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. In fact, more than 90% of Southeast students participate in internships, clinical opportunities, student teaching, research assistantships, and study abroad. Professional career counselors are available for all students. The Office of Career Services in Academic Hall 057 can provide students with professional career counseling, 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
- Great White Shark
- 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.

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**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
### Bachelor of Science (BS)

This is a guide based on the 2016-2017 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

**Required Courses:**
- BI163 Evolution & Ecology (4)
- BI173 Cell & Organismal Biology (4)
- BI233 Genetics (4)
- BI389 Career Development in Biology (1)
- CH185/085/005 General Chemistry (5)

Choose one math course:
- MA134 College Algebra (3)
- MA137 Pre-calculus (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

**Non-Biology Requirements:**
- 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)
- BI348 Marine Biology (3)
- BI434 Marine Evolutionary Ecology (3)
- ZO310 Animal Biology (4)
- ZO430 Invertebrate Zoology (4)

**Biology Electives:** 6-8 hours
- BI/BO/BOxxx 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:

**University Studies Requirements (not already listed above):**
- UI100 First Year Seminar, EN100 English Composition, Artistic Expression, Written Expression, Oral Expression, Literacy Expression, Behavioral Systems, Development of a Major Civilization, Economic Systems, Social Systems, Political Systems, two IU/UI/004s, and one UI4xx.

### SAMPLE FOUR-YEAR PLAN

#### FALL SEMESTER

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**Milestone:** maintain 2.0 cumulative GPA

#### SPRING SEMESTER

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**Milestone:** maintain 2.0 cumulative GPA

### SUMMER TERM

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**Milestone:** maintain 2.0 cumulative GPA

### FOURTH YEAR

#### FALL SEMESTER

<table>
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</table>

**Milestone:** maintain 2.0 cumulative GPA

### 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 senior level.

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

Refer to the Undergraduate Bulletin or DegreeWorks for additional graduation requirements (i.e. minimum GPA and coursework) for your program of study.

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