

**Syllabus: INTRODUCTION TO OCEANOGRAPHY
OCE 1001, Fall 2015 (Section 6227, 3 credits)**

*What does the deep sea say? Oh what does the deep sea say?
It moans, it groans, it flashes and it foams, and rolls on its weary way* (Traditional)

Meeting Time/Place: Mon/Wed./Fri., Period 5 (11:45 – 12:35) in Williamson Hall 100

Instructor

Andrew R. Zimmerman, Ph.D.

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<http://people.clas.ufl.edu/azimmer/>

Teaching Assistant

Masoud Roustami

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Office Hours: Friday 2:00 – 3:00 pm (or by appointment)

Overall Course Objectives

- Learn the major geological, physical and biological characteristics of Earth's marine realm.
- Understand the role of the ocean in shaping the global Earth environment.
- Develop an enhanced awareness of how the ocean influences human well-being and vice versa.
- Discover an excitement about science and how it can enhance our appreciation for the complexity and beauty of the world around us and solve real-world problems. Hopefully, this will translate into an eagerness to explore science-topics further and to vote and consume goods as a scientifically-educated citizen.

Course Website

All learning material, homework, exercises, quizzes, exams and discussions for this course will be carried out on the UF Canvas system website. Go to <http://lss.at.ufl.edu/> and click on the e-Learning in Canvas to Log In. You must have an active GatorLink ID to access the course website. If not, go to the GatorLink website (<http://gatorlink.ufl.edu>) or call the help desk at 392-HELP for assistance.

The course site provides access to grades, announcements, downloadable lecture notes/outlines and exercises. You are responsible for checking this site to see that your grades are being correctly recorded. It is the student's responsibility to see that their grades are correctly recorded in the on-line gradebook.

No grade will be adjusted more than one week after they are posted. It is recommended that students adjust Canvas settings so that Announcements are sent to phone or email.

Recommended Textbook and Extra Credit

No text book is required for the course. Any introductory oceanography textbook that you may find, even an old one, is probably sufficient to serve as a secondary source of information that can provide you with additional information and alternative explanations of the material covered in the lecture and on the quizzes. I will place some textbooks on reserve in Marston Library.

HOWEVER, use of the following textbook and its companion website (Mastering Oceanography) will provide you with an opportunity for extra credit points that can boost your final grade tally by up to 6%. Here's the info:

Essentials of Oceanography, Author: Trujillo and Thurman (11th edition,) + *Mastering Oceanography Access Card*. Pearson Publishing.

Using the 'MyLab and Mastering' link within our Canvas class website, the eBook + *Mastering* combo can be purchased for purchased for \$72.90 and *Mastering* alone for \$41.00.

Even if you purchase the Mastering elsewhere you need to register it from within Canvas. Later, you can access *Mastering* from within Canvas or via: <http://www.pearsonmylabandmastering.com/northamerica/>

There is a document in our class website to help you or here's a video that shows the student registration experience: <https://www.youtube.com/watch?v=0sPttXvkkdU>.

If problems, students should contact Pearson tech support directly: <http://247pearsoned.custhelp.com/>
For example, if you got Mastering through a different source like Amazon, contact them and they will switch out your access code. Students will also have access to 2 weeks of "temporary access" to Mastering Oceanography (including the eBook).

Extra Credit worth a possible 6% addition to your final grade: There are 6 assignments on the MasteringOceanography website, two that should be completed before each of the three exams to receive full credit. Each one can be done in roughly 2 hours. Your score on a 'Mastering' lesson will represent the fraction of the 1% extra credit you will be awarded (e.g. if you did only 2 lessons and got a 70% and a 90%, your grade would improve from 89% or a B+, to 90.6%, an A-).

The 'Mastering' assignments are designed to help you learn the material and do better on exams (by letting you stop and consult the e-textbook, allowing partial credit for getting the answers on your second try or after providing a hint). Thus, full credit will be awarded only if assignments are completed before taking class exams on the corresponding material covered. But half credit will be awarded for any assignments completed before the final (third) exam.

Grading

3 Exams (2 in class, 1 final exam)	27%, 27% (best two), 16% for lowest exam score
In class Review Questions (10-15)	15% total
Homework exercise (about 3-5)	15% total

Final letter grade:

A = ≥93%, A- = 90-92.99, B+ = 87-89.99, B = 83-86.99, B- = 80-82.99, C+ = 77-79.99, C = 73-76.99, C- = 70-72.99, D+ = 67-69.99, D = 63-66.99, D- = 60-62.99, E < 60

There will be no 'rounding up' of grades so please do not ask. The only extra credit that will be offered is 6% final grade points for work done on *MasteringOceanography* (see details above).

