

Biology: Pre-Physician Assistant Option

Bachelor of Science (BS)

Pre-Physician Assistant Option

This option is for students preparing to apply for admission into a physician assistant program. Physician assistants are in demand. The profession is one of the fastest growing in the country due to the shortage of primary care physicians, as well as economic pressures on health care costs. The required and supporting courses are typically required for admission into physician assistant programs.

The Department of Biology has numerous research and teaching labs and many regional field sites that provide excellent opportunities for "hands-on" experiences. We also have good relationships with local health professionals and two regional hospitals, providing numerous opportunities for volunteering, part-time employment, internships, and shadowing. Students may also choose to be involved in two student organizations, which allow them to explore their interest in the health profession.

Pre-Physician Assistant students will...

- Meet with their advisor each semester to assess their progress towards admission to a professional school.
- Take a core of courses that prepares them in any area of biology.
- Take rigorous coursework in anatomy and physiology and molecular genetics which are required for most MMS schools.
- Select additional electives in virology, immunology, pathogenic bacteriology, epidemiology, health physics, and toxicology.
- Complete 80 hours (for 2 credit hours) of experiential learning, usually shadowing doctors and nurses.
- Complete additional coursework in medical terminology, psychology, chemistry, physics, and mathematics to make them competitive for admission to MMS schools.
- Attend classes in the renovated Magill Hall furnished with modern equipment.

Career Planning

Career preparation is part of the mission of Southeast. In fact, more than 90% of Southeast students participate in internships, clinical opportunities, student teaching, research assistantships, and study abroad.

Professional career counselors are available for all students. The Office of Career Services in Academic Hall 057 can provide students with professional career counseling, resume critiques, practice interviews, job search strategies, career events, networking opportunities, and more.

Demonstrated Career Proficiency is a Requirement of all Southeast Students		
CL001/CL002	First Semester	Complete the FOCUS2 assessment and develop a Career Action Plan.
CL003	Junior Year	Students gain information about career planning and job searching resources.
CL004	Senior Year	Students demonstrate advanced proficiency by identifying a position in their field, developing a cover letter, and tailoring a resume for the position. Materials are critiqued to ensure preparedness for a successful job search.

Internship Opportunities

- St. Francis Medical Center
- Southeast Missouri Hospital
- Landmark Hospital
- Delta Area Hospital
- Regional physicians, physicians assistants, and nurse practitioners are eager to provide internship opportunities

Professional School Matriculation

- Southern Illinois University-Carbondale
- University of Missouri-Springfield
- University of Kentucky-Lexington
- St. Louis University
- Missouri State University

Physician Assistants complete a Masters of Medical Science (MMS) degree. The application process is very competitive. Many programs require substantial, 500-2000 hours of creditable medical employment. This may be fulfilled as a Certified Nurse Assistant, Emergency Medical Technician, and other allied health fields. Students considering becoming a Physician Assistant should consult the websites of the institutions they plan to attend for requirements and qualifications for admission.

Admission Requirements

A college preparatory sequence that includes three years of science (including biology, chemistry, and physics) and mathematics through advanced algebra is encouraged.

To learn more
 Office of Admissions
 (573) 651-2590
admissions@semo.edu
www.semo.edu

To explore the College
of Science, Technology, and
Agriculture online, visit
www.semo.edu/costa

For advising
 College of Science, Technology, and Agriculture
 Advising Center (573) 651-5930
Costaadvising@semo.edu
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This is a guide based on the 2015-2016 Undergraduate Bulletin and is subject to change. The time it takes to earn a degree will vary based on several factors such as dual enrollment, remediation, and summer enrollment. Students will meet with an academic advisor each semester and use DegreeWorks to monitor their individual progress.

