

**Syllabus for: Introduction to Oceanography – Eureka Campus**

<b>Semester &amp; Year</b>	<b>Spring 2016</b>	
<b>Course ID and Section #</b>	<b>Ocean-10 039199 / 039201</b>	
<b>Instructor's Name</b>	<b>D. O'Shea</b>	
<b>Day/Time</b>	<b>T Th / 10:05 – 11:30</b>	
<b>Location</b>	<b>HU125</b>	
<b>Number of Credits/Units</b>	<b>3</b>	
<b>Contact Information</b>	<i>Office location</i>	<b>HU125A</b>
	<i>Office hours</i>	<b>T Th / 08:30 – 09:30 a.m.</b>
	<i>Phone number</i>	
	<i>Email address</i>	<b>danny-oshea@redwoods.edu</b>
<b>Textbook Information</b>	<i>Title &amp; Edition</i>	<b>Oceanography Course Notes (online)</b>
	<i>Author</i>	<b>D. O'Shea</b>
	<i>ISBN</i>	<b>n/a</b>
<p><b>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.</b></p>		
<p><b>Student Learning Outcomes:</b></p> <ol style="list-style-type: none"> <li><b>1) Use the formal methodology of the scientific method as an inquiry-based tool to critically evaluate oceanic phenomena.</b></li> <li><b>2) Describe how energy is transferred between different elements of the Earth's geologic, oceanic, atmospheric, and biological systems.</b></li> <li><b>3) Apply oceanographic principles to describe how coastal materials and landscapes change over time.</b></li> <li><b>4) Apply concepts of physics and chemistry to quantitatively explain variations in the characteristics of the oceanic environment.</b></li> </ol>		
<p><b>Special Accommodations</b></p> <p>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 <a href="#">Disabled Students Programs and Services</a>. Students may make requests for alternative media by contacting DSPPS at 707-476-4280.</p>		
<p><b>Academic Support</b></p> <p>Academic support is available at <a href="#">Counseling and Advising</a> and includes academic advising and educational planning, <a href="#">Academic Support Center</a> for tutoring and proctored tests, and <a href="#">Extended Opportunity Programs &amp; Services</a>, for eligible students, with advising, assistance, tutoring, and more.</p>		

## Syllabus for: Introduction to Oceanography – Eureka Campus

### Academic Honesty

In the academic community, the high value placed on truth implies a corresponding intolerance of scholastic dishonesty. In cases involving academic dishonesty, determination of the grade and of the student's status in the course is left primarily to the discretion of the faculty member. In such cases, where the instructor determines that a student has demonstrated academic dishonesty, the student may receive a failing grade for the assignment and/or exam and may be reported to the Chief Student Services Officer or designee. The Student Code of Conduct (AP 5500) is available on the College of the Redwoods website at:

[www.redwoods.edu/district/board/new/chapter5/documents/AP5500StudentConductCodeandDisciplinaryProceduresrev1.pdf](http://www.redwoods.edu/district/board/new/chapter5/documents/AP5500StudentConductCodeandDisciplinaryProceduresrev1.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 website.

### Disruptive Classroom Behavior

Student behavior or speech that disrupts the instructional setting will not be tolerated. Disruptive conduct may include, but is not limited to: unwarranted interruptions; failure to adhere to instructor's directions; vulgar or obscene language; slurs or other forms of intimidation; and physically or verbally abusive behavior. In such cases where the instructor determines that a student has disrupted the educational process a disruptive student may be temporarily removed from class. In addition, he or she may be reported to the Chief Student Services Officer or designee. The Student Code of Conduct (AP 5500) is available on the College of the Redwoods website at:

[www.redwoods.edu/district/board/new/chapter5/documents/AP5500StudentConductCodeandDisciplinaryProceduresrev1.pdf](http://www.redwoods.edu/district/board/new/chapter5/documents/AP5500StudentConductCodeandDisciplinaryProceduresrev1.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 website.

