

Marine Sciences Program

www.savannahstate.edu/marinesciences

The SSU Marine Sciences Program provides vital research, education, and outreach programming to develop a technically qualified, intellectually thoughtful, and ethnically diverse community of ocean scientists.

Stop by to meet the faculty and visit our beautiful locations next to Country Club Creek!

Degree Programs

Bachelor of Science in Marine Sciences

Master of Science in Marine Sciences



Externally Supported Research & Training Programs

DOEd SSUMMS

NOAA LMRCSC

NSF Bridge to Research

Office of Naval Research (ONR)

Contact us to schedule a tour!

Department of Marine and Environmental Sciences
Faculty Offices and Research Facility
2717 Livingston Ave
Savannah, Georgia 31406
p: 912-358-4101 | f: 912-358-4046



Boat photo courtesy of Dr. Matthew Gilligan, "Students collecting samples" courtesy of Courtney Pegus.



R. Kiser sampling courtesy of Robin Pertree.

The Marine Sciences Program at Savannah State University offers an array of hands on educational research opportunities. Popular experiences include sample and data collection aboard SSU's vessels, including the R/V *Margaret C. Robinson*. Skills in aquarium systems, GIS, data analytics, technical writing, and ocean instrumentation are developed in our courses and are applied in student research.



SSU Dept of Marine & Environmental Sciences

A University System of Georgia Institution



Program Map: Marine Sciences
Department of Marine and Environmental Sciences, College of Sciences and Technology

Core IMPACTS Curriculum (Program Preferred Options in Bold)

Area I – Institutional Priority - 5 hrs

1. AFRS 1501 Survey of African-American Experience 2 hrs
2. Select one of the following:
 - DATA 1501 Introduction to Data Science 3 hrs
 - POLS 2401 Global Issues 3 hrs
 - HUMN 1201 Critical Thinking & Communication 3 hrs
 - AFRS 2000 Introduction to Africana Studies 3 hrs

Area M – Mathematics & Quantitative Skills – 3 hrs

1. Select one of the following:
 - MATH 1001 Quantitative Reasoning 3 hrs
 - MATH 1111 College Algebra 3 hrs
 - MATH 1401 Elementary Statistics 3 hrs
 - MATH 1113 Pre-Calculus 3 hrs**

Area P – Political Science and U.S. History - 6 hrs

1. POLS 1101 American Government 3 hrs
2. HIST 2111 U.S. History to the Post-Civil War Period 3 hrs **or**
HIST 2112 U.S. History from the Post-Civil War to Present 3 hrs

Area A – Arts, Humanities and Ethics - 6 hrs

1. Select two of the following:
 - ARTS 1101 Introduction to Visual Art 3 hrs
 - DNCE 2010 Dance Appreciation 3 hrs
 - ENGL 2111 World Literature I 3 hrs
 - ENGL 2112 World Literature II 3 hrs
 - ENGL 2121 British Literature I 3 hrs
 - ENGL 2122 British Literature II 3 hrs
 - ENGL 2131 American Literature I 3 hrs
 - ENGL 2132 American Literature II 3 hrs
 - ENGL 2140 Introduction to African American Literature 3 hrs
 - ENGL 2521 Introduction to Film 3 hrs
 - HUMN 2011 Humanities 3 hrs
 - MUSC 1101 Introduction to Music 3 hrs
 - PHIL 2010 Introduction to Philosophy 3 hrs
 - PHIL 2030 Introduction to Ethics 3 hrs
 - THEA 2101 Introduction to Theatre 3 hrs

