



B.S. Marine Science: Oceanography Requirements

The ocean covers over 71% of our planet. The Marine Science major focuses on the interactions among biology, chemistry, geology, and physics in the world's oceans. The laboratory and field-intensive interdisciplinary core curriculum prepares students for graduate school and careers in industry, government, fisheries, marine biology, oceanography, marine engineering, marine geology, pharmaceuticals, and natural resource development and protection. Recent marine science graduates work in diverse fields as biologists at zoos, aquariums, research labs, and national parks, as technicians at pharmaceutical and microbiology laboratories, as marine technicians on research ships, and as a video producer for NASA Earth. Students majoring in Marine Science choose from two concentration areas: Marine Biology and Oceanography.

Note that all students must achieve 120 undergraduate credits and a minimum 2.0 overall GPA to graduate. The final GPA requirement for Marine Science: Oceanography is 2.0.

Required Marine Science: Oceanography Core Courses – 27 credits

MRSC 110 Intro. to Oceanography (3 credits)

MRSC 226 Marine Biology (3 credits)

MRSC Method-Intense Field Course (3 credits) *Methods courses are offered at the Chincoteague Bay Field Station, Wallops Island, VA and must be approved by the MRSC Program Coordinator.*

MRSC 210 Sophomore Seminar (1 credit)

MRSC 364 Physical Oceanography (3 credits)

MRSC 366 Marine Geology (3 credits)

MRSC 380 Senior Seminar (2 credits)

MRSC 370: Research in Marine Science (3 credits) *or* MRSC 390 Internship in Marine Science (3 credits)

MRSC Elective (3 credits)

MRSC Elective (3 credits)

Courses in this category may be used to satisfy the minimum of 9 credit hours that must be taken at the Chincoteague Bay Field Station, Wallops Island, VA.

Required Oceanography Track Courses – 13 credits

GEOL 100 Physical Geology (4 credits)

Physical Science courses include prefixes: MRSC, GEOL, PHYS, CHEM, ASTR

Physical Science course level 100 or higher (3 credits)

Physical Science course level 200 or higher (3 credits)

Physical Science course level 200 or higher (3 credits)

Other Required Courses – 19 credits

BIOL 106 Intro. to Zoology (4 credits) *or* BIOL 108 Intro. to Botany (4 credits)

CHEM 100 General Chemistry I (4 credits)

GEOG 274 Geo. Info. Sys. I (3 credits)

MATH 181 Calculus I (4 credits) *or* higher

PHYS 42 General Physics II (4 credits) *or* PHYS 102 Physics II (4 credits)

Directed General Education Courses – 12 credits

These courses are required for the major and satisfy the general education requirement “Understanding Science and Technology.”

BIOL 104 Principles of Biology – Category C1 (4 credits)

CHEM 102 General Chemistry II – Category C2 (4 credits)

PHYS 40 General Physics I (4 credits) *or* PHYS 100 Physics I – Category C3 (4 credits)

University Electives – 16 credits

Students may use a combination of 1, 3 and 4 credit courses to complete 16 credits of University Electives

Program Plan Code: BS_MARF_OCEA

Effective Date: Spring 2020



B.S. Marine Science: Oceanography Check Sheet

Student Name:

Student ID Number:

This check sheet provides a mechanism for students and advisors to keep track of a student's progress in the program. Please refer to the program requirements for more details regarding options.

Note that all students must achieve 120 undergraduate credits and a minimum 2.0 overall GPA to graduate. The final GPA requirement for Marine Science: Oceanography is 2.0.

Required Marine Science Core Courses – 27 credits

MRSC 110 Intro. To Oceanography	3 credits	Grade:
MRSC 226 Marine Biology	3 credits	Grade:
MRSC Method Intense Field Course	3 credits	Grade:
MRSC 210 Sophomore Seminar	1 credit	Grade:
MRSC 364 Physical Geology	3 credits	Grade:
MRSC 366 Marine Geology	3 credits	Grade:
MRSC 380 Senior Seminar	2 credits	Grade:
MRSC 370 or MRSC 390 Research/Internship in Mar. Sci.	3 credits	Grade:
MRSC Elective:	3 credits	Grade:
MRSC Elective:	3 credits	Grade:
Total Credits	27 total credits	

Required Oceanography Track Courses – 13 credits

GEOL 100 Physical Geology	4 credits	Grade:
Physical Science Course 1:	3 credits	Grade:
Physical Science Course 2:	3 credits	Grade:
Physical Science Course 3:	3 credits	Grade:
Total Credits	13 total credits	

