

**Syllabus: INTRODUCTION TO OCEANOGRAPHY
OCE 1001, Spring 2015 (Section 03E4, 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 6 (12:50 – 1:40) in Williamson Hall 100

Instructor

Andrew R. Zimmerman, Ph.D.

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Office Hours: Monday 3:00 – 4:00 pm (or by appointment), Williamson Hall 364

e-mail: azimmer@ufl.edu (use this e-mail, NOT Sakai messaging for communication with me)

website: <http://users.clas.ufl.edu/azimmer/>

Teaching Assistant

Jack Hutchings Off: Williamson Hall 280

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Office Hours: Tuesday 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.

Recommended Textbook

Students are not required to have a textbook. However, many have found it useful to have a textbook as an alternate presentation of the material. I have arranged a deal with a publisher, Cengage Learning, for:

Essentials of Oceanography, Author: Garrison (7th edition): a custom loose-leaf-bound edition + CourseMate at the much reduced price of \$92 at this website: <http://www.cengagebrain.com/micro/1-1Q7FV2T>. You can also buy the bundle (textbook + CourseMate) at the bookstore for \$125. However, students are welcome to use any introductory Oceanography textbook they may find, or even share one, but of course, they won't have access to CourseMate. I will place some textbooks on reserve in Marston Library.

CourseMate/Extra Credit

'CourseMate' is an interactive learning, study, and exam preparation tool that supports the printed textbook, and contains, quizzes, animations, glossary, flashcards, etc. You can get extra credit of 3 final grade %points if you do ALL of the following:

- 1) 'Enroll' in our course: Access CourseMate and enroll in our course at www.cengagebrain.com. You will need to use this **Course Key: CM-9781285776064-0000025**. You can find a guide to enrolling on our course website or view: <https://www.youtube.com/watch?v=DSewSl-sETw>.
- 2) Spend an average of half hour/week (7 hours for the whole semester) on CourseMate.
- 3) Get at least a 65% as your best score on the Quick Quiz, Pre-Test, and Post-Test for at least 10 chapters.

Course Website is on the UF Sakai system. Go to <http://lss.at.ufl.edu/> and click on the e-Learning in Sakai. Start on the 'Course Materials' tab. You must have an active GatorLink ID to access the course website. If you do not, go to the GatorLink website (<http://gatorlink.uf.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. Do not send me e-mail through this site (use azimmer@ufl.edu). 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.

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 = $\geq 93\%$, 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 2 final grade %points for work done on CourseMate (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	Monday, Feb. 9
2nd in-class exam	Monday, March 23
3rd Exam	Finals Period: Wednesday, April 29, 12:30 p.m. - 2:30 p.m.

Exam grades will be curved using a linear method described at:

<http://www.ats.amherst.edu/software/excel/excel-grading/excel-grades/#CurvingGrades>. Grades will be curved to a median of 85%. So more than half the class will get at least a B on exams.

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 are assigned 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/scrr/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 – Spring 2015

Prof. Andrew Zimmerman - Tentative Schedule

Week	Date	Topic	Reading
		Background	
1	Jan 7	Introduction to Course and Topic	Ch 1.1-1.2, Appendix 6
	Jan 9	History and Methods of Oceanography	Ch 2
2	Jan 12	History and Methods of Oceanography	Appendix 4 & 5
	Jan 14	Origins of Earth, Oceans and Life	Ch 1
	Jan 16	Origins of Earth, Oceans and Life	
		Marine Geology	
3	Jan 19	MLK Day – No Class	
	Jan 21	Plate Tectonics	Ch 3
	Jan 23	Plate Tectonics	
4	Jan 26	Plate Tectonics	
	Jan 28	Physiography of the Seafloor	Ch 4
	Jan 30	Physiography of the Seafloor	
5	Feb 2	Physiography of the Seafloor	
	Feb 4	Sediments	Ch 5
	Feb 6	Sediments	
		Marine Chemistry	
6	Feb 9	1st In-Class Exam	
	Feb 11	Water Properties	Ch 6
	Feb 13	Water Properties	
		Physical Oceanography	
7	Feb 16	Atmospheric Circulation	Ch 7
	Feb 18	Atmospheric Circulation	
	Feb 20	Atmospheric Circulation	
8	Feb 23	Surface Ocean Circulation	Ch 8
	Feb 25	Surface Ocean Circulation	
	Feb 27	Deep Ocean Circulation	
SPRING BREAK March 1 - 8			
9	March 9	Waves	Ch 9
	March 11	Waves	
	March 13	Tides ??	Ch 10

10	March 16	Coasts & Beaches	Ch 11
	March 18	Coasts & Beaches	
	March 20	Coasts & Beaches	
11	March 23	2nd In-Class Exam	
	March 25	Climate Change	Ch 15.10
	March 27	Climate Change and Sea level Rise	
		Biological Oceanography	
12	March 30	Life in the Ocean - Intro	Ch 12
	April 1	Life in the Ocean - Ecology	
	April 3	Life in the Ocean – Primary Production	
13	April 6	Life in the Ocean – Primary Production	
	April 8	Pelagic Communities	Ch 13
	April 10	Pelagic Communities	
14	April 13	Pelagic Communities	
	April 15	Biological Resources	Ch 15.1-15.5
	April 17	Biological Resources	
15	April 20	Benthic Communities	Ch. 14
	April 22	Marine Pollution/Issues	Ch 15.6-15.9 & 15.11
	April 24	READING PERIOD	
3rd Exam (Finals Week) Wednesday, April 29, 12:30 p.m. - 2:30 p.m.			