

UNDERGRADUATE

## Biological Sciences

College of Arts and Sciences  
Department of Biological Sciences

SIUE



[siue.edu/biological-sciences](http://siue.edu/biological-sciences)

### Biological Sciences at SIUE

At SIUE, our diverse programs of study include specializations that allow students the opportunity to pursue any areas that are of interest to them. Students can customize their academic program in order to better prepare them for their chosen career.

### Degrees Available at SIUE

- Bachelor of Science, Biological Sciences
- Bachelor of Arts, Biological Sciences

Specialization required in one of the following:

- Ecology, Evolution and Conservation
- Genetics and Cellular Biology
- Integrative Biology
- Medical Science
- Medical Technology
- Professional Educator Licensure (9-12) program

### What can I do with a degree in biological sciences?

Many careers are available for people with basic or advanced training in biology. There are opportunities in:

- Botany
- Ecology
- Education
- Fisheries
- Forensics
- Forestry
- Genetic engineering
- Horticulture
- Medical technology
- Microbiology
- Molecular biology
- Parasitology
- Physiology
- Wildlife management
- Zoology

Technical and supervisory positions are available in federal, state, industrial and university laboratories.

Most students entering schools of medicine, dentistry, optometry, osteopathy, veterinary science, chiropractic and podiatry are biology majors. Basic training in biology is essential for careers in:

- Nutrition
- Pharmacy
- Occupational therapy
- Physical therapy

SOUTHERN ILLINOIS UNIVERSITY  
**EDWARDSVILLE**  
COLLEGE OF ARTS & SCIENCES

# Sample Curriculum for the Bachelor of Science in Biological Sciences, Medical Science

The first two years of biology and chemistry courses are identical for all specializations. Students pursuing a Bachelor of Arts will complete six courses in fine and performing arts or humanities, including one year of the same foreign language.

	Fall Semester		Spring Semester	
Year 1	<b>BIOL 150</b> Biology I (BLS, EL)	4	<b>BIOL 151</b> Biology II (BLS)	4
	<b>CHEM 121A</b> General Chemistry I (BPS)	4	<b>CHEM 121B</b> General Chemistry II (BPS)	4
	<b>CHEM 125A</b> General Chemistry Lab I (EL)	1	<b>CHEM 125B</b> General Chemistry Lab II	1
	ENG 101 English Composition I	3	ENG 102 English Composition II	3
	<b>MATH 145</b> Calculus for Life Sciences (FQR)	5	ACS 101 Public Speaking	3
	FST 101 Succeeding & Engaging at SIUE	1	Total Credits	15
Total Credits		18		
Year 2	<b>BIOL 220</b> Genetics (BLS)	4	BIOL 319 Cell & Molecular Biology	4
	<b>CHEM 241A</b> Organic Chemistry I (BPS)	3	<b>CHEM 241B</b> Organic Chemistry II (BPS)	3
	RA 101 Reasoning & Argumentation or PHIL 212	3	<b>CHEM 245</b> Organic Chemistry Lab	2
	<b>STAT 244</b> Statistics (BICS)	4	<b>PHYS 131/PHYS 131L</b> College Physics I or	
	Breadth Humanities (BHUM)	3	<b>PHYS 151, PHYS 151L</b> University Physics I	5
	Total Credits	17	Total Credits	14
Year 3	<b>PHYS 132/PHYS 132L</b> College Physics II or		BIOL 340 Physiology	4
	<b>PHYS 152, PHYS 152L</b> University Physics II	5	BIOL Elective (300-400 Level)	3-4
	Breadth Social Science (BSS)	3	Elective, if needed	2
	BIOL Elective	3	Experience Global Cultures (EGC)	3
	Breadth Fine & Performing Arts (BFPA)	3	Health Experience (EH)	3
	Total Credits	14	Total Credits	15-16
Year 4	BIOL 492 Biological Sciences Colloquium I	1	BIOL 492M or BIOL 497	2
	BIOL Elective (400 Level)	4	CHEM 352 Biochemistry II	3
	CHEM 351 Biochemistry I	3	Experience United States Cultures (EUSC)	3
	Interdisciplinary Studies (IS)	3	BIOL Elective (300-400 Level)	3-4
	Elective	3	Elective	2
	Total Credits	14	Total Credits	13-14
			<b>Total Hours</b>	<b>120</b>

**Transfer Students:** To maximize your transfer experience, complete the **bolded** courses/requirements pre-transfer and satisfy either the Illinois Articulation Initiative (IAI) General Ed Core or receive an AA, AS, or AAT (early childhood, special ed or math) degree from an IAI community college. If 'Minor' requirements are shown, discuss careful course selection with the academic advising contact listed. Visit [siue.edu/transfer](http://siue.edu/transfer) to find course equivalency guides..

## Admission Requirements

High school students who plan to major in one of the degree programs in biological sciences should complete at least three years of college preparatory mathematics (two years of algebra and one year of geometry), and one year each of chemistry and biology before entering the University. A fourth year of college preparatory mathematics (to include trigonometry) is strongly recommended.

Admission to a degree program in biological sciences requires an application for a major and acceptance by the department. Once admitted, students are formally affiliated with the department and assigned an academic advisor. Advisement is mandatory. Majors are permitted to register each term only after their course request forms have been approved by an academic advisor.

Students are encouraged to select their major field of study early in their academic careers to ensure orderly progress toward meeting degree requirements. To be admitted, students already enrolled in the University must have a minimum GPA of 2.0 in completed science and mathematics courses, as well as a cumulative GPA of 2.0 or higher in all courses taken at SIUE. Transfer students should have a 2.0 GPA in science and mathematics courses taken at other colleges and universities.

## Graduation Requirements

- Complete all specific program requirements
- Complete all University requirements including:
  - All general education requirements
  - A minimum of 120 credit hours
    - At least 30 of which must be completed at SIUE
    - At least 60 of which must be completed at a regionally accredited four-year institution
  - A minimum cumulative GPA of 2.0 (2.5 cumulative GPA is required for Professional Educator Licensure as well as a 2.5 science GPA, no grade lower than a C)
  - Bachelor of Arts only: One year of the same foreign language and six courses in the fine and performing arts or humanities
- File an Application for Graduation by the first day of the term in which you plan to graduate

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## Contact Information

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