

# **OCE2001: Introduction to Oceanography**

## **Spring 2010**

### **Final Version January 8**

This course is part of the University of South Florida's Foundations of Knowledge and Learning Core Curriculum. It is certified for Physical Science and for the following dimensions: Critical Thinking, Inquiry-based Learning, Scientific Processes and Environmental Perspectives.

#### **General Information**

This is a class in basic oceanography. Oceanography is interesting because it involves so many of the sciences. You will look at Chemical Oceanography (what is the sea made of), Physical Oceanography (tides, currents, waves), Geological Oceanography (the ocean floor, shore-line processes), and Biological Oceanography (what lives there). The course emphasizes critical thinking, scientific processes, environmental issues, and interrelationships among disciplines. It fulfills the General Education requirement for Physical Sciences.

This course is entirely on-line. Assignments and deadlines will be posted in the class website in Blackboard. It is your responsibility to complete your work in a timely way. You may work ahead, but do not fall behind. Assignments will be removed from the website at the due-date and time, and you will not have access to them after that.

#### **Course Objectives**

- Students will learn about the physical, chemical, geological and biological aspects of the Ocean.
- Students will learn about the interrelationships between these aspects of the ocean, and how these interrelationships govern earth processes.
- Students will learn about the scientific process.
- Students will learn how science advises policy, as it relates to the ocean.

#### **Student Outcomes**

Students will be able to explain ocean processes within the physical (e.g. ocean currents) geological (e.g. tectonic of the ocean floor) chemical (e.g. the water molecule) and biological (e.g. productivity and energy transfer) realms.

Students will be able to explain complex interactions in the ocean system.

Students will be able to identify the scientific process steps in research that they study.

Students will be able to discuss ocean policy and analyze it from a scientific and social perspective.

#### **Book**

The required textbook for this class is *Essentials of Oceanography*, by Alan Trujillo

and Harold Thurman. The current edition is the 9th. Used books are fine.

Other readings will be posted in the class website.

### Schedule and Assignments

Quizzes and writing assignments are posted on the class website. There are quizzes every week, and writing assignments due most weeks. Assignments are due Wednesdays at Midnight (as Wed becomes Thu). These assignments will vary somewhat in their complexity and the time required for each. The chart below shows the deadlines for the semester. You are welcome to complete them early.

	Date	Reading (Chapter) and Quizzes	Writing
1: Fundamentals	1.21/2010	Syllabus (Quiz is not part of your grade)	
	1.21/2010	1: Intro to Planet Earth	1A: On Skeptical Thinking
	1.28/2010	2: Plate Tectonics and Ocean Floor	1B: On Plate Tectonics
	2.4/2010	3: Marine Provinces	1C: Making a Logical Argument
2: Chemical and Physical	2.11/2010	4: Marine Sediments	EC1: Mercury in Fish
	2.18/2010	5: Water and Sea Water	2A: On Water
	2.25/2010	6: Sea-Air Interaction	
	3.4/2010	7: Ocean Circulation	2B: On Paleoclimate
3: Waves, Tides, Coasts	3.18/2010	8: Waves and Water Dynamics	3A: Ocean Energy
	3.25/2010	9: Tides	
	4.1/2010	10: The Coast: Beaches and Shoreline	3B: A Visit to El C
	4.8/2010	11: The Coastal Ocean	3C: Solutions for Coastal Erosion
4: Ocean Life	4.15/2010	12: Marine Life and the Environment	4A: State of the World Oceans
	4.22/2010	13: Biologic Productivity and Energy	4B: Life in the Ocean
		14: Animals of the Pelagic Env.	
	4.29/2010	15: Animals of the Benthic Env.	EC2: A Letter to your Senator

## Grading:

The final grade is based on two aspects of the class: quizzes, and essays. The breakdown is as follows:

Quizzes: There are 15 quizzes in all, worth 10 points each, so quizzes account for 15% of your final grade

Writing Assignments: There are three writing assignments each section. They vary in complexity and are labeled accordingly. Short writing assignments are worth 75 points (in blue writing), and should be about 3/4 – 1 page. Long writing assignments are more in depth, requiring more reading or research. They should be about 2 pages, and are worth 100 points (green writing).

Quizzes are 10 points each	15 x 10 = 150
There are 15	
Short writing assignments are 75 points each	6 x 75 = 450
There are 6	
Long writing assignments are 100 points each	4 x 100 = 400
There are 4	
Total points	1000

900-1000 points A-, A, A+

800-899 points B-, B, B+

700-799 points C-, C, C+

600-699 points D-, D, D+

0-599 points F

I do use a +/- system.

