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.

**Recent Internship Placement**
- 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.

**Transfer and Dual Credit Students**

If you have dual credit or transfer credit, please visit our transfer course equivalencies guide at semo.edu/transfercredit.
This is a guide based on the 2018-2019 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:**
- **BI103** Evolution & Ecology (4)
- **BI173** Cell & Organismal Biology (4)
- **BI283** Genetics (4)
- **BI389** Career Development in Biology (1)
- **CH185/085/005** General Chemistry (5)
- **CH342** Inorganic Chemistry (3)
- **CH341** Organic Chemistry (4)
- **CH343** Organic Chemistry Lab I (1)
- **CH350** Invertebrate Zoology (4)
- **CH591** Biological Research (2)

**Biology Option Required Courses:**
- **BI332** General Ecology (3)
- **BI340** Marine Biology (3)
- **BI344** Marine Ecology & Conservation (3)
- **ZO310** Animal Biology (4)
- **ZO430** Invertebrate Zoology (4)

**Biological Electives**: 6-8 hours
- **BI/BO/ZO** elective

**Non-Biology Requirements:**
- **CH185** Foundations of Inorganic Chemistry (3)
- **CH187** Inorganic Chemistry & Qualitative Analysis Lab (2)
- **CH341** Foundations of Organic Chemistry (4)
- **CH342** Organic Chemistry Lab I (1)
- **GO320** Oceanography (3)
- **PH101** Physical Concepts (3)

**University Studies Requirements** – some requirements may be fulfilled by coursework in major program
- Social and Behavioral Sciences – 3 hours
- Constitution requirement – 3 hours
- US History 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)

**SAMPLE FOUR-YEAR PLAN**

<table>
<thead>
<tr>
<th>Course #</th>
<th>Fall Semester Hrs</th>
<th>Spring Semester Hrs</th>
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<tr>
<td><strong>FIRST YEAR</strong></td>
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<tr>
<td>UI100</td>
<td>3</td>
<td>BI173</td>
</tr>
<tr>
<td>BI163</td>
<td>4</td>
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<td>CH187</td>
</tr>
<tr>
<td>MA116/137/139/140</td>
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<td>EN100</td>
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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

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Milestone: achieve a target cumulative GPA of 3.0

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<td><strong>Total</strong></td>
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</table>

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), 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.