

Syllabus for Ocean-10

Course Information

Semester & Year: Fall 2019

Course ID & Section #: OCEAN-10 E-8918

Instructor's name: Danny O'Shea

Day/Time or *Online: TTh 08:30-9:55

Location or *Online: Eureka

Number of units: 3

Instructor Contact Information

Office location or *Online: HU125A

Office hours: T Th 11:30 - 12:30

Phone number: n/a

Email address: danny-oshea@redwoods.edu

Required Materials

Textbook Title: Any recent edition (c.a. 2008) of an Introductory Oceanography textbook

Edition:

Author:

ISBN:

Other requirements: materials, equipment or technology skills

Catalog 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.

Course Student Learning Outcomes (from course outline of record)

- 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.

Evaluation & Grading Policy

Grading Summary: 1,000 Points Total

- > 3 Exams and 1 Final: 400 pts
- Course Notes and Illustrations 150 pts
- Research outline and report 150 pts
- Activities 150 pts
- Online Quiz 100 pts
- Participation 50 pts

Prerequisites/co-requisites/ recommended preparation

n/a

^{*}ONLINE REQUIREMENTS - The following are required online courses but are recommended for all (see * in contents).

Special accommodations statement

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 at (707) 476-4280.

Student feedback policy

[Communicate to students how you will provide timely and substantive feedback on course work.]

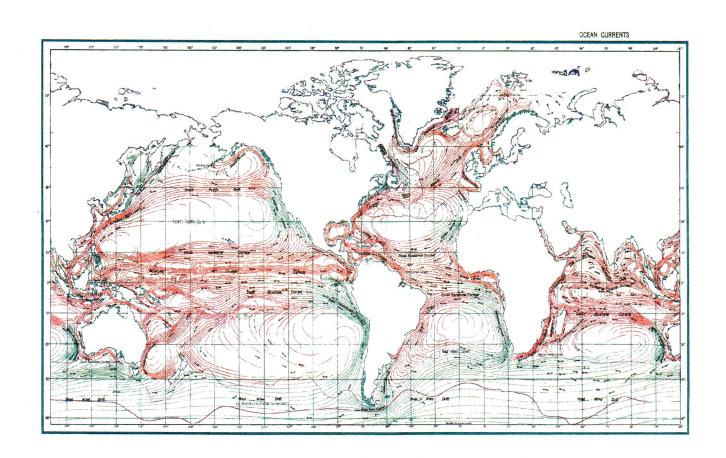
Proctored Exams

[Only include if Proctoring is required, and if so, provide Information on the available options. Online course instructors must include both on and off campus options for proctoring]

Student Accessibility Statement and Academic Support Information

[See recommended support links and accessibility statement]

Introduction to Oceanography OCEAN-10 E-8918 / E-8919 College of the Redwoods Fall 2019



<u>Syllabus</u> <u>Instructor Danny O'Shea</u>

OCEAN-10 E-8918 / E-8919 Introduction to Oceanography Office HU 125A

Fall 2019 Danny O'Shea

TTh 8:30AM-9:55AM

Danny O'Shea Room HU 125 e-mail: danny-oshea@redwoods.edu

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 08:30 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

Week	Day-Month	Topic	Chapter*	In-Class Activities	Online Quiz
1	27 - Aug 29 - Aug	Introduction	1	1) Charts, Latitude Longitude & Time	
2	3 - Sep 5 - Sep	Exploration Ocean Basins	2	2) Plate Boundaries & Marine Geology	1
3	10 - Sep 12 - Sep	Plate Tectonics	3	3) Hawai'ian Hot Spot <u>Research</u> <u>Outline Due</u>	2
4	17 - Sep 19 - Sep	Seafloor Sediments 1st Exam	4 1 - 4	Exam Review	
5	24 - Sep 26 - Sep	Water & Salinity Seawater Chemistry	5	4) Seawater Chemistry 5) Pressure, pH & CO ₂	3
6	1 - Oct 3 - Oct	Physical Oceanography	6	6) Coriolis Effect	
7	8 - Oct 10 - Oct	Atmospheric Circulation	7	7) Ocean Circulation	4
8	15 - Oct 17 - Oct	Ocean Circulation 2 nd Exam	5 - 7	Exam Review	
9	22 - Oct 24 - Oct	Ocean Waves	8	8) Ocean Wave Prediction	5
10	29 - Oct 31 - Oct	Tides			6
11	5 - Nov 7 - Nov	Coastlines Deltas	9	9) Ocean Tides Research Paper Due	7
12	12 - Nov 14 - Nov	3 rd Exam	10	Exam Review	
13	19 - Nov 21 - Nov	Life in the Ocean Plankton	6 -10		8
14	16 - Apr 18 - Apr	Marine Animals	11 12	10) Life in the Ocean	9
15	26 - Nov 28 - Nov	Thanksgiving Recess	13	No Classes	
16	3 - Dec 5 - Dec	Biological Oceanography	14 15		10
17	10 - Dec 12 - Dec	Ocean Resources Marine Pollution	16	Notebooks Due	
	15 - Dec	Final Exam	1 - 16	Final Exam	

Office Hours: Tuesday 11:30 AM – 12:30 PM, or by appointment. Room 125A. The best way to contact me is via e-mail at: danny-oshea@redwoods.edu

Reading

You will need an Introductory Oceanography textbook to successful 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. 2005) 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). Read each chapter 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.

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 4 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
Grading Summary:	Points	
3 Exams and 1 Final:	400	
Course Notes and Illustrations	150	
Research outline and report	150	
Activities	150	
Online Quiz	100	
Participation	50	
Total Points:	1,000	

Exams

There are 3 exams the semester, and a cumulative final exam, each that is 100 points. 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

Most classes will include notes and illustrations that are drawn on the board to explain the specific topics being covered for that day. Students are required to keep a notebook as a record the date, all illustrations, notes, graphs, plots and lecture material presented. Credit is given for careful reproduction of the notes and illustrations including any labels and graphs, questions as well as your personal notes. A complete notebook is worth **150 points.** Your notebook is collected the last Tuesday of class, and returned the following Thursday. If you are not present that week, you are responsible to turn it in the previous week.

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 of your original (not copied and pasted) text (about 5-7 pages).
- 2) **<u>DO NOT</u>** use direct quotes.
- 3) 2 images: at least one map with a figure number (e.g. Figure 1) and a brief description of the location of interest; <u>AND</u> 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 <u>General outline</u> with specific research topics for your project is due <u>September 12</u> (20 pts)

The <u>Final draft</u> is due by <u>November 7</u>, early submissions are encouraged. Projects are to be turned in online as a ".doc" document. I will post your research project on the <u>Canvas</u> website so other in the class students will have the chance to learn from your research. I will enable the Turniitin 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. If you miss more than 3 class periods you will be dropped from this class. Showing up late is 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 to miss a class, please let me know a day before 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 at (707) 476-4280.

Academic Support

Academic support is available at <u>Counseling and Advising</u> and includes academic advising and educational planning, <u>Academic Support Center</u> for tutoring and proctored tests, and <u>Extended Opportunity Programs & Services</u>, for eligible students, with advising, assistance, tutoring, and more.

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/AP5500StudentConductCodeandDisciplinary Proceduresrev1.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:

 $\underline{www.redwoods.edu/district/board/new/chapter5/documents/AP5500StudentConductCodeandDisciplinary}\\ \underline{Procedures rev1.pdf}$

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). 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.)

<u>RAVE</u> – 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 if you have any questions.