## Extra Credit

There are also two extra credit writing assignments, worth 75 points each. So actually, there are 1150 points available in the class. But, *pay attention here*, your grade will be calculated as if there were only 1000 points available. The extra credit is truly extra.

Extra credit assignments have strict deadlines, and will not be open again later. Do them if you anticipate needing them. Do the first one anyway, because you will, no doubt, need it later.

Why are there extra credit opportunities? So you and I don't have to have long dialogues about illness, car accidents, sick or dead relatives, hard-drives crashing, etc. If you miss a writing assignment, use an extra credit in its place, and don't sweat it.

## S/U Grades

S/U stands for Satisfactory/Unsatisfactory. You may choose this grading option instead of the standard A-B-C-D-F scale. The University allows you to do this as long as the

course is not required for your major. If you choose this, you must earn a C- or better to get an S grade. An S grade gives you credit for the course, and the course will still count toward your general education requirement, but it does not figure into your GPA. If you earn a U, it also does not figure into your GPA, but you get no credits for the course. If you would like to take this course S/U, just e-mail me by Thanksgiving. I will mark it in the gradebook that way.

## Writing Assignments

Your grade is based mostly on the writing assignments, so do them carefully. There are two types.

Short Writing, 75 points: These are generally digging for a little more information, explaining a concept, or giving an opinion. They should be about 3/4 – 1 page, single spaced.

Long Writing, 100 points: These ask for a much deeper level of understanding. They vary from comment on an outside reading, to solving a problem in Oceanography. They are worth 100 points, and should be 2 pages, single spaced.

The main difference between a B and an A in writing is in the details. If you are writing about new scientific terms and processes, explain what they mean and how they work. I know, of course, but I want to know that you know, so don't just toss jargon around. Also, be sure to explain why things work as they do. If you are stating your opinion, include the arguments in support of that position.

Write your essay in a word processing program, and use the spell and grammar check before submitting it. I will deduct for grammar and spelling errors. Blackboard's method for submitting essays is to upload them into blackboard. Click on the link below the assignment called "view/complete" and follow the instructions for uploading your essay.

When your assignment has been submitted successfully, you will have a checkmark in the gradebook. That means it needs grading. Be patient, I will get to it.

Students often ask "can I work with a friend" and the answer is yes and no. You can talk out the questions and answers, you can go on a virtual field trip together, but you must each write-up your own answer and submit it.

## Really Important—on Formatting:

Blackboard and I can read documents with a .doc, .docx, or .rtf ending. We cannot read documents with a .wpd, .wps, .odt, .txt, or any other ending.

If you are not using Microsoft Word for your word processing, use your SAVE AS command, and, choose either Rich Text Format (.rtf).

### **Name your Assignments so they don't get lost.**

Blackboard will tell you not to put your name on your paper. DO NOT FOLLOW THAT INSTRUCTION. I WILL NOT grade papers without your name on them.

Each assignment has a unique number. You have a unique name. Call each assignment by the matching name and number. For instance, I would call assignment 1a: snow1a If you have a common last name, use our initial too: snow e1a

Do **NOT** call it : julie1 (I may have more than one Julie) or oceanography1 (I have 900 students who could use that name) or assignment1 (you have several classes that could use that name) or snow7 for the 7th thing you write (I called it 3a, and I can't match it up if you give it a different number)

### **KEEP A COPY OF EACH ASSIGNMENT UNTIL YOU HAVE A GRADE SO THAT IF SOMETHING WENT WRONG IN THE SUBMISSION YOU CAN SEND IT AGAIN.**

(hmm--all caps--wonder if this has been a problem in the past.....) Create a folder on your desktop for this class, and put a copy of each assignment in there. If you happen to work on a different computer, e-mail yourself a copy so you'll have it.

### **If you work on someone else's computer**

e-mail yourself a copy of your paper so you always have it. A thumb drive is useful too.

### **Grades of 0 or 1:**

A grade of 1 means I cannot read it. It is not a grade, it is a signal. You need to resubmit it, probably first changing the format (see above). I will create a folder for resubmissions.

A grade of 0 means you violated the plagiarism policy. These can rarely be rewritten. *Read the plagiarism tutorial (linked on the main page) before class starts to avoid the most common mistakes.*