

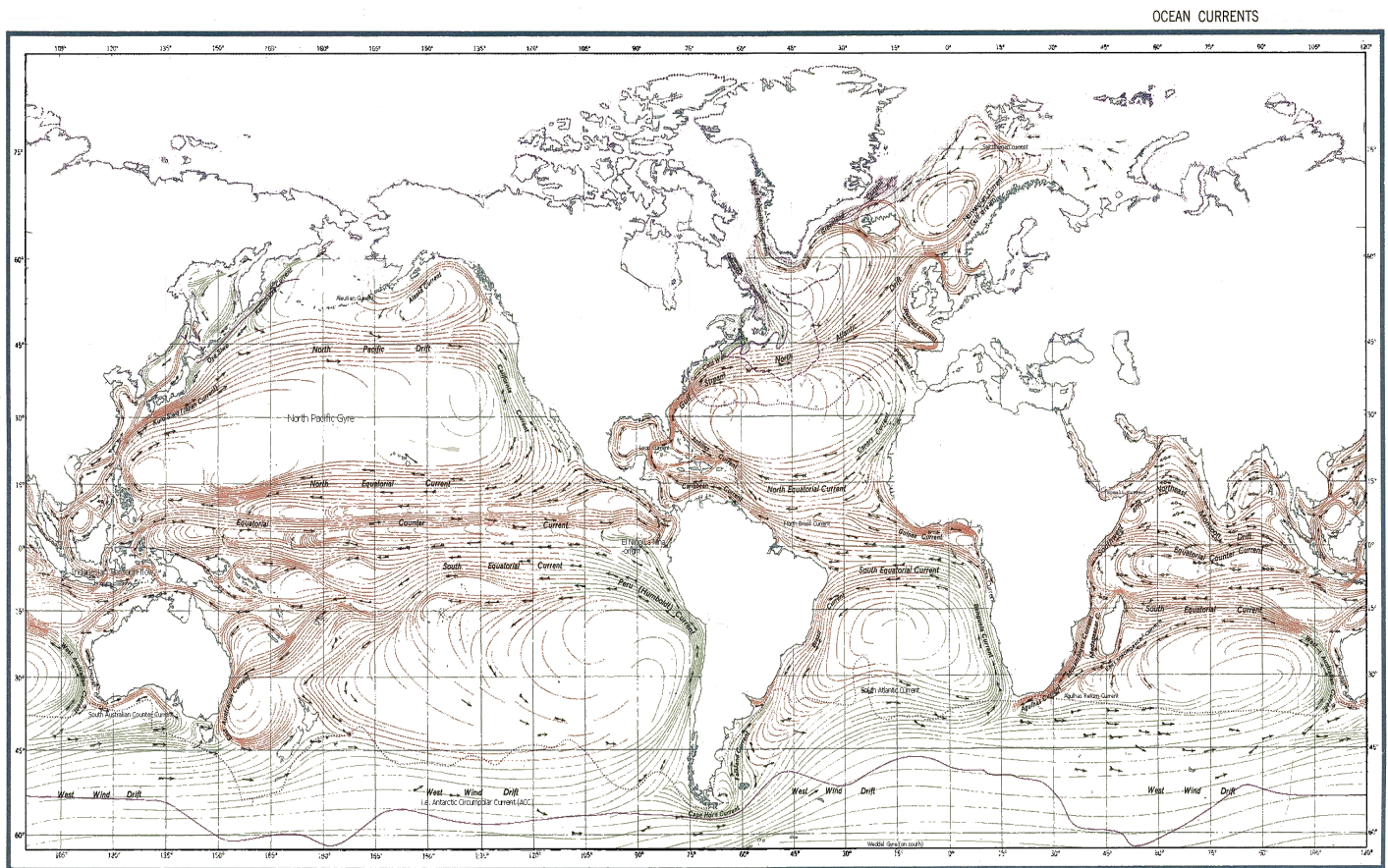
Syllabus for: Introduction to Oceanography	
Semester & Year:	Spring 2015
Course ID and Section Number:	OCEAN-10-E7065 (037065)
Number of Credits/Units:	3
Day/Time:	Tuesday, Thursday 10:05AM - 11:30AM
Location:	Humanities Bldg, Room HU125
Instructor's Name:	Danny O'Shea
Contact Information:	danny-oshea@redwoods.edu
Course Description: An introduction to the Earth's ocean including marine environments, geology, plate tectonics, fundamental chemical and physical properties of seawater, atmospheric-oceanic relationships, oceanic circulation, coastal environments and biological productivity.	
Student Learning Outcomes:	
<ol style="list-style-type: none"> 1) Use the formal methodology of the scientific method as an inquiry-based tool to critically evaluate oceanic phenomena. 2) Describe how energy is transferred between different elements of the Earth's geologic, oceanic, atmospheric, and biological systems. 3) Apply oceanographic principles to describe how coastal materials and landscapes change over time. 4) Apply concepts of physics and chemistry to quantitatively explain variations in the characteristics of the oceanic environment. 	
Special accommodations: College of the Redwoods complies with the Americans with Disabilities Act in making reasonable accommodations for qualified students with disabilities. Please present your written accommodation request at least one week before the first test so that necessary arrangements can be made. No last-minute arrangements or post-test adjustments will be made. If you have a disability or believe you might benefit from disability related services and may need accommodations, please see me or contact Disabled Students Programs and Services. Students may make requests for alternative media by contacting DSPS.	
Academic Misconduct: Cheating, plagiarism, collusion, abuse of resource materials, computer misuse, fabrication or falsification, multiple submissions, complicity in academic misconduct, and/ or bearing false witness will not be tolerated. Violations will be dealt with according to the procedures and sanctions proscribed by the College of the Redwoods. Students caught plagiarizing or cheating on exams will receive an "F" in the course.	
<p>The student code of conduct is available on the College of the Redwoods website at: http://redwoods.edu/District/Board/New/Chapter5/AP%205500%20Conduct%20Code%20final%2002-07-2012.pdf</p>	
Additional information about the rights and responsibilities of students, Board policies, and administrative procedures is located in the college catalog and on the College of the Redwoods homepage.	
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Introduction to Oceanography

