

Syllabus: INTRODUCTION TO OCEANOGRAPHY

OCE 1001, Summer B 2025 (On-line Course, 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)

Instructor

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Course Description

Using the scientific method, critical thinking skills, and data analysis, this course will examine the fundamental processes of the ocean system—composed of an atmosphere, hydrosphere, lithosphere, and biosphere—through time. The course will also explore interactions between these spheres, including critical analysis of scientific theories, and emphasize oceanic connections with humanity.

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.
- Realize the importance of 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.

Student Learning Outcomes (SLOs)

- Students will use critical thinking to recognize the rigorous standards of scientific theories.
- Students will analyze and synthesize oceanographic data to draw scientifically valid conclusions.
- Students will recognize the different time scales associated with different ocean processes.
- Students will describe interactions between humans and the ocean realm.
- Students will apply their understanding of oceanographic principles to various marine issues.

Course Website

All learning material, homework, exercises, quizzes, exams and discussions for this course will be carried out on the UF Canvas system website. There will be no need to be on campus during this course. 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](#) or call the help desk at 392-HELP for assistance.

Structure of the Course

During each of the six weeks of the course, 2 to 3 modules must be completed. Each module is composed of 3 – 4 lessons delivered as a combination of short lectures, readings, animations, web links and additional materials for further exploration. Each week, students will have:

Monday –Thursday to complete the **Exercise** for that week (Note: all ‘days’ end at 11:59 pm)

Thursday – Sunday to complete the group **Discussion** for that week, and

Thursday – Sunday to complete a **Quiz** that covers the material presented throughout that week.

See the course ‘Due Dates’ handout for a listing of the specific dates that each activity is due. Each student is responsible for completion of each activity of the course on time, for checking the Canvas site for announcements, and to see that your grades are being correctly recorded in the Canvas gradebook. No grade will be changed more than one week following the date it was due. It is recommended that students adjust Canvas settings so that Announcements are sent to phone or email.

Grading

Your semester grade will be determined as follows:

5 Exercises (3% each)	15% of final grade	- Due by each Thursday by 11:59 pm
5 Group Discussions (3% each)	15% of final grade	- Thursday – Sunday by 11:59 pm
5 End-of-Module Quiz (10% each)	50%	- Thursday – Sunday by 11:59 pm
1 Final Exam	20% of final grade	- Fri. Aug. 8 th (8 am) – Sat. Aug. 9 by 11:59 pm

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’, but in a border line cases, I may check the quality of your participation in discussions and other measures of effort. ***Note:** An earned grade of ‘C-’ grade or below does not qualify for major, minor, Gen. Ed., or college basic distribution credit. *For further information on UF's Grading Policy, consult:* <https://catalog.ufl.edu/ugrad/current/regulations/info/grades.aspx>

Quizzes and Exams

Quizzes and the Final Exam will be taken within the Canvas course shell. Everything associated with the class, including lecture material, book readings and exercises are fair game on quizzes and the final exam. However, the focus will be on the material presented in lecture videos. The 5 quizzes will be 20 multiple choice questions to be answered as open book but will be time-limited (**40 minutes**) – thus, don’t expect to be able to look up every answer. Each quiz must be completed between Thursday 5 am and Sunday 11:59 pm (EST) at the end of weeks 1-5.

The **final exam** at the end of week 6 will consist of 55 multiple choice questions covering all subjects presented in the course. The Final Exam will be closed book, 2 hour limit and monitored using the HonorLock system. The final exam must be completed between **Friday Aug. 8 or Saturday Aug 9** (11:59 pm, EST).

To use Honorlock, you must use the Google Chrome browser (<https://chrome.com>), and have a working camera and microphone. Contact Honorlock for support at (844) 243-2500.

Final Exam grades will be curved to a median of 85% using a linear method described at: <http://www.ats.amherst.edu/software/excel/excel-grading/excel-grades/#CurvingGrades>.

Group Discussions

Group Discussion will take place in the Discussion link section of the course Canvas website (see tab at left) from Thursday-through Sunday (11:59 pm) at the end of weeks 1- 5 of the course. Each student is required to make at least one substantive comment addressing the posed question, as well as one response to another student's comment (each is usually at least 2-3 sentences). The best comments will utilize knowledge and insights gained from the materials presented in lectures and readings.