***Note:** An earned grade of 'C-' grade or below does not qualify for major, minor, Gen Ed, or college basic distribution credit.

Exams

Exams will be about 50-60 multiple choice questions (the same or similar to those that appear as in-class Review Questions). Everything associated with the class is fair game on exams. However, the focus will be on material presented in lecture. Exam material is cumulative but focuses on each third of the course. I will offer pre-exam Q&A sessions. Make-ups for exams will only be given by pre-arrangement (before the exam) or under extraordinary circumstances.

1st in-class exam	Fri., Sep. 25
2nd in-class exam	Wed., Oct. 28
3rd Exam	Wed. Dec. 8 (or makeup: Friday, Dec. 10, 1:00 - 3:00 pm.)

Exam grades will be curved to a median of 85% using curve function in the Canvas gradebook. This Canvas gradebook tool adjusts scores as a bell curve so that 66% will fall within 1 standard deviation of the median score which will be 85%. I.e. if the median is below 85%, all grades will be shifted upward, a lot if a grade is very low, only a little if it is very high. As a result, more than half the class will get at least a B on exams.

We will be taking the exams in class. Students that do these exams on their laptops (or other device within Canvas) will receive a 1% bonus on top of their curved scores. Paper exam copies will be available to students who forget their laptop or have unsurmountable technical difficulties.

Review Questions (RQ)

Throughout each lecture, multiple choice questions will be presented to the class. Students should write down each **question and the answer** on the RQ Form that students pick up as they enter class each day. Some days (about 10-15), the forms will be collected and graded, other days they will not. Students should save all the RQ Forms as these will be an excellent resource to study for exams since some exam questions will be the same or similar to Review Questions. The point of all this is to be present and attentive during class and to self-test your comprehension of class material. Students may work with others to come up with correct answers. However, students caught filling out or turning in more than one RQ form will be penalized with 10% grade reduction on the next exam.

Failure to write the question or answer, whether because of inattention, absence, tardiness or forgetting to turn in the RQ form, will receive no points...no exception. When missing a RQ set due to an approved absence, students should notify the TA via e-mail along with documentation and the final Review Question grade 'total possible' will be adjusted accordingly.

Exercises

4-5 exercises will be assigned during the semester. All but one of them will be done on the Sakai class website (Assignment tab). Homework assignments can be turned in late, but only within one week of the due date and only for half credit. You will receive in-class and e-mail announcement when these assignments are due.

How to do well in this class

Skeleton notes for each lecture will be posted on the class website, usually one day before the lecture. Keep in mind that these are NOT complete notes. I recommend taking your notes on top of these. Everyone has his or her own study techniques, but here's my recommendation. The more frequently you are exposed to the material, the more likely you are to grasp the concepts and ideas presented. So I recommend skimming the designated reading before lecture. After class, really read the text focusing on the material covered in lecture and concentrating on figures and illustrations. Make note of questions or concepts to have clarified by me or your TA later. Attend pre-exam review sessions with a list of questions for me to answer. Use the office hours provided for you to ask questions or just to come in and chat. Be responsible for your own education. If you miss a class, get the notes from a colleague before the next class. It is not my intention that you be forced to memorize many trivial facts. Instead, I think you can succeed by being very familiar with the visual images (figures, graphs etc. shown in lecture or textbook). If you really understand the pictures, then you really understand the concepts.

Miscellaneous

This is a large class, so small disturbances rapidly multiply into large disturbances. Creating a disturbance is rude to your classmates and to me. I consider the following to be rude:

- No use of computers other than viewing and taking class notes will be allowed during class.
- No eating or reading the newspaper will be allowed in class during class.

-Entering the class late or leaving early. If you are more than 10 minutes late, I would suggest you do not enter. Leaving your seat before class ends, even to go to the bathroom, should be an extremely rare occurrence (i.e. should not happen). Make prior arrangement in the event of an extenuating circumstance.

-Talking with other students during lectures. If you have questions during the lecture, please address them to me, chances are others have questions as well. Your comments and feedback are welcome.

