

Lecture Syllabus
Introduction to Oceanography
MARN 1002 & MARN 1003
Fall 2010 Avery Point

Course Information

Title: Introduction to Oceanography
Credits: 3 (4 with lab)
Meeting time: Tuesdays and Thursdays 11:00 AM to 12:15 PM
Classroom: Academic Building 211

Instructor: Dr. Michael Whitney
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Teaching Assistant: Alejandro, Arias-Esquivel
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Course Description

This general education course covers the processes governing the geology, circulation, chemistry, and biological productivity of the world's oceans. Emphasis is placed on the interactions and interrelationships between physical, chemical, biological, and geological processes that contribute to both the stability and the variability of the marine environment. A background in secondary school physics, chemistry or biology is recommended.

Course Objectives

Upon successful completion of this course, students will be able to:

- Describe the physical and chemical characteristics of seawater.
- Describe how the oceans and seafloor have changed over geological time.
- Explain how oceans modify climate and heat distribution on Earth.
- Explain the processes driving currents, tides, and waves.
- Describe the environmental issues concerning marine resources and ecosystems.
- Describe characteristics of marine life and controls on the marine trophic web.

Course Materials

Required Text: Chamberlin, W. S. and T. D. Dickey. (2008). *Exploring the World Ocean*. McGraw Hill. ISBN: 978-0-07-301654-2.

Course Schedule

Week	Date	Topic	Reading
1	8/30	Introduction	Preface
	9/2	The Water Planet	Chapter 2
2	9/7	Plate Tectonics	Chapter 3
	9/9	Plate Tectonics	Chapter 3
3	9/14	The Sea Floor	Chapter 4
	9/16	Sea Floor Sediments	Chapter 5
4	9/21	Physical Properties of Water	Chapters 6 and 7
	9/23	Chemistry of Seawater	Chapter 6
5	9/28	Chemistry of Seawater	Chapter 6
	9/30	Atmospheric Circulation	Chapter 8
Saturday	10/2	Project Oceanology (9:30-4:00)	Chapter 8
6	10/5	TEST 1	Chapters 2-7
	10/7	Ocean Circulation	Chapters 8 and 9
7	10/12	Ocean Circulation	Chapters 8 and 9
	10/14	Surface Currents	Chapter 9
8	10/19	Surface Currents	Chapter 9
	10/21	Waves	Chapter 10
9	10/26	Waves	Chapter 10
	10/28	Tides	Chapter 11
10	11/2	Coasts, Beaches, and Estuaries	Chapter 15
	11/4	Coasts, Beaches, and Estuaries	Chapter 15
11	11/9	Environmental Issues	Chapter 15
	11/11	TEST 2	Chapters 8-11, 15
12	11/16	Ocean Life	Chapters 12
	11/18	Primary Production	Chapter 13
13	11/30	Food Webs	Chapter 14
	12/2	Plankton, Bacteria, and Viruses	Chapters 13 and 14
14	12/7	Benthic Life	Chapter 12
	12/9	General Concepts and Review	
	12/14	FINAL (11:00 AM to 1:00 PM)	Cumulative

Course Requirements

Successful completion of this course requires attendance and participation in class, promptly reading assigned chapters in the text, completing weekly homework assignments and in-class activities, completing two tests and the final examination, and participating in the class field trip on the Project Oceanology field trip (or alternative assignment).

Grading and Absence Policies

Students are expected to electronically submit completed homework assignments via HuskyCT. Assignments are due by 4 PM on the Thursday one week after they were assigned. The following penalties will be assessed for late assignments: 10% penalty within 1 week, 25% penalty within 2 weeks, 100% penalty (no credit) beyond 2 weeks after the due date. No assignments will be accepted for credit after the last day of classes for the semester.

Illnesses, religious observances, and other personal circumstances may be grounds for excused absences and relief from assignment deadlines. The student is expected to contact the instructor in advance of class in most situations or shortly thereafter in extreme circumstances to discuss a strategy for covering missed material and completing missed assignments. Make-up tests should be scheduled and completed within 1 week of the student's return. Deadlines for work missed during absences will be extended by no more than 2 weeks beyond the student's return. Specific arrangements will be determined by the instructor on a case by case basis. The student is responsible for all material covered during the absence and the student is expected to keep up with any work assigned following an absence. The Director of Student Affairs at Avery Point (www.averypoint.uconn.edu/avery_point/student_affairs.htm) and the Dean of Students (www.dosa.uconn.edu/students.html) have additional information concerning absences.

The final grade will be calculated as the weighted average of the scores obtained in each of the following categories:

Participation	15%
Homework Assignments	35%
Test 1	15%
Test 2	15%
Final Exam	20%

Participation includes attending class, actively participating in class discussions, completing assigned readings, and attending the class field trip. Weekly homework assignments and in-class activities are based on materials presented in the lectures and assigned readings. The tests and final examinations are in-class and closed-book.

The final grade in the course will not be curved based on the highest grade in the class. The final letter grade will be assigned based on each student's final score:

A	93-100	C	73-76
A-	90-92	C-	70-72
B+	87-89	D+	67-69
B	83-86	D	63-66
B-	80-82	D-	60-62
C+	77-79	F	0-59

Classroom Conduct and Academic Integrity

Students are expected to conduct themselves in a mature and professional manner while in the classroom. It is important to be attentive in class and be respectful of the instructor and other students. Students engaging in disruptive or unsafe behavior will be dealt with through disciplinary actions deemed appropriate by the instructor and the university. The Director of Student Affairs (www.averypoint.uconn.edu/avery_point/student_affairs.htm) has additional information concerning proper classroom conduct.

The in-class tests and final examination should be carried out individually. Group discussions for better understanding of homework materials are encouraged, however homework assignments should be written individually. The University Student Code (available at www.dosa.uconn.edu) regarding any cheating and plagiarism will be followed in this course:

A fundamental tenet of all educational institutions is academic honesty; academic work depends upon respect for and acknowledgement of the research and ideas of others. Misrepresenting someone else's work as one's own is a serious offense in any academic setting and it will not be condoned. Academic misconduct includes, but is not limited to, providing or receiving assistance in a manner not authorized by the instructor in the creation of work to be submitted for academic evaluation; ... presenting, as one's own, the ideas or words of another for academic evaluation; [and] doing unauthorized academic work for which another person will receive credit or be evaluated... A student who knowingly assists another student in committing an act of academic misconduct shall be equally accountable for the violation, and shall be subject to the sanctions and other remedies described in The Student Code.