SOUTHEAST MISSOURI STATE UNIVERSITY · 1873

Biology: Wildlife and Conservation Biology Option

Bachelor of Science (BS)

Wildlife and Conservation Biology Option

This option is designed for students preparing to do graduate work or to seek full-time employment in Wildlife Management, Conservation Biology or related fields. 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, among others.

Becoming Career Ready...

/ Faculty-mentored research and guidance will help you develop the professional skills needed for success in a competitive job market and/or advanced study in graduate and professional programs. Students attend classes in the newly renovated Magill Hall furnished with state-of-the-art equipment.

/ The Wildlife and Conservation Biology option prepares graduates to work one-on-one with nature in some beautiful environments. Example job titles include fisheries biologist, wildlife biologist, habitat restoration biologist, wildlife or fish manager, wildlife area manager and park ranger.

/ 100% of Southeast programs offer real-world experience. Wildlife and Conservation Biology students earn this experience through required 80 hours outside the class room which earn 2 college credits. Faculty advisors in this area have on-going research programs and involve students in their research. Students participate in external internships with the Missouri Department of Conservation and other agencies. In addition, students in wildlife and conservation biology have many opportunities to conduct, present, and publish research with biology faculty. Wildlife and Conservation Biology students also have access to the Miller Reserve Wetlands Restoration project, the Kelso Wildlife Sanctuary, the Reis Biological Research Station, the Diversity and Research Greenhouses and participate in their renovation.

/ Wildlife and Conservation Biology students take rigorous coursework in ecology, plant biology, and animal biology, which prepares them for advanced study or employment. Students also complete additional course work management of wildlife populations, management of wildlife habitat, conservation biology, wildlife toxicology, and wetlands ecology and management as well as, geology and mathematics to qualify them for wildlife certification after they graduate.

/ The Student Chapter of the Wildlife Society provides peer-support and guidance for Wildlife and Conservation Biology students. Students will meet with their advisor each semester to assess their progress towards post-graduation goals. Through advisor guidance, students may also select additional option courses in plant biology or microbiology, aquatic ecology, management of wildlife populations, ichthyology, conservation biology to help prepare students for their future career goals.

/ The path to a successful career starts with you! You can maximize your career development by working closely with Career Services and Southeast faculty – they are here to help you connect your passions, interests and skills to jobs and opportunities in the field. Career Services provides professional career counseling and coaching, resume critiques, practice interviews, job search strategies, career events, networking opportunities and more.

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
- Madikwe Game Reserve in South Africa
- Black Hills, South Dakota

Graduate School Matriculation:

- Southeast Missouri State University
- University of Missouri-Columbia
- Southern Illinois University - Edwardsville

Employment Opportunities:

- Greenhouse Technician at Monsanto
- Missouri Department of Conservation
- Open Rivers & Wetland Field Station
- Trail of Tears State Park
- National Park Service
- Army Corps of Engineers
- Florida Fish and Wildlife Service

Admission Requirements

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

Special Options with Biology

Southeast offers a Master of Natural Science in Biology.

Transfer and Dual Credit Students

If you have dual credit or transfer credit, please visit our transfer course equivalencies guide at semo.edu/transfercredit.

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

To explore the College of Science, Technology, Engineering and Mathematics online, visit semo.edu/stem

For advising
Center for Academic Advising
semo.edu/advising

SOUTHEAST MISSOURI STATE UNIVERSITY · 1873

Biology: Wildlife and Conservation Biology Option

Bachelor of Science (BS)

Degree Map 2019-2020

This is a guide based on the 2019-2020 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 Degree Works to monitor their individual progress.

CURRICULUM CHECKLIST

"Critical Courses" are italicized and bolded. Data shows that students who have completed this course in the first two years and have earned the noted grade are most likely to complete this program of study.

Required Courses:
___ ***BI163 Evolution & Ecology (4)***
___ BI173 Cell & Organismal Biology (4)
___ ***BI283 Genetics (4)***
___ BI389 Career Development in Biology (2)
___ CH185/085/005 General Chemistry (5)
Choose one math course:
___ MA116 Precalculus A (3)
___ MA137 Precalculus (5)
___ MA139 Applied Calculus (3)
___ MA140 Analytical Geometry & Calculus I (5)
Choose one additional math course:
___ MAxxx Additional math (for which MA116 is a prerequisite) (3)
OR
___ MA155 Statistical Reasoning (3)
Experiential Learning Requirement: 2 hours
___ BI471-473 Internships in Biology (2)
___ BI551-553 Biology Field Studies (2)
___ BI563-565 Experience in Museum Curation (1-3)
___ BI570 Development of Instructional Materials (1)
___ BI589-591 Biological Research (2)
Wildlife and Conservation Option Required Courses:
___ ***BI332 General Ecology (3)***
___ BO310 Plant Biology (4)
___ ZO310 Animal Biology (4)
Choose 6 Hours From:
___ BI420 Management of Wildlife Populations (3)
___ BI430 Management of Wildlife Habitat (3)
___ BI435 Conservation Biology (3)
___ BI440 Wetland Ecology and Management (3)
___ BI469 Wildlife Toxicology (3)
Biology Electives: choose at least 5 Hours not selected above
___ Any BI, BO, ZO, BT courses, 300 level and above (6)
Non-Biology Requirements: 3 Hours
___ GO110 Physical Geology (3)

General Education Requirements – some requirements may be fulfilled by coursework in major program

- Social and Behavioral Sciences – 6 hours
- Constitution Requirement – 3 hours
- Written Communication – 6 hours
- Oral Communication – 3 hours
- Natural Sciences – 7 hours (from two disciplines, one to include a lab)
- Mathematics – 3 hours
- Humanities & Fine Arts – 9 hours (from at least two disciplines)
- Additional requirements – 5 hours (to include UI100 for native students)
- Civics examination

SAMPLE FOUR-YEAR PLAN

	Fall Semester		Spring Semester	
	Course #	Hrs	Course #	Hrs
FIRST YEAR	UI100	3	BI173	4
	BI163	***4***	EN100	3
	CH185/085/005	5	Additional Math	3
	MA116/137/139/140	3-5	General Education	3
			General Education	3
	Total	**15-17**	**Total**	**16**
	Milestone: achieve a target cumulative GPA of 3.0			
SECOND YEAR	BI283	4	BI332	3
	General Education	3	BO310	4
	General Education	3	General Education	3
	General Education	3	General Education	3
	General Education	3	General Education	3
	Total	**16**	**Total**	**16**
	Milestone: achieve a target cumulative GPA of 3.0			
THIRD YEAR	BI389	2	BI420/430/435/440/469	3
	ZO310	4	GO110/010	3
	Biology Elective	3	Biology Elective	2
	Elective	3	Elective	3
	Elective	3	Elective	3
	Total	**15**	**Total**	**14**
	Milestone: achieve a target cumulative GPA of 3.0			
FOURTH YEAR	BI420/430/435/440/469	3	Elective	3
	Experiential Learning Crs	2	Elective	3
	Elective	3	Elective	3
	Elective	3	Elective	3
	Elective	2	Elective	3
	Total	**13**	**Total**	**15**
	Milestone: achieve a target cumulative GPA of 3.0			

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

Degree requirements for all students: *a minimum of 120 credit hours, completion of the General Education program, completion of 39 senior division hours (300-599), Writing Proficiency Exam (WP003).*

Refer to the Undergraduate Bulletin or Degree Works for additional graduation requirements for your program.

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

Revised 4/29/2019

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

To explore the College of Science, Technology, Engineering and Mathematics online, visit semo.edu/stem

For advising
Center for Academic Advising
semo.edu/advising