Academic Honesty Policy

Students must conform to UF's academic honesty policy regarding plagiarism and other forms of cheating. This means that on all work submitted for credit by students at the University of Florida, the following pledge is either required or implied: "On my honor, I have neither given nor received unauthorized aid in doing this assignment." The university specifically prohibits cheating, plagiarism, misrepresentation, bribery, conspiracy, and fabrication. For more information about the definition of these terms and other aspects of the Honesty Guidelines, see <http://www.dso.ufl.edu/sccr/process/student---conduct---honor---code/>. All students found to have cheated, plagiarized, or otherwise violated the Honor Code in any assignment for this course will be prosecuted to the full extent of the university honor policy, including judicial action and the sanctions listed in paragraph XI of the Student Conduct Code. For serious violations, you will fail this course.

Accommodations for Students with Disabilities

Please do not hesitate to ask for accommodation for a documented disability. Students requesting classroom accommodation must first register with the Dean of Students Office (<http://www.dso.ufl.edu/drp/>). The Dean of Students Office will provide documentation to the student, who must then provide this documentation to the Instructor when requesting accommodation. Please ask the instructor if you would like any assistance in this process. Please provide this information to your TA within the first two weeks of the semester.

Additional Resources

Students facing difficulties completing the course or who are in need of counseling or urgent help may contact the Counseling and Wellness Center: <http://www.counseling.ufl.edu/cwc/Default.aspx>, 392-1575; or the University Police Department: 392-1111 or 9-1-1 for emergencies.

Other Resources available on-campus for students include:

- a. Student Mental Health, Student Health Care Center, 392-1171, personal counseling;
- b. Sexual Assault Recovery Services (SARS), Student Health Care Center, 392-1161, sexual counseling;
- c. Career Resource Center, Reitz Union, 392-1601, career development assistance and counseling.

Introduction to Oceanography OCE 1001 – Fall 2015
Prof. Andrew Zimmerman - Tentative Schedule

<u>Week</u>	<u>Date</u>	<u>Topic</u>	<u>Reading</u>
		Background	
1	Aug 24	Introduction to Course and Topic	Ch 1
	Aug 26	History and Methods of Oceanography	Appendix 2 & 3
	Aug 28	History and Methods of Oceanography	
2	Aug 31	Origins of Earth and Oceans	Ch 1
	Sep 2	Origins of Earth and Oceans	
	Sep 4	Plate Tectonics	Ch 2
		Marine Geology	
3	Sep 7	No class – Labor Day	
	Sep 9	Plate Tectonics	Ch 2
	Sep 11	Plate Tectonics	
4	Sep 14	Physiography of the Seafloor	Ch 3
	Sep 16	Physiography of the Seafloor	
	Sep 18	Physiography of the Seafloor	
5	Sep 21	Sediments	Ch 4
	Sep 23	Sediments	
	Sep 25	1st In-Class Exam	
		Marine Chemistry	
6	Sep 28	Water Chemistry	Ch 5, Appendix IV
	Sep 30	Water Chemistry	
	Oct 2	Atmospheric Circulation	Ch 6
		Physical Oceanography	
7	Oct 5	Atmospheric Circulation	
	Oct 7	Atmospheric Circulation	
	Oct 9	Surface Ocean Circulation	Ch 7
8	Oct 12	Surface Ocean Circulation	
	Oct 14	Deep Ocean Circulation	
	Oct 16	Waves	Ch 8
9	Oct 19	Waves	
	Oct 21	Coasts & Beaches	Ch 10
	Oct 23	Coasts & Beaches	

10	Oct 26	Coasts & Beaches	Ch 10
	Oct 28	2nd In-Class Exam	
	Oct 30	Climate Change – Evidence and Uncertainties	Ch 16
11	Nov 2	Climate Change and Sea level Rise	
	Nov 4	Life in the Ocean – Intro.	Ch 12
	Nov 6	No class - Homecoming	
		Biological Oceanography	
12	Nov 9	Life in the Ocean - Ecology	
	Nov 11	No class – Vet. Day	
	Nov 13	Life in the Ocean – Primary Production	Ch 13
13	Nov 16	Life in the Ocean – Primary Production	
	Nov 18	Pelagic Organisms	Ch. 14
	Nov 20	Pelagic Organisms	
14	Nov 23	Pelagic Organisms	
	Nov 25	No class - Thanksgiving	
	Nov 27	No class - Thanksgiving	
15	Nov 30	Biological Resources	Ch. 13 (p 413-423)
	Dec 2	Biological Resources	
	Dec 4	Benthic Communities	Ch 15
16	Dec 7	Marine Pollution/Issues	Ch 11
	Dec 9	3rd In-Class Exam (alternative date Dec.11?)	
	Dec 11	READING PERIOD	
		Scheduled Final Exam that we will not be having: Fri. Dec. 18	