Other Required Courses – 19 credits

BIOL 106 Intro to Zoology or BIOL 108 Intro to Botany	4 credits	Grade:
CHEM 100 General Chemistry I	4 credits	Grade:
GEOG 274 Geo. Info. Sys. I	3 credits	Grade:
MATH 181 Calculus I or higher	4 credits	Grade:
PHYS 42 or 102 Physics II	4 credits	Grade:
Total Credits	19 total credits	

Directed General Education Courses

BIOL 104 Principles of Biology (Category C1)	4 credits	Grade:
CHEM 102 General Chemistry II (Category C2)	4 credits	Grade:
PHYS 40 or 100 Physics I (Category C3)	4 credits	Grade:

University Electives – 16 credits

Course 1:	credits	Grade:
Course 2:	credits	Grade:
Course 3:	credits	Grade:
Course 4:	credits	Grade:
Course 5:	credits	Grade:
Course 6:	credits	Grade:
Total Credits	16 total credits	

Summary of Graduation Requirements

Total credits from major courses	59
Total credits from general education program	45
Total credits from university electives	16
Minimum total credits to graduate	120
Minimum overall GPA	2.0
Minimum GPA in major program	2.0

Program Plan Code: BS_MARF_OCEA

Effective Date: Spring 2020

KU B.S. Marine Science: Oceanography 8-Semester Planner

Student Name:

Student ID Number:

Each semester listed below provides information including course categories, typical credit hours (CH.), and space to add specific course selections. This planner is a suggested path. Consult with your advisor regarding your unique plans and interests as you make choices about your schedule.

First Semester Plan

Major	MRSC 110	3 CH.	Selection:
Gen Ed	BIOL 104 (Category C1)	4 CH.	Selection:
Gen Ed	FYSM 100	3 CH.	Selection: FYSM 100
Gen Ed	Category A1	3 CH.	Selection:
Total		13 CH.	

Second Semester Plan

Major	GEOL 100	4 CH.	Selection:
Major	BIOL 106	1 CH.	Selection:
Major	MATH 181 or higher	4 CH.	Selection:
Gen Ed	Category A2	3 CH.	Selection:
Total		12 CH.	

Third Semester Plan

Major	CHEM 100	4 CH.	Selection:
Major	MRSC 210	1 CH.	Selection:
Elective	Free Elective	3 CH.	Selection:
Major	Physical Science course 100-Level or higher	3 CH.	Selection:
Gen Ed	Category B	3 CH.	Selection:
Total		14 CH.	

Fourth Semester Plan

Gen Ed	CHEM 102 (Category C2)	4 CH.	Selection:
Major	BIOL 226	3 CH.	Selection:
Elective	University Elective	4 CH.	Selection:
Gen Ed	Category B	3 CH.	Selection:
Total		14 CH.	

Fifth Semester Plan

Gen Ed	PHYS 40 or 100 (Category C3)	4 CH.	Selection:
Major	Physical Science course 200-level or higher	3 CH.	Selection:
Gen Ed	Category A3	3 CH.	Selection:
Gen Ed	Category D	3 CH.	Selection:
Total		13 CH.	

Sixth Semester Plan

Major	Physical Science course 200-level or higher	3 CH.	Selection:
Major	MRSC 364 or 366	3 CH.	Selection:
Major	PHYS 042 or 102	4 CH.	Selection:
Gen Ed	Category B	3 CH.	Selection:
Total		13 CH.	

Seventh Semester Plan

Major	MRSC 370 or 390	3 CH.	Selection:
Major	GEOG 274	3 CH.	Selection:
Elective	University Elective	3 CH.	Selection:
Elective	University Elective	3 CH.	Selection:
Gen Ed	Category A4	3 CH.	Selection:
Total		15 CH.	

Eighth Semester Plan

Major	MRSC 380	2 CH.	Selection:
Major	MRSC 364 or 366	3 CH.	Selection:
Elective	University Elective	3 CH.	Selection:
Gen Ed	Category D	3 CH.	Selection:
Gen Ed	Category D	3 CH.	Selection:
Total		14 CH.	

Additional Notes:

1. In addition to the above, the Marine Science major requires three summer field courses at the Chincoteague Bay Field Station, Wallops Island, Virginia. These methods courses must be approved by the MRSC program coordinator, and they can be used to fill the MRSC electives category. These can be scheduled any summer following freshman year with 1, 2, or all 3 courses in any given summer.
2. Physical Science courses include prefixes: MRSC, GEOL, PHYS, CHEM, ASTR.

Program Plan Code: BS_MARF_OCEA

Effective Date: Spring 2020