

OCEANOGRAPHY: BIOLOGICAL (OCB)

OCB 3108C - Field Studies Marine Science (4 Credits)

Field intensive course covering biodiversity, geochemistry, and human impacts in Florida's coastal and offshore ecosystems through a round-robin trip around Florida. Students visit reefs of the Florida Keys, cruise the Gulf of Mexico, and explore tropical and temperate estuaries and watersheds.

Prerequisite(s): (BSC 1010C or (BSC 1010 and BSC 1010L)) and (BSC 1011C or (BSC 1011 and BSC 1011L)) and (CHM 1045C or (CHM 1045 and CHM 1045L)) and (CHM 1046C or (CHM 1046 and CHM 1046L))

OCB 4623C - Marine Physiology (3 Credits)

Marine physiology will use a comparative approach to learn the functional adaptations of marine animals to diverse environments and introduces basic concepts of physiology, including metabolism, water and salt balance, thermal relations, gas exchange, and locomotion. This course will integrate the principles and applications of physiology with methodologies for studying physiological processes in marine organisms, including commonly used techniques in physiology. Students will participate in in-class exercises, data analysis, and interpreting and reporting physiological data. Marine Physiology deals with three fundamental aspects of physiological processes: • The cellular basis of physiological processes • The integration of these processes from the cellular to organismal level • The dependence of these processes on the evolutionary history and ecology of the organism

Prerequisite(s): BSC 1010C and BSC 1011C or (BSC 1011 and BSC 1011L) and OCB 4633C

OCB 4633C - Marine Ecology (3 Credits)

Investigates the interactions of biotic (living) and abiotic (nonliving) factors in a marine setting. Diverse environments such as sea grasses, mud flats, coral and mollusc reefs, and the impact of pollution will be examined.

Prerequisite(s): ((BSC 1010C or (BSC 1010 and BSC 1010L)) and (BSC 1011C or (BSC 1011 and BSC 1011L))) (and (CHM 1045C or (CHM 1045 and CHM 1045L)) or CHM 1084C) and (OCE 1001C or OCE 3008C))

Attribute(s): BTEC - Ecology Elective, SUSC - Sustainability Component

OCB 4740C - Marine Invertebrates (3 Credits)

This course provides an introduction to the anatomy, physiology, ecology, and biology of marine invertebrate taxa. The course has a large field and laboratory component to provide a better understanding of the complexity, prevalence, and ecological importance of marine invertebrates and their role in marine ecosystems.

Prerequisite(s): BSC 1010C and BSC 1011C or (BSC 1011 and BSC 1011L) and OCE 1001C

OCB 4930 - Special Topics: Marine Biology (3 Credits)

Topics of current or special interest to students or faculty. Topic or focus varies depending on faculty expertise and student interest.

Prerequisite(s): BSC 1010C and (BSC 1011C or (BSC 1011 and BSC 1011L))

OCB 4936 - Senior Capstone Marine Science (1 Credits)

This capstone course is a culminating of students' experiences from the Marine Science program and will help prepare students for careers or graduate school following completion of the degree program.

Prerequisite(s): (OCE 3008C or OCE 3603C) and (ISC 4910 or ISC 4940)

OCB 5565 - Marine Primary Production (3 Credits)

Ecological examination of phytoplankton and primary productivity. Topics will include phylogeny, nutrition, primary productivity, effects of environmental change, community ecology, global productivity, harmful algal blooms, and an overview of detection/monitoring techniques.

OCB 6050 - Biological Oceanography (3 Credits)

This course focuses on the interaction of phytoplankton, zooplankton, and nekton in the open oceanic environment. Knowledge gained will then be applied to the study of local and global productivity.

OCB 6266 - Coral Reef Ecosystems (3 Credits)

The purpose of this course is to provide overview of coral reef ecosystems and how they are studied and evaluated. Topics include an overview of coral reef residents, coral biology and phylogeny, environmental stressors, molecular techniques and current topics in the field.

OCB 6635 - Estuarine Ecology (3 Credits)

Ecological examination of estuarine systems. Treatment will include: estuarine organisms and their adaptations; community structure and dynamics; and human impact on estuarine systems. Course structure includes lecture and review and discussion of relevant literature.