

GEO 435 – Oceanography

Instructor:

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Office: 2B 112 – Building 4

Office Hours: Su Tue Thu 09:00 – 11:00 am

General Information:

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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| ▪ Exam 1 | 20% |
| ▪ Exam 2 | 20% |
| ▪ Quizzes | 10% |
| ▪ Homework | 10% |
| ▪ Final Exam | 40% |

Course Topics:

- Introduction
- Marine Province
- Marine Sediments
- Air-Sea Interaction
- Ocean Circulation
- Waves and Water Dynamics
- Earthquakes and Tsunamis
- Tides