CURRICULUM CHECKLIST

Required Courses:

- ___ BI151 Biological Reasoning (3)
- ___ BI153 Intro to Organismal Biology (4)
- ___ BI154 Genetics and Cell Biology (4)
- ___ BI489 Analysis of Biological Issues (2)
- ___ CH185/085/005 General Chemistry (5)

Choose one math course:

- ___ MA134 College Algebra (3)
- ___ MA137 Precalculus (5)
- ___ MA139 Applied Calculus (3)
- ___ MA140 Analytical Geometry & Calculus I (5)

Choose one additional math course:

- ___ MAxxx Additional math (MA133 or higher) (3)

Experiential Learning Requirement: 2 Hours

- ___ BI 471-473 Internships in Biology (2)

OR

- ___ BI 551-553 Biology Field Studies (2)

OR

- ___ BI 589-591 Biological Research (2)

Pre-Physician Assistant Option Required Courses:

- ___ BI381 Molecular Genetics (3)
- ___ BS113/013 Anatomy & Physiology I and Lab (4)
- ___ BS114/014 Anatomy & Physiology II and Lab (4)

Biology Electives - choose 12 Hours

- ___ BI/BO/BT/ZO prefix or BS 240 with at least 8 hours at the 300 level

Non-Biology Requirements:

- ___ CH186 Foundations of Inorganic Chemistry (3)
- ___ CH187 Inorganic Chemistry & Qualitative Analysis Lab (2)
- ___ CH341 Foundations of Organic Chemistry (4)
- ___ HL113 Medical Terminology (3)
- ___ PH120/020 Introductory Physics I and Lab (5)
- ___ PH121/021 Introductory Physics II and Lab (5)
- ___ PY220 Psychological Development Across the Lifespan (3)

University Studies Requirements (not already listed above):

UI100 First Year Seminar, EN100 English Composition, Artistic Expression, Written Expression, Oral Expression, Literary Expression, Development of a Major Civilization, Economic Systems, Political Systems, Social Systems, and two IU/UI3XXs, and one UI4XX.

SAMPLE FOUR-YEAR PLAN

	Fall Semester		Spring Semester	
	Course #	Hrs	Course #	Hrs
FIRST YEAR	UI100	3	BI153	4
	BI151	3	CH186	3
	CH185/085/005	5	CH187	2
	MA134/137/139/140	3-5	EN100	3
			PY220	3
Total	14-16	Total	15	
Milestone: maintain 2.0 cumulative GPA				

SECOND YEAR	BI154	4	Biology Elective	3
	PH120/020	5	PH121/021	5
	Artistic Expression	3	Literary Expression	3
	Written Expression	3	Political Systems	3
			Elective	3
Total	15	Total	17	
Milestone: maintain 2.0 cumulative GPA				

THIRD YEAR	BI381	3	CH341	4
	Experiential Learning Crs	2	Oral Expression	3
	Additional math	3	Social System	3
	Develop of a Mjr Civ	3	Electives	4
	Economic Systems	3		
Total	14	Total	14	
Milestone: take admission test (if required) & apply through CASPA				

FOURTH YEAR	BS113/013	4	BI489	2
	Biology elective	3	BS114/014	4
	Biology elective	3	HL113	3
	IU/UI 3xx	3	Biology electives	3
	IU/UI 3xx	3	IU/UI 4xx	3
Total	16	Total	15	
Milestone: maintain 2.0 cumulative GPA				

A "Milestone" signifies a significant stage for a student in the completion of a degree.

*Recommended for program; consult advisor

Degree requirements for all students: a minimum of 120 credit hours, completion of University Studies program, career proficiencies (CL001-004), Writing Proficiency Exam (WP003), and completion of the Measure of Academic Proficiency and Progress (MAPP) at the senior level.

A minimum 2.00GPA in the major and overall are required to graduate with a BS in Biology degree.

Refer to the Undergraduate Bulletin or DegreeWorks for additional graduation requirements (i.e. minimum GPA and coursework) for your program of study.

Revised
3/19/2015

Degree Map 2015-2016

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