



**Marine Science (B.S.)**  
**College of Arts and Sciences**  
**Department of Marine and Ecological Sciences**

<https://www2.fgcu.edu/CAS/MarineScience/index.asp>  
(239) 590-7196

**20182019-2019-2020 Catalog Year**

GLY 1000C is being replaced by GLY 1010C Physical Geology for the proposed program Environmental Geology B.S. In anticipation of this new program's approval, the catalog copies for affected majors have been prepared by ACS as informational items for the University Undergraduate Curriculum Team. All other edits were approved at a prior meeting.

**Program Progression And Additional Graduation Requirements**

- Attend an orientation session.
- Sign an Advising Agreement document.

In addition to the program requirements, students must:

- Complete a minimum of 120 credits.
- Complete a minimum of 48 of the 120 credits at the upper division (3000 - 4999) level.
- Earn a cumulative GPA of 2.0 for all coursework attempted at FGCU.
- Satisfy the College-Level Skills and foreign language entrance requirements.
- Satisfy the Service Learning requirement. (See [www.fgcu.edu/connect](http://www.fgcu.edu/connect)).
- Satisfy the residency requirement: thirty of the last sixty credits must be completed at FGCU.
- Complete the summer course enrollment requirement.
- Submit an Application for Graduation by the deadline listed in the FGCU Academic Calendar.

**Program Requirements**

**1. FGCU General Education**

**Program** ([https://www2.fgcu.edu/general\\_education/](https://www2.fgcu.edu/general_education/))

To prevent or minimize excess hours, select general education courses that satisfy common prerequisite requirements for your intended major.

**2. Common Prerequisites**

For this major, common prerequisite courses with an asterisk (\*) require prior knowledge and skills demonstrated through degree acceleration programs (e.g., the College Board's Advanced Placement Program [AP], International

Baccalaureate Program [IB], College-Level Examination Program [CLEP], Advanced International Certificate of Education Program [AICE]); dual enrollment; placement exam; or college coursework.

FGCU Course: [BSC 1010C Gen'l Biology w/Lab I (4) or {BSC 1010 General Biology I (3) and BSC 1010L General Biology I Laboratory (1)} Minimum grade of C

Acceptable Substitute: BSCX010C

FGCU Course: BSC 1011 General Biology II (3) and BSC 1011L General Biology II Laboratory (1) Minimum grade of C

Acceptable Substitute: BSCX011C

FGCU Course: \*CHM 1045 General Chemistry I (3) and CHM 1045L General Chemistry I Lab (1) Minimum grade of C

Acceptable Substitute: CHMX045C

[Prerequisites of MAT 1033 minimum grade of C then MAC 1105 minimum grade of C; or relevant accelerated credit; or placement exam]

FGCU Course: CHM 1046 General Chemistry II (3) and CHM 1046L General Chemistry II Lab (1) Minimum grade of C

Acceptable Substitute: CHMX046C

FGCU Course: ~~GLY 1000C~~ GLY 1010C Physical Geology (4) Minimum grade of C  
Acceptable Course: GLYX000C

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FGCU Course: \*MAC 2311 Calculus I (4) or \*STA 2122 Social Science Statistics (3) or an advanced mathematics course. Minimum grade of C

Acceptable Substitute: MACX311 or STAX122 or an advanced mathematics course

[For MAC 2311 Prerequisites of MAT 1033 minimum grade of C then MAC 1105 minimum grade of C then MAC 1147 minimum grade of C; or relevant accelerated credit; or placement exam]

[For STA 2122 Prerequisites of MAT 1033 minimum grade of C then STA 2023 and PSY 2012 minimum grades of C; or relevant accelerated credit; or placement exam]

FGCU Course: \*PHY 2053C College Physics I w/Lab (4) Minimum grade of C  
Acceptable Substitute: PHYX053C

[Prerequisites of MAT 1033 minimum grade of C then MAC 1105 minimum grade of C then MAC 1147 minimum grade of C; or relevant accelerated credit;

or placement exam]

FGCU Course: \*STA 2023 Statistical Methods (3) Minimum grade of C

Acceptable Substitute: STAX023

[Prerequisites of MAT 1033 minimum grade of C; or relevant accelerated credit; or placement exam]

### 3. **Required Courses in the Major (29 credits)**

A minimum grade of C is required in each course.

CHM 1084C Environmental Chemistry (4)

[ISC 3XXXC \(3527C\) Environmental Research Design](#)

GLY 4700C Coastal & Watershed Geology (3)

IDS 3300 Foundations of Civic Engagement (3)

~~ISC 3120C Scientific Process (3)~~

OCB 4633C Marine Ecology (3)

OCB 4936 Senior Seminar Marine Science (1)

OCC 4002C Marine Chemistry (3)

OCE 3008C Oceanography (3)

OCP 3002C Physical Oceanography (3)

PCB 3463C Marine Eco Mon & Res Method (3)

### 4. **Restricted Electives in the Major (20-21 credits)**

A minimum grade of C is required in each course.

Students are asked to select their electives equitably between the physical and biological sciences to best ensure they are well prepared as interdisciplinary marine scientists.

Select one of the following:

ISC 4910 Sr. Proj Rsch Intrdisc Nat Sci (3)

ISC 4940 Internship in Interdis Nat Sci (3)

Select 2 credits in any combination from the following:

BSC 4933\* Current Topics in Biology (1)

EVR 4920\* Current Topics Environ Studies (1)

ISC 4930\* Current Topics in Intd Nat Scienc (1)

\*This course/prefix number can be repeated as long as the topic is different.

Select 6 credits from the following Ecological/Biological courses:

BSC 3303 Biogeography (3)  
EVR 4024C Microbial Ecology (3)  
EVS 4814C Environmental Toxicology (3)  
OCB 3108C Field Studies Marine Science (4)  
OCB 4930 Special Topics: Marine Biology (3)  
PCB 3043C General Ecology (3)  
PCB 4303C Limnology (3)  
PCB 4442C Wetland Ecology (3)  
ZOO 3205C Invertebrate Zoology (3)  
ZOO 4454C Ichthyology (3)  
ZOO 4894C Fisheries Management (3)

Select 6 credits from the following Physical/Statistical/Geological courses:

GLY 3420C Tectonics and Marine Geology (4)  
GLY 3603C Geobiology (3)  
GLY 4071C Paleoclimatology (3)  
GLY 4074C Meteorology & Climatology (3)  
GLY 4244C Biogeochemistry (3)  
GLY 4574C Sediment Dynamics (3)  
GLY 4952 Carbonate Deposition Environs (3)  
OCE 4930 Special Topics: Oceanography (3)  
OCP 4284C Coastal Hydrodynamics (3)  
PAD 4343C Coastal Zone Management (3)  
STA 3163 Applied Statistics (3)

Select 3 credits from the following:

BCH, BOT, BSC, CHM, EVR, EVS, GLY, MAP, OCB, OCC, OCE, OCG,  
OCP, PCB, PHY, ZOO — 3000-4999 (3)

**5. University Requirements (3 credits)**

IDS 3920 University Colloquium (3)

**6. Additional Electives** - as needed to reach total credits required for the degree

**TOTAL CREDITS REQUIRED: 120**