaging the World		3
PHYS 1702	General Physics II	3
PHYS 1812	Physics Laboratory II	1
Arts & Sciences Core ***		6
Hours		17
Fourth Year		
First Semester		
Professional Year I		
PAFY 4001	Human Anatomy	4
PAFY 4104	Psychiatry	2
PAFY 4105	Professional Seminar I	2
PAFY 4111	Human Physiology	3
PAFY 4114	Pharmacology I	2
PAFY 4203	Intro Clinical Medicine I	4
Hours		17
Second Semester		
PAFY 4107	Pathophysiology	3
PAFY 4115	Pharmacology II	2
PAFY 4113	Neuroscience	3
PAFY 4205	Intro Clinical Medicine II	4
PAFY 4206	Electrocardiography	1
PAFY 4208	Laboratory Diagnostics	2
Hours		15
Summer		
GMPA 6209	Diagnostic Imaging	2
GMPA 6305	Professional Seminar 2	2
Hours		4
Fifth Year		
First Semester		
GMPA 7305	Professional Seminar 3	2
GMPA 7312	Fundamentals Clinical Medicine	8
GMPA 7314	Intro Clinical Medicine III	4

GMPA 7404	Research Methods I	2
Hours		16
Second Semester		
GMPA 7405	Professional Seminar 4	2
GMPA 8510	Biostatistics	2
Six Supervised Clinical Practice Experience Blocks ****		12
Hours		16
Sixth Year		
First Semester		
GMPA 8509	Research Methods II	1
GMPA 8515	Professional Seminar 5	2
GMPA 8604	Biomedical Ethics	2
GMPA 8605	Epidemiology	2
Four Supervised Clinical Practice Experience Blocks ****		8
Hours		15
Second Semester		
GMPA 8512	Research Methods III	2
GMPA 8603	Health Care Policy	2
GMPA 8615	Professional Seminar 6	2
Four Supervised Clinical Practice Experience Blocks ****		8
Hours		14
Total Hours		200

* See SHMS adviser. Fulfilling some of the requirements may lead to a need for some students to take overload or summer courses at additional cost. Consult with your advisors frequently to effectively manage your requirements.

** This is a prerequisite for admission to the professional phase of the program. Students are responsible for arranging their own healthcare experience time.

*** Consult the College of Arts and Sciences Core Curriculum for information regarding these courses.

**** The number of supervised clinical practice experience blocks indicated for each semester is an approximation. Student rotation schedules will vary based upon clinical site availability.

The Bachelor of Science degree is awarded upon successful completion of the fourth year of study.