

Course Syllabus

DESCRIPTIVE OCEANOGRAPHY

Printed by: jcedeno

Program: Oceanographic Engineering

1. Course number and name

OCEG1001 - DESCRIPTIVE OCEANOGRAPHY

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, title, author, and year

- Alan P. Trujillo Y Harold V. Thurman. ESSENTIALS OF OCEANOGRAPHY (12, 2017)

5. Specific course information

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

The course is an introduction to Oceanography and all its applications. It offers an integrated vision from the perspective of Physics, Chemistry, Biology and Geology. It studies the current state of research at local, regional and global levels. It also includes an introduction to contemporary topics, such as Climate Change, Ocean Health, Sustainable Fishing, Integral Management of Marine-Coastal Resources, Objective 14 of Sustainable Development (Underwater Life), El Niño-Southern Oscillation, among others.

- b. This course is: Required

6. Specific goals for the course

- a. Specific outcomes of instruction

- 1.- To understand the development of oceanography and its installment from its beginning to the modern era. This includes an explanation of how different periods influenced its development.

- 2.- To organize physical, chemical, biological and geological processes in oceanography, analyzing their interaction and feedback.

- 3.- To discuss contemporary problems in Oceanography, and offer solutions for its development.

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

- An ability to communicate effectively with a range of audiences in Spanish.
- An ability to recognize ethical and professional responsibilities in engineering situations and make informed judgments, which must consider the impact of engineering solutions in global, economic, environmental, and societal contexts.

7. Brief list of topics to be covered



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- 1.- Introduction.
- 2.- Perspectives of Physical Oceanography.
- 3.- Perspectives of Chemical Oceanography.
- 4.- Perspectives of the Biological Oceanography.
- 5.- Perspectives of the Marine Geology.
- 6.- Contemporary topics.

