

Course Syllabus

COASTAL DESIGN I

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Program: Oceanographic Engineering

1. Course number and name

OCEG1016 - COASTAL DESIGN I

2. Credits and contact hours

3 credits and 4 contact hours

3. Instructor's course or coordinator's name

JONATHAN MARCELO CEDEÑO OVIEDO

4. Text book, title, author, and year

- Sorensen, Robert M.. Basic Coastal Engineering (3rd Edition)

5. Specific course information

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

This course deals with the study of the different types of coastal structures and their application according to the type of problem or situation that needs to be faced on the coast for its adequate protection and development. For this, the student recognizes the type of oceanographic and coastal information that needs to be determined and calculated in order to be able to conceptually dimension a structure so that it can fulfill its function safely.

- b. Prerequisites

REINFORCED CONCRETE DESIGN - CIVG1018

COASTAL OCEANOGRAPHY - OCEG1008

- c. This course is: Required

6. Specific goals for the course

- a. Specific outcomes of instruction

1.- Calculate oceanographic parameters to integrate them into the sizing and implementation of the coastal structure

2.- Determine the type of structure for the solution of a proposed problem.

3.- Discuss ethical and technical criteria in the sizing and implementation of coastal structures.

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

7. Brief list of topics to be covered

1.- History and philosophy of coastal engineering

2.- Oceanography in coastal engineering

3.- Types of structures

4.- Coastal engineering projects

