

OCEANOGRAPHY: GENERAL (OCE)

OCE 1001C - Introduction to Oceanography (3 Credits)

Using the scientific method, critical thinking skills, data analysis, this course will examine the fundamental processes of the ocean system, composed of an atmosphere, hydrosphere, lithosphere, and biosphere, through time. The course will also explore interactions between these spheres, including critical analysis of scientific theories and emphasize oceanic connections with humanity. Lecture, laboratory and field experiences are fully integrated in this general education course.

Attribute(s): CRIT - GE Critical Think Competency, GE Critical Think Competency, GENC - Gen. Ed -Natural Sci+Lab, Gen. Ed -Natural Sci+Lab, SCIQ - Scientific Inquiry, Scientific Inquiry

OCE 3603C - Quant Techniques Oceanography (3 Credits)

A systems approach to the study of the world's oceans integrating elements of biological, chemical, geological and physical oceanography. Examination of basic oceanographic principles and processes with a focus on quantitative and data analysis techniques. Introduce students to various oceanographic databases maintained by NOAA, USGS, FDEP (DB Hydro), FWC (red tide), etc.

Prerequisite(s): BSC 1010C 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)) and OCE 1001C

OCE 4260C - Coastal Remote Sensing and GIS (3 Credits)

Introduce the students to the basic concepts in remote sensing and digital data analysis, with a focus on coastal and nearshore processes. Basic physics pertaining to interaction of electromagnetic radiation with land and water and how that is effectively recorded by satellite sensors will be discussed. Familiarize with high resolution coastal lidar data processing for monitoring long-term and short-term (landfall of a hurricane) beach and nearshore morphologic evolution. Provides hands-on training in GIS for processing LIDAR data as well as for image classification.

Prerequisite(s): OCE 3008C or OCE 1001C or OCE 3603C

Attribute(s): WBLI - Work based learning indicator

OCE 4930 - Special Topics: Oceanography (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): (GLY 1000C and CHM 1084C and (PHY 2053C or (PHY 2053 and PHY 2053L)) and OCE 1001C)

OCE 5065 - Marine Conservation Biology (3 Credits)

Study of Marine Conservation Biology with emphasis on implementing conservation practices and assessing their effectiveness. Topics will include human impacts on the marine environment, biodiversity, climate change, human use of marine environments, societal versus ecological priorities, and case studies of marine conservation areas.