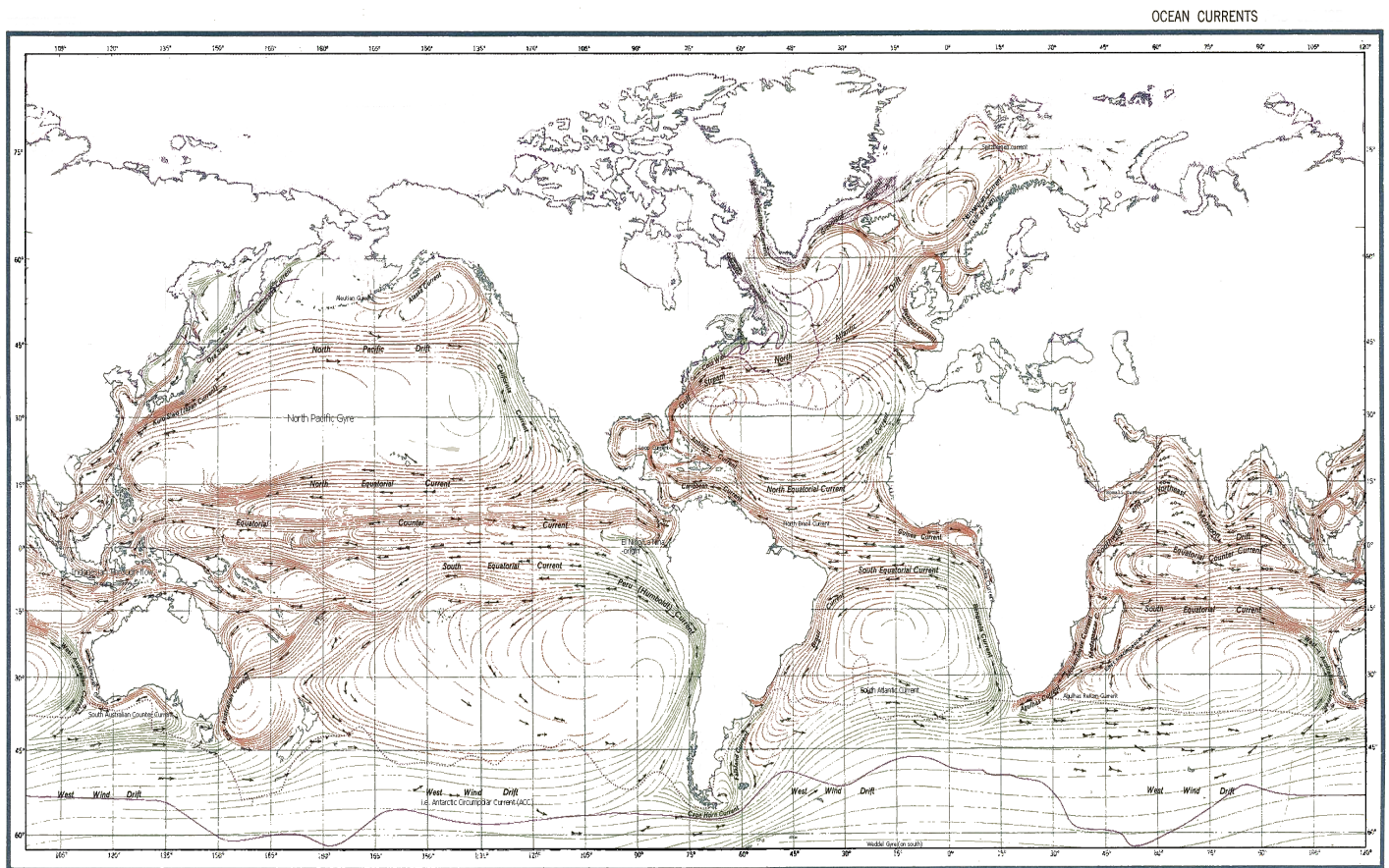
### Emergency Procedures for the Eureka campus:

Please review the campus evacuation sites, including the closest site to this classroom (posted by the exit of each room). The Eureka **campus emergency map** is available at: ([http://www.redwoods.edu/Eureka/campus-maps/EurekaMap\\_emergency.pdf](http://www.redwoods.edu/Eureka/campus-maps/EurekaMap_emergency.pdf)). For more information on Public Safety, go to <http://redwoods.edu/safety/> In an emergency that requires an evacuation of the building:

- Be aware of all marked exits from your area and building.
- Once outside, move to the nearest evacuation point outside your building:
- Keep streets and walkways clear for emergency vehicles and personnel.
- Do not leave campus, unless it has been deemed safe by the Incident Commander or campus authorities. (CR's lower parking lot and Tompkins Hill Rd are within the Tsunami Zone.)

**RAVE** – College of the Redwoods has implemented an emergency alert system. In the event of an emergency on campus you can receive an alert through your personal email and/or phones at your home, office, and cell. Registration is necessary in order to receive emergency alerts. Please go to <https://www.GetRave.com/login/Redwoods> and use the "Register" button on the top right portion of the registration page to create an account. During the registration process you can elect to add additional information, such as office phone, home phone, cell phone, and personal email. Please use your CR email address as your primary Registration Email. Your CR email address ends with "redwoods.edu." Please contact Public Safety at 707-476-4112 or [security@redwoods.edu](mailto:security@redwoods.edu) if you have any questions.

