

Oceanography

ADMINISTERED BY THE DEPARTMENT OF GEOLOGICAL SCIENCES

OFFICE: Geology/Mathematics/Computer Science 237

TELEPHONE: 619-594-5586 / **FAX:** 619-594-4372

E-MAIL: geology@sdsu.edu

WEBSITE: <http://www.geology.sdsu.edu>

San Diego State University provides preparation for ocean-oriented careers by offering marine-related coursework and oceanographic experience within regular degree programs in the Departments of Biology, Chemistry and Biochemistry, Economics, Civil, Construction, and Environmental Engineering, Geography, Geological Sciences, Mechanical Engineering, and Physics. Master's degrees with specialization in marine problems may also be earned in these departments. The Ph.D. degree is offered in biology, chemistry, and ecology, jointly with the University of California. Degrees in general oceanography or marine studies are not offered by the university. The Coastal and Marine Institute coordinates work in the area of marine studies and provides special supporting services to the faculty, staff and students, including student advising, assistance in research and publication, operation of the university's marine laboratory at San Diego Bay, and a boat operations program.

Courses in general oceanography are offered by faculty from the Departments of Biology and Geological Sciences. Advanced coursework and research in geological and physical oceanography are conducted in the Geological Sciences Department. Advanced courses and research in biological oceanography, marine biology, marine botany, and marine zoology are conducted in the Department of Biology. Similar marine-related coursework and research are offered in the Departments of Economics and Geography and in the College of Engineering. Students who require advising in these areas should inquire at one of the departments listed above or the Coastal and Marine Institute. (See section of this catalog on Colleges, College of Sciences Research Centers and Institutes.)

Oceanography Minor

(Minor Code: 19191) (SIMS Code: 775379)

Offered for undergraduate science students by the Department of Geological Sciences, the minor in oceanography consists of a minimum of 15-16 upper division units to include Oceanography 320; Biology 515 or 517; and nine additional units selected with the approval of the adviser. Additional prerequisite courses are required.

The oceanography minor is intended for students with extensive background in the sciences.

Courses in the minor may not be counted toward the major, but may be used to satisfy preparation for the major and general education requirements, if applicable. A minimum of six upper division units must be completed in residence at San Diego State University.

Courses (OCEAN)

Refer to *Courses and Curricula and University Policies* sections of this catalog for explanation of the course numbering system, unit or credit hour, prerequisites, and related information.

LOWER DIVISION COURSE

OCEAN 100. The Ocean Planet (4) [GE]

Three lectures and three hours of laboratory.

Physical, chemical, geological, and biological foundations of the global ocean system, with emphasis on science as a process and its role in environmental issues from global climate change to local pollution.

UPPER DIVISION COURSES

(Intended for Undergraduates)

OCEAN 320. Oceans of Change (3) [GE]

Prerequisites: One introductory college course in a life science and one in a physical science.

Scientific, socioeconomic, and geopolitical perspectives on human impacts upon the global ocean system to include ocean warming and acidification, regional fisheries depletion, and local coastal issues.

OCEAN 496. Experimental Topics (1-4)

Selected topics. May be repeated with new content. See *Class Schedule* for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor's degree.

For additional courses in Marine Studies see:

Biology 515.	Marine Invertebrate Biology
Biology 517.	Marine Ecology
Geography 592.	Intermediate Remote Sensing of Environment
Geography 592L.	Intermediate Remote Sensing of Environment Laboratory
