

Course Syllabus

ESTUARINE PROCESSES

Printed by: jcedeno

Program: Oceanographic Engineering

1. Course number and name

OCEG1020 - ESTUARINE PROCESSES

2. Credits and contact hours

3 credits and 3 contact hours

3. Instructor's course or coordinator's name

JONATHAN MARCELO CEDEÑO OVIEDO

4. Text book, title, author, and year

- Valle-Levinson, A.. Contemporary Issues in Estuarine Physics (1)
 - a. Other supplemental materials
- Day, John F.. Estuarine Ecology (2da)

5. Specific course information

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

The course addresses the study of the physical and biogeochemical principles that govern the ecology of estuaries, as well as their interrelationships. The types of habitats present in estuaries and the factors that govern their productivity are studied. Pressure factors on these ecosystems associated with climate variability and environmental pollution are also analyzed for a better understanding of their adaptation and response mechanisms. Class didactics are supported by face-to-face sessions, case and/or article analysis, and project realization.

- b. This course is: Selected elective

6. Specific goals for the course

- a. Specific outcomes of instruction

1.- Study the physical and biogeochemical processes that govern estuaries for understanding the present spatial and temporal variability.

2.- Analyze the influence of climate variability on estuarine environments through environmental information analysis.

3.- Analyze the pressure that environmental pollution exerts on estuarine ecosystems from the study of documented cases.

- 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.- Introduction
- 2.- Salinity structure and circulation of estuaries
- 3.- Estuary geochemistry



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4.- Ecology of estuaries

5.- Global Change and estuarine systems