

# OCEANOGRAPHY 10

Introduction to Oceanography

**Mission Statement:** *El Camino College offers quality, comprehensive educational programs and services to ensure the educational success of students from our diverse community.*

**Lynn Fielding**  
**Fall 2009**  
**Section 1330**

El Camino College  
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**Text:** Trujillo, Alan P. and Harold Thurman. *Essentials of Oceanography, Custom Edition for El Camino College, 2<sup>nd</sup> Edition*. Upper Saddle River, NJ: Pearson Prentice Hall, 2008.

ISBN 0131447734      Price new \$107.95      Price used \$87.35



Noyes, T., J. Holliday, C. Herzig, and L. Fielding. *Oceanography in California, 12<sup>th</sup> Edition*. Torrance, CA: El Camino College, 2007.

ISBN 2-10-551369-7      Price new \$11.25

**Course Objectives:** At the completion of the course, students should be able to describe plate tectonics, seafloor spreading, the origin of ocean sediments, the near shore and deep ocean environments, the dynamics of waves, tides, and ocean currents, and general ocean processes.

**Recommended preparation:** eligibility for English 84.

Transfer credit – California State University and University of California

<b>Class Meetings:</b>	Lecture	H	2:00 – 5:10 PM	Room: NATS 218
	Lab	T	2:00 – 5:10 PM	Room: NATS 218

## Student Learning Objectives:

Students will be able to recognize and articulate how the ocean affects human life and how humans affect the ocean and explain the basic concepts of oceanography. Oceanography students will use the scientific method in their laboratory and field exercises. Assessment assignments will be administered during the semester.

**Attendance:** Roll will be taken at each class meeting. Students are expected to attend every lecture. Excessive absences may impact the student's grade. Students are responsible for all of the attendance guidelines published in the current El Camino College Catalog. Maps to alternative site meetings will be provided at least a week in advance.

**Lecture Notes:** The best way to learn what will be covered on the exams is to attend class. Text book web site is : <http://www.prenhall.com>.

*Bring the text book and lab manual to class!*

<b>Grading:</b>	4 Lecture Exams	400 Points (100 points each)	A =	900 - 1,000 Points
	Lab Assignments	300 Points	B =	800 - 899 Points
	4 Assignments	100 Points ( 25 points each)	C =	700 - 799 Points
	Group Presentation	50 Points		
	Attendance\Participation	50 Points	D =	600 - 699 Points

Final Exam

100 Points  
1,000 Points Total

F = > 599 Points

No make up exams or laboratories without **prior** consent of instructor or for medical reasons.

**International students may use a paper dictionary during exams.**

Laboratory assignments are to be done during class time and not as a homework assignment. Students are to work with partners (up to four students per group) during the laboratory exercises.

**Student Conduct:** Anyone caught cheating or found to be plagiarizing material will receive the grade of **F**. Conduct at El Camino College must conform to the laws of the State of California, District policies, and campus rules and regulations. The El Camino College faculty, staff and administration are dedicated to maintaining an optimal learning environment; the standards of behavior as outlined in this policy are essential to the maintenance of a quality college environment. These standards will apply to all students on campus, other college property or while attending any college-sponsored event. Violation of such laws, policies, rules and regulations or behavior adversely affecting suitability as a student, will lead to disciplinary action. Disciplinary actions as noted in Section II may be taken against any person who engages in behavior defined as misconduct as listed. Students are responsible for all of the standards of conduct guidelines published in the current El Camino College Catalog.

**American Disability Act:** El Camino College is committed to providing educational accommodations for students with disabilities upon the timely request by students to the instructor. Students with disabilities that would like to request an academic accommodation are responsible for identifying themselves to the instructor and to the Special Resources Center.

Several alternative site meetings will be conducted off campus and students are expected to provide their own transportation. Waivers must be completed prior to the alternative site meetings. Please note that students represent El Camino College and the Earth Science Department both in the classroom and during alternative site meetings so please act accordingly. Car stereos should not be able to be heard from outside of the vehicle when arriving at alternative site locations.

**A maximum of ten extra credit points (1 point per current event)** can be earned by sharing an oceanographic current event with the class at the beginning of lecture. To receive credit, students must write their name, date, and topic on a sheet of paper and submit it by the end of the current event announcements.

Food and drink are permitted in the classroom as long as it does not cause a disruption during class time. Students are expected to clean up all materials before leaving the classroom or loss in privileges will result. No food or beverages, even water, are allowed in the computer labs. There is to be no gum in the classroom.

