

# **OCEANOGRAPHY 10 - Section 1322**

Saturday 8:00 to 11:10am and 11:30am to 2:40pm  
El Camino College Fall 2009

Instructor: Dr. Robin Bouse

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Textbook: Earth: Essentials of Oceanography  
by A. P. Trujillo and H. V. Thurman

310-660-3593 x 4832

Office: NATS 209

Lab Manual: Exploring Southern California Oceanography

Office Hours: T 12 to 1pm

## **OBJECTIVE**

The goal of this course is to expand your knowledge in all aspects of Earth's ocean, including the geology, chemistry, physics, and biology. You will learn how these components interact and how the ocean affects your life. You will become comfortable using the scientific vocabulary of oceanography to describe the natural processes you will learn about and observe in class and on alternate site activities. There will be required reading, homework, three exams and four alternate site activities. Some math will be necessary and use of the metric system is essential. At the end of the course, you will be more knowledgeable about plate tectonics, seawater chemistry, ocean circulation, marine organisms, climate change, ocean pollution and your relationship with the ocean.

## **STUDENT LEARNING OUTCOMES**

- Students can identify and use the basic concepts and vocabulary of oceanography.
- Students can recognize and articulate how the ocean affects humans' lives and how human activities affect the ocean.
- Students can identify and the key elements of the scientific method hypotheses, tests, observations, conclusions/interpretation of observations

## **AGENDA**

Week 1 8/29	Introduction, Scientific Method, Origin of Earth and Ocean, Earth's Interior T&T Chapter 1 Lab 1: Map Skills Lab 2: Contour Maps and Profiles
Week 2 9/5	Ocean Floor and Marine Provinces T&T Chapter 3 Lab 2: Contour Maps and Profiles continued Lab 3: Plate Tectonics
Week 3 9/12	Plate Tectonics T&T Chapter 2 Lab ASA – Cabrillo Aquarium
Week 4 9/19	Marine Sediments T&T Chapter 4 Lab 4: Sediments Lab 5: Sedimentary Rock

Week 5 9/26	<b>EXAM 1</b> Water and Seawater T&T Chapter 5 Lab 6: Water and Seawater Chemistry
Week 6 10/3	Air-Sea Interaction T&T Chapter 6 Lab: ASA Redondo Pier
Week 7 10/10	Ocean Circulation T&T Chapter 7 Lab 8: Ocean Currents
Week 8 10/17	Waves and Water Dynamics T&T Chapter 8 Lab 9: Waves Lab 10: Tsunamis
Week 9 10/24	Tides T&T Chapter 9 Lab 11: Tides
Week 10 10/31	<b>EXAM 2</b> The Coast: Beaches and Shoreline T&T Chapter 10 Lab ASA: Sandy Shores
Week 11 11/7	The Coastal Ocean T&T Chapter 11 Lab 12: Shorelines
Week 12 11/14	Marine Animals T&T Chapters 12-15 Lab 15: Coral Reefs
Week 13 11/21	Climate Change Lab 7: Climate Change
Week 14 12/5	Student Presentations Lab ASA: Bluff Cove
Week 15 12/12	Student Presentations <b>FINAL EXAM</b>

### **GRADING SCALE**

A = 90-100%, B = 80-90%, C = 70-80%, D = 60-70%, <60 = F

## **GRADING**

Your grade will be based on the exams, homework, and attendance as follows:

Three exams	= 60%
Laboratory	= 30%
Presentation	= 10%

## **EXAMS**

There will be three exams. Each exam will be worth 20% of your grade. Programmable language translators (electronic dictionaries) cannot be used during exams (paper dictionaries are okay). There are no make-up exams without a verifiable written excuse.

## **LABORATORY**

Lab grade is based on the weekly completion of all lab activities. You will need to **BUY THE LAB MANUAL** (Exploring Southern California Oceanography) to complete the lab activities. There are no make-up labs and late labs will start with a 15% penalty.

## **PRESENTATIONS**

Students will work in pairs on a <10 minute oral presentation. The format will be explained in class.

## **HOMEWORK AND READING**

Homework and reading will be assigned on Saturday and will be due the next Saturday. You will need to **BUY THE TEXT BOOK** (Essentials of Oceanography by A. P. Trujillo and H. V. Thurman) so that you can read the assignments and answer homework questions.

## **ALTERNATE SITE ACTIVITIES (ASA)**

ASAs will be held at nearby beaches and aquariums. You must fill out and turn in the transportation agreement in the front of your lab book. Directions to each site are in your lab book. Students will meet me at each site. The lab in your book for each ASA should be completed and checked by me before you leave the site.

## **ATTENDANCE**

Attendance is expected and will be taken.

## **LATE LABS, MISSED EXAMS, TARDINESS, and CELL PHONES**

I expect that there will be none of the above. Late labs will be penalized and missed labs or exams cannot be made up without a verifiable written excuse. Tardiness is disruptive to the whole class, be respectful and be on time. Answering cell phones and private conversations are not allowed in the classroom as they are distracting to the other students.

## **UNACCEPTABLE behaviors in the Standards of Student Conduct include:**

- 1) cheating and plagiarism
- 2) conduct that jeopardizes health and safety
- 3) tardiness
- 4) profanity
- 5) pornography
- 6) inappropriate displays of affection
- 7) children or pets in class
- 8) private conversations
- 9) uncooperativeness
- 10) continually leaving ones seat
- 11) eating and drinking
- 12) reading unrelated materials
- 13) solciting funds and/or signatures
- 14) use of unauthorized electronic devices