

Course Syllabus

COASTAL DESIGN

Printed by: lualtam

Program: Oceanographic Engineering

1. Course number and name

OCEG1034 - COASTAL DESIGN

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 studies different types of coastal structures and their applications to problems for an adequate coastal 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 - CIVG1045

COASTAL MODELING - OCEG1047

- c. This course is: Required

6. Specific goals for the course

- a. Specific outcomes of instruction

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

2.- Determine the type of structure to solve a specific problem.

3.- Discuss ethical and technical criteria in dimensioning and implementing 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