Course Syllabus

#### MARINE GEOLOGY

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Program: Oceanographic Engineering

- 1. Course number and name
  - OCEG1005 MARINE GEOLOGY

# 2. Credits and contact hours

2 credits and 2 contact hours

**3. Instructor's course or coordinator's name** CARLOS EDUARDO MARTILLO BUSTAMANTE

## 4. Text book, tittle, author, and year

• Tarbuck Edward J., Lutgens Frederick. Ciencias de la Tierra (10) a.Other supplemental materials

- Bird Eric. Coastal Geomorphology (Segunda)
- Short, Andrew D.. Handbook of beach and shoreface morphodynamics (Primera)

# 5. Specific course information

a. Brief description of the content of the course (catalog description)

This course analyzes Planet Earth's internal and external processes that generated marine life and continental and transitional environments throughout geological time as well as current processes that modify them. It explains the use of technologies, procedures and basic criteria for the study of marine and coastal geology for the application of engineering and environmental solutions.

b. Prerequisites

## DESCRIPTIVE OCEANOGRAPHY - OCEG1001

c. This course is: Required

## 6. Specific goals for the course

a. Specific outcomes of instruction

1.- Explain Earth's internal (endogenous) processes that control ocean formation and continents throughout geological time, through discussion of scientific documents.

2.- Recognize Earth's external (exogenous) processes that shape marine and coastal environments, recognizing the types of rocks and minerals that compose it.

3.- Discuss different means and technologies used marine and coastal geological processes study for their analysis or evaluation for the application of engineering and environmental solutions.

b. Explicity indicate which of the student outcomes listed in Criterion 3 or any other outcomes are addressed by the course

• An ability to apply the scientific method to oceanic and marine-coastal processes research.



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#### 7. Brief list of topics to be covered

- 1.- Internal and external structure of the Earth.
- 2.- Sedimentary Environments
- 3.- Internal and external structure of the Earth.
- 4.- Main coastal geomorphological features.



