THE OCEANS

ISNS 3367

Fall 2005

Classroom CN 1.120

Sections: 001 T -R 08:00-09:15 AM

002 T-R 02:00-03:15 PM

Instructors: Dr. Ignacio Pujana, and Dr. William Manton

W. Manton; Office: FO 3.620B, phone 972-883- 2441 office hours T-R 10:00- 11:00
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I. Pujana; Office: FO 2.616, phone 972-883- 2461 office hours T-R 9:30- 10:30
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Teaching Assistants

Yanrong Hu yxh035100@utdallas.edu Office Hours: Friday 12:00:2:00 pm

Place for TA's Office hours: FO 2.612

Attention!!!!

The Oceans is no longer a Self -paced course. The format is like any normal lecture class.

Course Description

The Oceans focuses on a scientific understanding of the world's oceans, the dominant feature of Earth's surface. You will learn about: features on the ocean floor and their role in plate tectonics; sediments on the sea floor and how they are used to interpret the history of the oceans; why seawater is salty; the role of the oceans in controlling weather; what causes tides, currents and waves; and life in the ocean.

The Oceans is also:

An Earth Science Course: Because it deals with a major part of the Earth.

An Environmental Course: Most of the world's population live within 100 miles of the ocean. Consequently, the ocean provides food and other resources and serves as a waste depository for billions of people.

An Interdisciplinary Science Course: Oceanography is the science that deals with the study of the oceans. To be an oceanographer, a scientist must have a background in one of the relevant basic sciences: geology, chemistry, physics or biology. Oceanography, then, is the application of these basic sciences to the study of the oceans. As an introductory course, with no prerequisites, you will obtain an overview of the subject from these perspectives. However, it is not necessary for you to have a science background other than your high school courses to take this course.

Class Requirements

Class attendance and participation: We expect you to attend all classes, unless you are sick (an attendance roll will be signed in class). We also expect you to participate in class discussions. This will contribute to your grade (10 %).

Required Text: Essentials of Oceanography -3rd edition- by Tom Garrison. The old book Essentials of Oceanography - 2nd Edition by the same author is no longer supported.

Tests: Test materials will be taken both from the textbook (see discussion in syllabus below), handouts, and lectures. Tests will include approximately 50 multiple choice, fill in the blank, T/F, sketch/diagram, or short answer questions. Four tests will be required (see schedule of lectures) including a mid term and a last test. The first test will assess your knowledge of material covered in Units 1 to 4; the second will be over material covered in Units 5 to 7, the third tests will test Units 8, 9 and 11, and finally the remaining units will be evaluated in the last Test.

A Fifth optional test will be offered to the end of the semester, this test will replace the lowest grade on the previous four. This Fifth test will be comprehensive, hence including al units.

Test Make-up: Tests will not be taken at any time except during the scheduled in-class period, unless the instructor agrees to reschedule an individual's test as the result of a prior agreement, or a doctor's excuse certifies the student was too ill to attend class the day of the examination. If you have health problems, or extenuating circumstances, please contact the instructor as soon as possible so arrangements can be made.

Grading policy: Each test contributes equally towards your grade. You can keep track of your grades by checking the course WebCT page (link available on the UTD homepage). The final grade is based on the following percentile divisions A+: 97.1-100; A: 93.1-97; A-: 90.1-93; B+: 87.1-90; B: 83.1-87; B-: 80.1-83; C+: 77.1-80; C: 73.1-77; C-: 70.1-73, D=60.1-70, F<60.

Class Schedule:

Sections: 001 T R, 08:00-09:15 AM

002 T-R 02:00-03:15 PM

Week #	Class #	Date	Theme	Chapter
1	1	T.-January 10	Unit 1:Introduction and History of Oceanography	Chapter 2
2	2	Th.-January 12	Unit 2:Origins	Chapter 1
	3	T- January 17	Unit 3:Earth Structure and Plate Tectonics	Chapter 3
3	4	Th.-January 19	Unit 3: Earth Structure and Plate Tectonics	Chapter 3
	5	T.-January 24	Unit 4: Ocean Basins	Chapter 4
4	6	TH.- January 26	Unit 4: Ocean Basins	Chapter 4
	7	**T.- January 31**	**Test 1**	
5	8	TH.- February 2	Unit 5: Sediments	Chapter 5
	9	T.- February 7	Unit 5: Sediments	Chapter 5
6	10	TH.- February 9	Unit 6: Water	Chapter 6
	11	T.- February 14	Unit 6: Water	Chapter 6
7	12	**TH.- February 16**	Unit 7: Atmospheric Circulation	Chapter 7
7	13	T.-February 21	: Ocean Circulation	Chapter 7
8	14	TH.- February 23	Unit 8: Ocean Circulation	Chapter 9
	15	T.- February 28	Unit 9: Waves	Chapter 8
9	16	TH.- March 2	**Mid Term** Unit 8: Units 5, 6, 7 and 8	
	17	**T.-** March 7	Spring Break	
10	18	TH.- March 9	Spring Break	
	19	T.- March 14	Unit 10: Tides	Chapter 10
11	20	TH.- March 16	Unit 10: Tides	Chapter 10

	21	TH.- March 23	Unit 11: Coasts	Chapter 11
12	22	T.- March 28	Unit 11: Coasts	Chapter 11
	23	**T.- March 21**	**3rd Test Units: 9, 10, and 11**	
13	24	TH.-March 30	Unit 12: Life in the Ocean	Chapter 12
	25	T.- April 4	Unit 12: Life in the Ocean	Chapter 13
14	26	TH.- April 6	Unit 13: Pelagic Communities	Chapter 14
	27	T.- April 11	Unit 14: Benthic Communities	Chapter 14
15	28	TH.- April 13	Unit 15 Life in the Ocean	Chapter 15
	29	T.- April 18	Unit 15 Life in the Ocean	Chapter 15
16	30	**TH.- April 20**	**4th Test Units 12, 13, 14 and 15**	
	31	T. April 24	Last day of class	
		final week	-- FIFTH OPTIONAL TEST	comprehensive