**Introduction to Oceanography**  
**Oceanography 10 E-9199/E-9201**  
**College of the Redwoods**  
**Spring 2016**



**Syllabus**  
**Instructor Danny O'Shea**

**Course Description:** This course is an introduction to the Earth's oceans and 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 marine ecology. Through this course you will gain a scientific perspective of how marine systems modify the oceans, shorelines and how energy is transferred through biogeochemical cycles in 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	19 - Jan 21 - Jan	Introduction Exploration	1	1) Charts, Latitude Longitude & Time	1
2	26 - Jan 28 - Jan	Ocean Basins Plate Tectonics	2 3	2) Plate Boundaries & Marine Geology	2
3	2 - Feb 4 - Feb	Seafloor Sediments Review	4	3) Mantle Plumes & the Hawai'ian Hot Spot	Research Outline Due
4	9 - Feb 11 - Feb	1 <sup>st</sup> Exam Water & Salinity	1 - 4 5	4) Seawater Chemistry	3
5	16 - Feb 18 - Feb	Seawater Chemistry Physical Properties	5	5) Pressure, pH & CO <sub>2</sub>	
6	23 - Feb 25 - Feb	Atmospheric Circulation	6	6) Coriolis Effect	4
7	1 - Mar 3 - Mar	Ocean Circulation	7	7) Ocean Circulation	5
8	8 - Mar 10 - Mar	Research Paper Due 2 <sup>nd</sup> Exam	5 - 7	Exam Review	6 Research Paper
9	15 - Mar 17 - Mar	Spring Break		No Class	
10	22 - Mar 24 - Mar	Ocean Waves	8 9	8) Ocean Wave Prediction	
11	29 - Mar 31 - Mar	Tides	10	9) Ocean Tides	7
12	5 - Apr 7 - Apr	Coastlines / Deltas 3 <sup>rd</sup> Exam	6 - 10	Exam Review	8
13	12 - Apr 14 - Apr	Life in the Ocean Plankton	11 12	10) Life in the Ocean	9
14	19 - Apr 21 - Apr	Marine Animals	13		10
15	26 - Apr 28 - Apr	Biological Oceanography Ocean Ecology	14		Notebooks Due
16	3 - May 5 - May	Marine Resources Marine Pollution	15 16		
17	12 - 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 Canvas 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 Canvas website ([www.redwoods.edu](http://www.redwoods.edu)). **Read the chapters before you come to class.**

Taken with the laboratory, Oceanography-11, this is 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](mailto: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:

1000-900 = A                      899-800 = B                      799-700 = C                      699-600 = D                      <599=F

## **Grading Summary:**

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

### Mid-Term/Final Exams

The 3 midterms and final are worth **100 points each**. The exams are a mix of multiple choice, true/false, short answer, and essay questions based on the lectures, activities, homework, and course reading. The final is cumulative and will concentrate on physical, chemical, and geological topics relevant to the biological topics covered during the last several weeks of the course. Each student is required to submit a multiple-choice question for the final exam based on the information presented by the student during the last two weeks of class.

### Course Notes and Illustrations

Each lecture will include notes and several illustrations that relate to the specific topic being discussed for that day. Credit is given for careful recording of the notes and illustrations including any labels and graphs, questions. A complete notebook is worth **180 points**. You will turn in your notebook the last Tuesday of classes.

### Activities

Each week we will focus on a specific topic, and use some of the class time to develop these concepts. You may need to spend some time out of class completing the activities. There are 10 activities throughout the course, each worth **15 points** for a total of **150 points**.

### On-Line Quiz

Each week a multiple-choice, on-line quiz will be posted on **Canvas**. Variations of the quiz questions will also appear on the midterm exams. Note that the questions may be slightly different, so read exam the questions carefully. Each on-line quiz is worth **10 points** for a total of **100 points**.

### Research Project

Each student is required to submit a **2,500 to 3,000-word** research paper with **2 images with description** on a topic of interest to you. The paper is to be **submitted online** via the **Canvas** web site. Your information should come from your own observations, scientific articles on the subject, library and internet research. An outline is due the third week of the semester and is to be turned in online. No late work accepted.

**>>>>>>>\*\*\*Projects submitted without references will not receive a grade\*\*\*<<<<<<<<<<<<**

A research project on a topic of interest to you that is related to Oceanography is required from each student. For full credit your research must include:

- 1) **2,500-3,000 words**, original (not copied and pasted) **text** (this is about 5-7 pages);
- 2) **DO NOT** use direct quotes.
- 3) **2 images**: at least one **map** with a **figure number** (e.g. Figure 1) and **brief description** of the location of interest; and at least one **image, drawing or graph** complete with a **figure number** and **brief description**.
- 4) **References** (Bibliography, Works Cited, etc.); A minimum of three references, not including your textbook. One of your reference must be from the science journal "Science" available in the library or online through Canvas under the "Library Resource" link in the Course Tools box.

We will briefly review some basic writing techniques early in the course.

A **General outline** with specific research topics for your project is due **February 4** (20 pts)

The **Final draft** is due by **March 10**, early submissions are encouraged. Projects are to be turned in online as a .pdf. I will post your research project on the **Canvas** website so other in the class students will have the chance to learn from your research. I will enable the Turnitin service so you will be able to see your similarity (to online sources) index.

**>>>>>>>\*\*\*Projects submitted without references will not receive a grade\*\*\*<<<<<<<<<<<<**

### 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.

**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.