Area C – Communicating in Writing - 6 hrs

1. ENGL 1101 English Composition I 3 hrs
2. ENGL 1102 English Composition II 3 hrs

Area T – Technology, Mathematics and Sciences - 10 hrs

1. Select one of the following:
 - ASTR 1000 Introduction to the Universe 3 hrs
 - BIOL 1103/1103L General Biology 4 hrs
 - BIOL 1104/1104L Human Biology 4 hrs
 - CILS 1130 Computer Applications 3 hrs
 - CSCI 1130 Computer Applications 3 hrs
 - CSCI 1301 Computer Science I 3 hrs
 - DATA 1501 Introduction to Data Science 3 hrs
 - ENVS 1140 Environmental Issues 3 hrs
 - FSCI 1107 Introduction to Molecular Forensic Science 3 hrs
 - ISCI 1101 Integrated Science I 3 hrs
 - MATH 1111 College Algebra 3 hrs
 - MATH 1401 Elementary Statistics 3 hrs
 - MATH 1113 Pre-Calculus 3 hrs
2. Select two of the following lab sciences:
 - BIOL 1103/1103L General Biology 3+1 hrs
 - BIOL 1104/1104L Human Biology 3+1 hrs
 - BIOL 1107/1107L Principles of Biology I 3+1 hrs**
 - BIOL 1108/1108L Principles of Biology II 3+1 hrs
 - CHEM 1101K Introductory Chemistry 4 hrs
 - CHEM 1211/1211L Principles of Chemistry 3+1 hrs**
 - CHEM 1212/1212L Principles of Chemistry 3+1 hrs**
 - ISCI 1111K Integrated Science II 4 hrs
 - MSCI 1501K Introduction to Marine Biology 4 hrs
 - PHYS 1111K Introductory Physics I 4 hrs
 - PHYS 1112K Introductory Physics II 4 hrs

- PHYS 2211K Principles of Physics I 4 hrs
- PHYS 2212K Principles of Physics II 4 hrs

Area S – Social Sciences - 6 hrs

1. Select two of the following:
 - AFRS 2000 Introduction to Africana Studies 3 hrs
 - ANTH 1101 Introduction to Anthropology 3 hrs
 - ECON 2105 Principles of Macro-Economics 3 hrs
 - GEOG 1101 Introduction to Human Geography 3 hrs
 - HIST 1111 World Hist to Early Modern Times 3 hrs
 - HIST 1112 World History Early Modern Times to Pres 3 hrs
 - POLS 2401 Global Issues 3 hrs
 - PSYC 1101 Intro to General Psychology 3 hrs
 - PSYC 2103 Human Growth & Development 3 hrs
 - SOCI 1101 Introduction to Sociology 3 hrs
 - SOCI 1160 Social Problems 3 hrs

Major Guidelines***

- Field of Study Area (17 hrs)
- COST 1103 First Year Experience 2 hrs
 - MSCI 1810K Marine Biology 4 hrs
 - MSCI 2010K Intro to Oceanography 4 hrs
 - PHYS 1111K Introductory Physics or
PHYS 2211K Principles of Physics 4 hrs
 - MATH 1401 Elementary Statistics or
MATH 3000 Intro to Biostatistics 3 hrs

- Major Requirements (28 hrs)
- BIOL 1107L Prin of Biology I Lab 3 hrs
 - MATH 2101 Calculus I 4 hrs
 - CHEM 2501 Organic Chemistry 3 hrs
 - CHEM 2501 Organic Chemistry Lab 1 hr
 - CHEM 3301K Marine Chemistry & Analysis 4 hrs
 - MSCI 3901 Technical Writing 3 hrs
 - MSCI 4201K Marine Ecology 4 hrs
 - MSCI 4350K Biological Oceanography 4 hrs
 - MSCI 4902 Sr. Research/Internship 3 hrs
 - MSCI 4904 Sr. Seminar 1 hr

- Marine Science Electives (6 hrs selected from options below)***
- MSCI 3401K Marine Invertebrate Zoology 4 hrs
 - MSCI 3501 Ichthyology 4 hrs
 - MSCI 4401K Marine Sediments 4 hrs
 - MSCI 4447 Marine Mammalogy 3 hrs

- Marine Science Tools Electives (6 hrs selected from options below)***
- MSCI 2701K Aquarium Systems I 4hrs
 - MSCI 2702K Aquarium Systems II 4 hrs
 - MSCI 3560 Big Data Analysis 3hrs
 - MSCI 3702 Intro to GIS 3 hrs
 - MSCI 4572 Oceanographic Instrumentation 3 hrs

- Math/Science Electives (3 hrs selected from options below)***
- PHYS 1112K/2212K Intro/Principles Physics II 4 hrs
 - MATH 2111 Calculus II 4 hrs
 - CHEM 2511/L Organic Chemistry II 4 hrs
 - CHEM 3801 Biochemistry 3 hrs

Other COST Electives (17 hrs)

Additional courses within the College of Science & Technology including 2 MSCI courses. *** Extra hrs from the elective categories above also count here, for a total of 17 hours. 39 hours of 3000/4000 level courses are required for the degree, thus limiting use of 1000/2000 electives.

Program Description

The mission of the SSU Marine Sciences Program is to provide vital research, education, and outreach programming to develop a technically qualified, intellectually thoughtful, and ethnically diverse community of ocean scientists. Students are trained in research and science communication throughout their studies and develop technical skill sets for competitive job placement. The university is adjacent to a salt marsh tidal creek, has two docks, and multiple boats for instruction and research.