Smoking is **NOT** permitted during alternative site meetings.

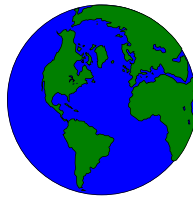
Cell phones and portable electronic devices are not to be used in the classroom at any time.

Please push in chairs before leaving the classroom. The classroom door should never slam shut. Generally, one door will be left ajar and the other closed. Use only the door that is ajar to prevent disruption of classes in session. When in the hallway, students should only speak softly so as not to disrupt other classes in session.

**Students will be notified of any changes to the course requirements or policies.**

Good luck this semester!





## Oceanography 10 Fall 2009 Semester Outline

Week 1		
09/01	T	Course Outline, Introduction, Latitude and Longitude
09/03	H	Chapter 1 (Introduction to Planet Earth), Appendix, Maps and Charts
Week 2		
09/08	T	Lab - California Tectonics/ Geography of the Oceans
09/10	H	Chapter 1, Chapter 2 (Plate Tectonics and the Ocean Floor)
Week 3		
09/15	T	Chapter 2, Chapter 3 (Marine Provinces), <b>Assignment 1 Due</b>
09/17	H	<b>Alternative Site Meeting Madrona Marsh</b>
Week 4		
09/22	T	<b>Alternative Site Meeting Torrance Beach - Geology/Ocean Environment Meet at alternative site at 2:45 PM</b>
09/24	H	Chapter 3, Chapter 4 (Marine Sediments), Lab - Marine Sediments
Week 5		
09/29	T	Lab - Plate Tectonics Computer Lab (MCS 8)
10/01	H	<b>Exam 1</b> (Chapter 1, 2, and 3), Chapter 4, Chapter 5 (Water and Seawater)
Week 6		
10/06	T	Lab – Tsunamis, Circulation
10/08	H	Chapter 5, Chapter 6 (Air - Sea Interaction), Lab - Global Warming
Week 7		
10/13	T	<b>Alternative Site Meeting Torrance Beach - Sediments Meet at alternative site at 2:45 PM</b>
10/15	H	Chapter 6, Chapter 7 (Ocean Circulation), <b>Assignment 2 Due</b>
Week 8		
10/20	T	Lab – Seawater Chemistry
10/22	H	Chapter 7, Chapter 8 (Waves and Water Dynamics), lab - Waves
Week 9		
10/27	T	Lab - Productivity, Coral Reefs
10/29	H	Chapter 8, Chapter 9 (Tides), Sieving of Sediment Samples
Week 10		
11/03	T	<b>Alternative Site Meeting Marine Mammal Care Center Meet at alternative site at 2:45 PM</b>
11/05	H	<b>Exam 2</b> (Chapters 4, 5, 6, and 7), Chapter 10 (The Coast: Beaches and Shoreline Processes)
Week 11		
11/10	T	Lab - Internet Research Project (MCS 8)
11/12	H	Chapter 11 (The Coastal Ocean), Chapter 12 (The Marine Habitat) <b>Assignment 3 Due, Sediment Analysis Due</b>
Week 12		
11/17	T	Lab - Remote Sensing, <b>Lab Manuals Due</b>
11/19	H	<b>Exam 3</b> (Chapters 8, 9, 10, and 11), Chapter 13 (Biological Productivity and Energy Transfer), <b>Assignment 4 Due</b>
Week 13		
11/24	T	<b>Alternative Site Meeting Cabrillo Marine Aquarium Meet at alternative site at 3:00 PM</b>
11/26	H	<b>No Class Meeting – Thanksgiving Day!</b>
Week 14		
12/01	T	<b>Alternative Site Meeting Torrance Beach - Marine Habitat Meet at alternative site at 2:45 PM</b>
12/03	H	Chapter 14 (Animals of the Pelagic Environment), Chapter 15 (Animals of the Benthic Environment)
Week 15		
12/08	T	Lab Presentations
12/10	H	<b>Exam 4</b> (Chapters 12, 13, 14, and 15), Current Events in Oceanography
Week 16		
12/15	T	<b>Alternative Site Meeting Torrance Beach – Pollution Meet at alternative site at 2:45 PM (Collect Beach Labs)</b>
12/17	H	Final Exam

### Final Exam

Thursday, December 17, 2009  
2:00 PM, NATS 218