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Course Syllabus

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ESTUARINE PROCESSES

Program: Oceanographic Engineering

1. Course number and name **OCEG1046 - ESTUARINE PROCESSES**

2. Credits and contact hours

2 credits and 3 contact hours

3. Instructor's course or coordinator's name JONATHAN MARCELO CEDEÑO OVIEDO

4. Text book, tittle, author, and year

- Day, John F.. Estuarine Ecology (2nd
- Edition) a. Other supplemental materials
- Valle-Levinson, Arnoldo. Contemporary Issues in Estuarine Physics (1st Edition)

5. Specific course information

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

This professional training course covers the study of physical and biogeochemical principles that govern the ecology of estuaries, as well as their interrelationships. The module includes the study of types of habitats and factors that govern the productivity in the estuaries. In addition, the analysis of the pressure factor over those ecosystems associated to climate variability and environment pollution, for a better understanding of its adaptation and response mechanisms.

b. Prerequisites

COASTAL OCEANOGRAPHY - OCEG1048

c. This course is: Required

6. Specific goals for the course

- a. Specific outcomes of instruction
 - 1. Understand the physical and biogeochemical processes that govern the estuaries through the study of temporary and spatial patterns.
 - 2. Analyze tidal and climate influence over the estuaries from the data analysis of environmental variables.
 - 3. Analyze the environmental contamination impact on estuaries from the study of documental cases.

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

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7. Brief list of topics to be covered

- 1.- Evaluation activities
- 2.- Introduction to estuaries
- 3.- Physical estuaires processes
- 4.- Biogeochimical estuaires processes
- 5.- Ecology of estuaries