Oceanography 10 - E-7065

College of the Redwoods

Spring 2015



Syllabus

Instructor Danny O'Shea

Oceanography 10 / 037065
Introduction to Oceanography
Office HU 125A

Spring 2015
Danny O'Shea
e-mail: danny-oshea@redwoods.edu

TTh 10:05 a.m. – 11:30 a.m.
Room HU 125

Course Description: This Earth Science course is an introduction to the oceans includes the study of marine geology, plate tectonics, and the physical and chemical properties of seawater, oceanic-atmospheric circulation, marine environments, and biological productivity and ecology. The goal of this course is to understand the biogeochemical relationships of the Earth's Ocean. This 3-unit course meets Tuesday and Thursday in Room HU125 on the CR main Eureka campus at 10:05 a.m. The course will follow the syllabus outlined below, however, material will shift to accommodate events or discoveries that occur during the semester.

Syllabus

<u>Week</u>	<u>Day-Month</u>	<u>Topic</u>	<u>Chapter</u>	<u>In-Class Activities</u>	<u>Online Quiz</u>
1	20 - Jan 22 - Jan	Origins Exploration	1	1) Charts, Latitude Longitude & Time	1
2	27 - Jan 29 - Jan	Plate Tectonics Ocean Basins	2 3	2) Plate Boundaries & Marine Geology	2
3	3 - Feb 5 - Feb	Seafloor Sediments Review	4	3) Mantle Plumes & the Hawai'ian Hot Spot	Research Outline Due
4	10 - Feb 12 - Feb	1 st Exam Water & Salts	1 - 4 5	4) Seawater Chemistry	3
5	17 - Feb 19 - Feb	Seawater Chemistry Physical Properties	5	5) Pressure, pH & CO ₂	
6	24 - Feb 26 - Feb	Atmospheric Circulation	6	6) Coriolis Effect	4
7	3 - Mar 5 - Mar	Ocean Circulation	7	7) Ocean Circulation	5
8	10 - Mar 12 - Mar	Research Paper Due 2 nd Exam	5 - 7	Exam Review	6
9	17 - Mar 19 - Mar	Spring Break		No Class	
10	24 - Mar 26 - Mar	Ocean Waves	8 9	8) Ocean Wave Prediction	Research Paper Due
11	31 - Mar 2 - Apr	Tides	10	9) Ocean Tides	7
12	7 - Apr 9 - Apr	Coastlines / Deltas 3 rd Exam	6 -10	Exam Review	8
13	14 - Apr 16 - Apr	Life in the Ocean Plankton	11 12	10) Life in the Ocean	9
14	21 - Apr 23 - Apr	Marine Animals	13		10
15	28 - Apr 30 - Apr	Biological Oceanography Ocean Ecology	14		Notebooks Due
16	5 - May 7 - May	Marine Resources Marine Pollution	15 16		
17	14-May	Final Exam	1 - 16	Final Exam	

Reading

You will need an Introductory Oceanography textbook to successfully complete the Ocean-10 course. New textbooks are very expensive, so I have set up this course so that any recent (published since c.a. 2004) edition of an Intro Oceanography textbook will suffice. You will need to read the chapter(s) to be discussed **BEFORE** you come to class. This will make the lectures more interesting, and improve your learning experience. A course outline is posted on myCR so that you can review topics covered in the classroom. I strongly encourage you to investigate other sources of information, such as, news feeds, journal articles, and other media.

Textbooks may be available at local bookstores, online and are required as a background reading to improve your general understanding of the material. Any recent edition of a Introductory Oceanography textbook will suffice, however, you will need to cross reference the chapter from the syllabus and outline available on the myCR website (www.redwoods.edu). **Read the chapters before you come to class.**

Taken with the laboratory, Oceanography-11, this course is transferable to CSU and UC schools as a science class with a laboratory. Ocean-11 is offered in the Spring semester only.

My office is located in the adjacent prep room, HU125A, and my office hours are Tuesday 1:00 p.m., or by appointment. The best way to contact me is via e-mail at: danny-oshea@redwoods.edu

Course Learning Outcomes:

- 1) Use the formal methodology of the scientific method as an inquiry-based tool to critically evaluate oceanic phenomena.
- 2) Describe how energy is transferred between different elements of the Earth's geologic, oceanic, atmospheric, and biological systems.
- 3) Apply oceanographic principles to describe how coastal materials and landscapes change over time.
- 4) Apply concepts of physics and chemistry to quantitatively explain variations in the characteristics of the oceanic environment.

Grading:

Your performance on: the three midterm, and cumulative final exams, research paper; in-class activities, online quizzes, readings, and class participation determine the grade you receive. There are 1000 points available and grades are assigned by the percentage of total points as follows:

1000-940=A	939-900=A-	899-870=B+	869-830=B	829-800=B-
799-770=C+	769-730=C	729-700=C-	699-670=D+	669-600=D
				<599=F

Grading Summary:

	<u>Points</u>
➤ 3 Midterms and 1 Final:	400
➤ Course Notes and Illustrations	150
➤ Research outline and report	150
➤ Activities	150
➤ Online Quiz	100
➤ <u>Participation</u>	50
Total Points:	1,000

Attendance/Participation

Participation is very important and absence will reflect negatively on your performance and final grade. Showing up late is very disruptive so please come to class on time. Likewise, if you need to leave the class early, please let me know before the class starts. Eating, drinking, texting, and chatting are social activities, and are best done outside the class. Thank-you.

Faculty Initiated Drop

If you miss more than 3 class meetings over the course of the semester you will be dropped from this course. If you have an emergency situation arise, please let me know why you are unable to attend the class.

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