This option is designed for the student who is preparing to do graduate work in this area or seek full-time employment in this field. Employment may be found with national and state conservation and resource management agencies, park services, environmental consulting agencies, and zoological parks, among others. This option includes course work to be taken at the Gulf Coast Research Laboratory (GCRL) or another comparable institution.

The time spent at a marine station affords students the opportunity to gain hands on experience or advanced education/training in the marine environment.

Marine Biology students will...
- Meet one-on-one, with their advisor, Dr. Michael Taylor or Dr. Timothy Judd, each semester to assess their progress in the program and toward their post-graduation goals.
- Take a core of courses that will prepare them for any area of biology.
- Take rigorous coursework in marine biology, marine ecology, invertebrate zoology and animal biology, which will prepare them for advanced study or employment.
- Select additional option courses in plant biology or microbiology, aquatic ecology, management of wildlife populations, ichthyology, conservation biology and more.
- Take at least one course at a marine laboratory such as the Gulf Coast Research Laboratory.
- Be required to complete 80 hours of experiential learning, usually in field studies or internships.
- Complete additional course work in oceanography, physics, organic chemistry and calculus in order to qualify them for employment.
- Attend classes in the newly renovated Magill Hall furnished with state-of-the-art equipment.
- Have access to the Miller Reserve Wetlands Restoration project, the Kelso Wildlife Sanctuary and the Reis Biological Research Station.

Career Planning
Career preparation is part of the mission of Southeast. 100% of programs offer our students an internship, study-abroad program, clinical opportunity, student teaching or research internship.

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

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

Recently, Marine Biology students have been placed in the following institutions:
- Missouri Department of Conservation
- St. Louis Children’s Museum
- St. Louis Zoo
- Sea World
- Whale Shark and Oceanic Research Center
- Coastal Marine Education Research Academy

Graduate School
Matriculation/Employment
- Southeast Missouri State University
- University of Southern Mississippi
- University of Puerto Rico
- Miami Seaquarium

Employment Opportunities
- Aquarium Technician
- Biological Oceanographer
- Conservation Agent
- Field Technician
- Laboratory Assistant
- Marine Biologist
- Marine Fisheries Biologist
- Marine Mammal Trainer
- Park Service Naturalist

Electives offered in this Major
- Marine Microbiology
- Marine Phycology
- Marine Aquaculture
- Marine Mammals
- Coastal Vegetation
- Marine Fisheries Management
- Marine Ichthyology

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.
This is a guide based on the 2017-2018 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**

"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:**
- B153 Evolution & Ecology (4)
- B173 Cell & Organismal Biology (4)
- B283 Genetics (4)
- B139 Career Development in Biology (1)
- 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)
- BI 551-553 Biology Field Studies (2)
- BI 589-591 Biological Research (2)
- BI 570 Development of Instructional Materials (1)

**Marine Biology Option Required Courses:**
- BI332 General Ecology (3)
- BI48 Marine Biology (3)
- BI43 Marine Ecology & Conservation (3)
- ZO510 Animal Biology (4)
- ZO430 Invertebrate Zoology (4)

**Biology Electives**: 6-8 hours
- BI/BO/ZO elective
- BIBO/BI/ZOxxx 300 level or above

* A minimum of 3 hours must be taken from the Gulf Coast Research Laboratory or comparable institution or the equivalents listed below.

**Non-Biology Requirements:**
- CH186 Foundations of Inorganic Chemistry (3)
- CH187 Inorganic Chemistry & Qualitative Analysis Lab (2)
- CH 341 Foundations of Organic Chemistry (4)
- CH042 Organic Chemistry Lab I (1)
- GO302 Oceanography (3)
- PH106 Physical Concepts (3)

**University Studies Requirements** (not already listed above):
- UI100 First Year Seminar, EN100 English Composition, Artistic Expression, Written Expression, Oral Expression, Literary Expression, Behavioral Systems, Development of a Major Civilization, Economic Systems, Political Systems, Social Systems

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

**SAMPLE FOUR-YEAR PLAN**

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Milestone: achieve a target cumulative GPA of 3.0

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Milestone: achieve a target cumulative GPA of 3.0

**SUMMER TERM**

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Milestone: achieve a target cumulative GPA of 3.0

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

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

**Degree requirements for all students:** a minimum of 120 credit hours, completion of University Studies program, completion of 39 senior division hours (300-599), career proficiencies (CL001-004), Writing Proficiency Exam (WP003), and completion of the Measure of Academic Proficiency and Progress (MAPP) at the senior level. Refer to the Undergraduate Bulletin or Degree Works for additional graduation requirements for your program.

Revised 3/31/2017