

Geo 435: Oceanography

Instructor:

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Office Hours: Mon Wed 11:00 am – 12:00 pm

General Information:

Meeting Time: Mon 1:00 – 3:00 pm

Credits: 2 hours (2+0)

Reference Books:

-  Essentials of Oceanography by Alan Trujillo and Harold Thurman, Eight Edition (2005).
-  Exploring Ocean Science by Keith Stowe, Second Edition (1996).

Objectives:

This course is an introduction to the ocean sciences, with particular focus on the physical processes in the oceans – waves, currents and tides – formation of ocean basins – turbidity and deep sediment transport – earthquakes and tsunamis – marine chemistry – coastal processes – life in the oceans – ocean minerals resources – changes in the oceanic ecosystem.

Grades:

Based on examinations and class participation as follows:

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| ■ 1 st Midterm Exam | 20% |
| ■ 2 nd Midterm Exam | 20% |
| ■ Final Exam | 40% |
| ■ Attendance and participation | 10% |
| ■ Homework assignments | 10% |

Course Topics:

- Introduction to Planet "Earth"
- Plate Tectonics and the Ocean Floor
- Marine Province
- Marine Sediments
- Water and Seawater
- Ocean Circulation
- Waves and Water Dynamics
- Marine Chemistry
- Marine Life
- The Coast
- Tides
- Earthquakes and Tsunamis