

Biology: Organismal, Ecological, & Evolutionary Biology Option

Bachelor of Science (BS)

Organismal, Ecological, & Evolutionary Biology Option

This option is designed for students preparing to do graduate work or to seek full-time employment in this field. Employment can be found with national and state conservation and resource management agencies, park services, environmental consulting agencies, zoological parks, botanical gardens, and public health facilities, etc. This option can be customized to the student's interest in learning more about field biology, botany, zoology, ecology, etc. This is an option also appropriate for students considering veterinary school.

Faculty advisors in this area are active in research and they involve students in their research. These opportunities give students the potential to conduct, present, and publish research carried out with faculty members.

Organismal Biology students will...

- Meet with their advisor each semester to assess their progress towards admission to a professional school.
- Take a core of courses prepares them in any area of biology.
- Take rigorous coursework in evolutionary biology, ecology, plant biology, and animal biology which prepares them for advanced study or employment.
- Complete 80 hours for 2 credit hours of experiential learning, usually in field studies or internships.
- Complete additional coursework in geology and mathematics to qualify them for employment and graduate school.
- Attend classes in the renovated Magill Hall furnished with modern equipment.
- Have access to the Miller Reserve Wetlands Restoration project, the Kelso Wildlife Sanctuary, and the Reis Biological Research Station.

Career Planning

A St. Louis Outreach Office, located in Chesterfield, Mo., provides career exploration assistance, resume critiques, interview tips, job search strategies 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.
Career Services, located in Academic Hall 057, provides professional career advising to guide students in their career development.		

Recent Internship and Field Studies Experiences

- Missouri Department of Conservation
- Open Rivers & Wetland Field Station
- Trail of Tears State Park
- Big Oak Tree State Park
- Fults Hill Prairie Nature Reserve
- Whiterock Nature Preserve, Illinois
- Saltlick Nature Preserve, Illinois
- World Bird Sanctuary
- Army Corps of Engineers
- Black Hills, South Dakota
- St. Louis Zoo, Missouri

Graduate and Professional School Matriculation

- Southeast Missouri State University
- University of Missouri
- University of Missouri, School of Veterinary Medicine
- Southern Illinois University- Edwardsville
- University of Illinois- Champagne, School of Veterinary Medicine

Recent Employment Realized

- Missouri Department of Conservation
- Open Rivers & Wetland Field Station
- Trail of Tears State Park
- National Park Service
- Army Corps of Engineers
- Woodland Hills High School
- LAD Foundation

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
www.semo.edu/costa/advising/index.htm

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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.

CURRICULUM CHECKLIST

Biology: Organismal, Ecological, and Evolutionary Biology Option - 52 hours

- ___ 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)
- ___ BI300 Introduction to Evolutionary Biology (3)
- ___ BI332 General Ecology (3)
- ___ BO200 Plant Biology (4)
- ___ ZO200 Animal Biology (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)

Electives: 10 Hours

- ___ Any BI, BO, ZO, BT courses, 300 level and above (10)

Non-Biology Requirement:

- ___ UI373 Earth/Life Through Time (3)

University Studies Requirements (not already listed above):

UI100 First Year Seminar, EN100 English Composition, Artistic Expression, Literary Expression, Written Expression, Oral Expression, Behavioral Systems, Development of a Major Civilization, Economic Systems, Social Systems, Political Systems, one IU/UI3XX and one UI4xx.

SAMPLE FOUR-YEAR PLAN

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Requirements for the 2014-2015 Undergraduate Bulletin

	Fall Semester		Spring Semester	
	Course #	Hrs	Course #	Hrs
FIRST YEAR	UI100	3	BI153	4
	EN100	3	CH185/085/005	5
	BI151	3	Behavioral Systems	3
	MA134	3	Written Expression	3
	Artistic Expression	3		
Total	15	Total	15	
SECOND YEAR	BI154	4	BO200	4
	Additional Math course	3	BI332	3
	Economic Systems	3	Oral Expression	3
	Develop of a Mjr Civ	3	Political Systems	3
	Literary Expression	3	Social Systems	3
Total	16	Total	16	
THIRD YEAR	Biology electives	6	BI300	3
	UI373	3	Biology electives	4
	ZO200	3	Experiential learning crs	2
	IU/UI3XX	3	General elective	5
	Total	15	Total	14
FOURTH YEAR	General electives	15	BI489	2
			IU/UI 4xx	3
			General elective	9
Total	15	Total	14	

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 2.00 GPA 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
02/20/2014