

# 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**

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.
<b>Career Services</b> , located in Academic Hall 057, provides professional career advising to guide students in their career development.		

### **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  
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This is a guide based on the 2014-2015 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.

**Degree Map****CURRICULUM CHECKLIST****Biology: Pre-Physician Assistant Option - 49 Hours Required**

- \_\_\_ 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)
- \_\_\_ MA134 College Algebra (3)
- \_\_\_ MA xxx Additional Math (3)#
- \_\_\_ BI381 Molecular Genetics (3)
- \_\_\_ BS113/013 Anatomy & Physiology I and Lab (4)
- \_\_\_ BS114/014 Anatomy & Physiology II and Lab (4)
- \_\_\_ BI/BO/BT/ZO prefix or BS 240 with at least 8 hours at the 300 level (12)

**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)

**Non-Biology Requirements: 25 Hours**

- \_\_\_ 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)
- \_\_\_ PY101 Psychological Perspectives on Human Behavior (3)
- OR
- \_\_\_ PY102 Introduction to Psychology (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****Biology: Pre-Physician Assistant Option**

Requirements for the 2014-2015 Undergraduate Bulletin

	Fall Semester		Spring Semester	
	Course #	Hrs	Course #	Hrs
<b>FIRST YEAR</b>	UI100	3	BI153	4
	BI151	3	EN100	3
	MA134	3	CH186	3
	CH185/085/005	5	CH187	2
			PY101 or PY102	3
<b>Total</b>	<b>14</b>	<b>Total</b>	<b>15</b>	
<b>SECOND YEAR</b>	BI154	4	BI381	3
	CH341	4	BS114/014	4
	BS113/013	4	HL113	3
	Artistic Expression	3	Literary Expression	6
	<b>Total</b>	<b>15</b>	<b>Total</b>	<b>16</b>
<b>THIRD YEAR</b>	PH120/020	5	PH121/021	5
	Oral Expression	3	PY271/MA155/MA223#	3
	Experiential Learning	2	Social System	3
	Economic Systems	3	Develop of a Mjr Civ	3
	Political Systems	3		
<b>Total</b>	<b>16</b>	<b>Total</b>	<b>14</b>	
<b>FOURTH YEAR</b>	Biology elective	6	BI489	2
	IU/UI 3xx courses	6	Biology electives	6
	PY220	3	IU/UI 4xx	3
			General electives	4
	<b>Total</b>	<b>15</b>	<b>Total</b>	<b>15</b>

\*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 freshman and senior levels.

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.

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