

Syllabus for: Laboratory in Oceanography	
Semester & Year:	Fall 2012
Course ID and Section Number:	OCEAN 11-- #032466
Number of Credits/Units:	1
Day/Time:	Friday 1:00 p.m. – 4:10 p.m.
Location:	Room 122, Mendocino Coast Education Center
Instructor's Name:	Jason Patton
Contact Information:	Office location and hours: available by appointment Phone: 707-962-2667 Email: jason-patton@redwoods.edu
Course Description (catalog description as described in course outline):	
An exploration of the conceptual material presented in OCEAN 10. Students will acquire practical laboratory and field experience in many oceanographic skills, tests, and procedures. Laboratory exercises will focus on chart reading and navigational skills, basic measurements of seawater chemistry, and other processes. Field experience will include examinations of coastal geology, wave and beach processes, and marine organisms and habitats.	
Student Learning Outcomes (as described in course outline) :	
<ol style="list-style-type: none"> 1. Make reasonable interpretations of scientific data. 2. Apply the scientific method to the critical evaluation of data and concepts. 3. Identify the underlying concepts and principles of oceanography and apply and interpret them in a variety of marine environments. 4. Discuss the relationships between physical and chemical environmental factors and the organisms and populations characteristic of an area. 5. Demonstrate the skills necessary to utilize basic instruments, tools, and tests used in oceanography. 6. Discuss the strengths and weaknesses of various data collection techniques, and evaluate the relative merits of specific techniques in different environmental situations. 7. Follow written and oral laboratory instructions. 	
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.	
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	

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.

College of the Redwoods is committed to equal opportunity in employment, admission to the college, and in the conduct of all of its programs and activities.

College of the Redwoods Mendocino Coast Campus
Lab in Oceanography
Course Syllabus Fall 2012

Ocean 11 – Section 032467 – 1.0 Unit
Friday 1- 4:10 PM Room 122

Instructor: Jason Robert Patton

email: Jason-Patton@redwoods.edu

Voicemail: 707.962.2667 (If you leave a voicemail, please state your name, phone, and time that you called, in addition to the topic.)

Office: Room 101

Office Hours: Thursday afternoon by appointment

Required Text: Alan Trujillo & Harold Thurman, Essentials of Oceanography, 10th ed., 2010,
2012 Tide Tables

Required Supplies: three ring binder for class handouts including blank paper for drawing illustrations and notes during class; colored pencils for making illustrations better, USB "thumb" drive.

Contact: Please don't hesitate to email me with any questions, comments, or concerns. I welcome any feedback or suggestions. The best way to contact me for any reason is by sending an email to my CR account at Jason-Patton@redwoods.edu .

Alternatively, you may leave me a voice mail message (see phone number at the top of this syllabus). Please do not send messages through the myCR 'messages' application.

Course Description

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Course Learning Outcomes

1. Make reasonable interpretations of scientific data.
2. Apply the scientific method to the critical evaluation of data and concepts.
3. Identify the underlying concepts and principles of oceanography and apply and interpret them in a variety of marine environments.
4. Discuss the relationships between physical and chemical environmental factors and the organisms and populations characteristic of an area.

5. Demonstrate the skills necessary to utilize basic instruments, tools, and tests used in oceanography.
6. Discuss the strengths and weaknesses of various data collection techniques, and evaluate the relative merits of specific techniques in different environmental situations.
7. Follow written and oral laboratory instructions.

Grading

Your final grade will be comprised of:

<u>Summary</u>	<u>Points</u>
1 Mid Term and 1 Final Exam	400
Course Notes and Illustrations	180
Lab Activities	200
Final Exam Question	10
Research Poster Outline	40
Research Poster	120
<u>Poster Presentation (~5 minutes)</u>	<u>50</u>
Total	1000

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	699-670=D+	669-600=D	<599=F

Classroom Conduct

Side conversations among classmates are disrespectful and disruptive to the instructor and your fellow students. Questions or comments about the course material are welcome at all times but should be approached in a respectful manner.

The use of cell phones, iPods, or other items that may distract you, your instructor, or your classmates are not permitted during class. All such devices must be turned off.

You may not leave the room during an exam or quiz unless you are ready to turn in your finished exam.

Academic Honesty

You are encouraged to work together to review notes from lectures, to work on problems from the text, and to formulate ideas for any take-home assignments. However, all work you turn in must be your own independent, original work.

In the event that any work is copied from another student, zero credit will be given to all students involved (regardless of who copied from whom).

Any sources of information used in your written work must be referenced (regardless of whether the material was copied word-for-word). This includes your text book and all internet sources (reference these by including the name and URL). Any work including un-referenced material from another source (regardless of whether it was copied word-for-word) will be given zero credit.

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Academic dishonesty in any form may be reported to the vice president of CR, as per the student code of conduct available at <http://www.redwoods.edu/District/Board/New/Chapter5/Ap5500.pdf> See in particular page 9, Article VIII which begins "Students are expected to demonstrate qualities of morality, integrity, honesty, civility, honor, and respect."

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Tentative Class Schedule*

<u>Date</u>	<u>Topic</u>	<u>Activities</u>
8/31/12	Bathymetry, Charts, and Navigation	Lat/Long & Time
9/7/12	Sea Floor Spreading	Bathymetry & Sonar
9/14/12	No Class	
9/21/12	<u>Research Poster Group Formation</u> ; Coastal Geology	** <u>Field Trip</u> beach survey
9/28/12	<u>Research Poster Presentation Outline Due</u> ; Marine Sediments	Grain Size Analysis
10/5/12	Rivers and Estuaries	** <u>Field Trip</u> Ten Mile River
10/12/12	Mid Term Exam ; Salinity, Temperature, and Density	T-S Diagrams
10/19/12	Plankton; Planning & Preparation for Cruise	microscopic view of life

10/26/12	**<u>Oceanographic Research Cruise (7AM - 3PM):</u>	
	Cruise Data compilation	
11/2/12	Evaluation of Cruise Data	
11/9/12	Ocean Circulation	Water Masses
11/16/12	Ocean Waves; Tsunami	Wave Calculations
11/23/12	Holiday: Thanksgiving Break	
11/30/12	Rocky Shores	**<u>Field Trip</u> tide pools
12/7/12	Marine Life Protection Act	Mapping and "Prediction"
12/14/12	<u>Final Exam:</u> Student Research Poster Presentations; <u>Course</u> <u>Notes and Illustrations are due</u>	

*** Note: Instructor reserves the right to make changes to course schedule as deemed necessary.**

** Indicates Field Trip. Be prepared for outdoor conditions such as sun, wind and rain protection.

College of the Redwoods Resources and Information

Disabilities: College of the Redwoods is dedicated to providing access to all classes for persons with disabilities. If you have a verified disability and need accommodation, or suspect you have a disability and wish to be evaluated for eligibility, you are encouraged to speak with Carole Freeman at 707.962.2638.