- *justify your answers with facts (if not from our lectures, provide the source)*
- *stay on topic and address every part of the discussion questions.*

Textbook

No textbook is required for the course. However, it is recommended that you get yourself 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 have placed a few on reserve at Marston Library.

Extra Credit: worth a possible 2% point addition to your total final grade. The different extra credit opportunities are listed in a separate document on the Canvas site under 'Additional Information'. It should be uploaded to the Canvas extra credit tab by the Sunday before the final exam.

Field Trip: There will be an optional **field trip on Thursday, Aug. 7 to the Nature Coast marine Biological Station, Cedar Key, FL**. Transportation will be provided from Gainesville. We will leave G-ville at 10:30 a.m. and return by 5 pm. Or one can meet us in Cedar Key at noon. Pre-registration required. More info will follow.

Late Policy

- Exercises and Quizzes can be completed only up to 1 day late, but will only be awarded half credit after the due date.
- Discussions and the Final Exam must be completed during the scheduled time and cannot be made up if missed (except in cases as outlined in UF policies, below).
- Students are expected to complete all activities on the specified dates and will not be granted an alternate date unless they have an acceptable reason (e.g., medical emergency, military obligation) and pre-arranged consent of the instructor. These requests must be timely and accompanied by all necessary written documentation. This policy is accordance with UF's policies: <https://catalog.ufl.edu/ugrad/current/regulations/info/attendance.aspx>.

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 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 instructor within the first two days 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.

Detailed Course Outline - OCE1001 (SUM B - 2025)

Week	Module	Lesson	*Assignments	'Do' Dates
1 Jun 29 - July 6 INTRODUCTION	Module 1: Introduction	The Syllabus What is Oceanography? Meet your Instructor/Career	Syllabus Quiz	Jun 29-July 3
	Module 2: History	Early explorations Solving equations and Navigation	Exercise 1	Jun 29-July 3
	Module 3: Origins	What is science? Origins of the Universe and Earth Origin of life Geological time	Group Discussion 1 Quiz 1	July 3 - 6 July 3 - 6
2 July 7 - 13 MARINE GEOLOGY	Module 4: Plate Tectonics	Theory of plate tectonics Plate boundaries Shear boundaries, hot spots & paleogeog.	Exercise 2	July 7 - 10
	Module 5: Ocean Basins	Bathymetric tools Ocean basin shape A walk across the sea - margins A walk across the sea - deep basin	Group Discussion 2	July 10 - 13
	Module 6: Marine Sediments	Tools of a marine sedimentologist	Quiz 2	July 10 - 13
3 July 14 - 20 CHEM. & PHYSICAL OCEANOGRAPHY	Module 7: Water & Seawater	Properties of water Properties of seawater		
	Module 8: Atmosphere Processes	Principles of air movement A global air circulation model Regional/local climate effects		
	Module 9: Ocean Currents	Ocean circulation - Intro Surface currents Deep ocean currents	Exercise 3 Group Discussion 3 Quiz 3	July 14 - 17 July 17 - 20 July 17 - 20
4 July 21 - 27 COASTAL OCEANOGRAPHY	Module 10: Air-Sea Phenomena	Marine upwelling & ENSO		
	Module 11: Waves & Tides	Waves introduction Wave/shore interaction Tsunamis Tides	Exercise 4	July 21 - 24
	Module 12: Coasts	Coasts - Intro Beaches Coasts and man	Group Discussion 4 Quiz 4	July 24 - 27 July 24 - 27
5 July 28 - Aug 3 BIOLOGICAL OCEANOGRAPHY	Module 13: Life in the Ocean	Classification of marine life Marine ecology Marine primary production		
	Module 14: Pelagic Organisms	Adaptations to the marine environment Zooplankton Nekton	Exercise 5	July 28 - 31
	Module 15: Benthic Organisms	Marine mammals Benthic ecosystems Coral reefs	Group Discussion 5 Quiz 5	July 31 - Aug 3 July 31 - Aug 3
6 Aug 4 - 9 MARINE ISSUES	Module 16: Marine Resources	Marine resources - Intro Biological resources - Overfishing		
	Module 17: Climate Change	Global warming - Evidence Global warming - Uncertainties Sea level rise		
	Module 18: Pollution	Marine pollution	Final Exam	Aug 8 or 9

***All Assignments are Due by 11:59 p.m. EST on the Due Date**

***All Exercises and Quizzes are found in the Assessments Tool.**

Discussions are found in the Canvas Discussion Tool.