

OCEANOGRAPHY (OCEA)

OCEA-112

Introduction to Oceanography

3 UNITS

3.0 hours lecture

A physical science course which examines major aspects of the marine environment. Topics include origin of the oceans, plate tectonics, sea floor features, properties of sea water, ocean climate, currents, waves, tides, coastal landforms, marine ecology, pollution and resources. The development of the field of oceanography and the present and future importance of the oceans are also discussed. (CSU/UC) (AA/AS-B2, CSU-B1, IGETC-5A)

OCEA-113

Oceanography Laboratory

1 UNITS

Prerequisite: "C" grade or higher or "Pass" in OCEA 112 or equivalent or concurrent enrollment.

3.0 hours laboratory

Provides hands-on oceanographic experience to accompany and augment Oceanography 112. The course will include laboratory and field investigations of the marine environment, emphasizing the geological, chemical, physical, and biological aspects of the ocean. Lab activities may include, but are not limited to, field trips to obtain samples, analysis of data, and visits to oceanographic facilities (such as research institutions and aquariums). (CSU/UC) (AA/AS-B2, CSU-B3, IGETC-5C)

OCEA-150

Field Study of the Natural History of the Greater San Diego

Region

3 UNITS

Prerequisite: "C" grade or higher or "Pass" in BIO 110 or 120; or GEOG 120 or 121 or 140; or GEOL 110 or 111; or OCEA 112 or equivalent.

2.0 hours lecture, 3.0 hours laboratory

An exciting, team-taught, interdisciplinary, field-based study of the natural environment of the San Diego region, including related parts of Imperial, Riverside, and Orange Counties. Vans are utilized to visit sites that best illustrate (1) the region's physical environment (including tectonics, geologic history, geomorphology, hydrology, meteorology, climatology, and soils), (2) the evolutionary response to environmental variation (focusing on coastal sage scrub, chaparral, and desert ecosystems), and (3) the interaction of humans with the natural environment. Emphasis on field measurement includes use of GPS, compass, clinometer, maps, the current Jepson plant taxonomy, etc. Four weekends in spring semester only. Overnight campouts required. Students with credit in Oceanography 150 will not be able to enroll in Biology 150, Geography 150 or Geology 150. (CSU/UC)