

**OCEANOGRAPHY 10  
EL CAMINO COLLEGE  
Fall 2009**

**INSTRUCTOR:** Dr. Chuck Herzig

**OFFICE:** NATS210

**OFFICE PHONE:** 310-660-3593 x3366

**OFFICE HOURS:** 1 – 2 M, 5:00 – 6 pm Tues, 5:10 – 6 pm Wed, 5 – 6 pm Thurs, or by appointment

**TEXTBOOK:** Essentials of Oceanography, 9th Edition, Harold Thurman & Alan Trujillo ECC Custom Ed.

Pearson - Prentice Hall, ISBN 0-13-240122-3 **Lab Manual (3<sup>rd</sup> ed) – Herzig version only**  
**Lab manual is clean and unmarked**

**COURSE CONTENT:** The purpose of this course is to familiarize you with oceans and the dynamic processes that occur within them. This course will cover the physical, chemical, geological, and biological aspects of oceans. This course will: (a) teach you the vocabulary and ideas used by scientists to describe oceans; (b) give you an understanding of the dynamics of oceans so that you may view them within their proper context of a dynamic Earth. (c) develop confidence in using the vocabulary of science.

**GRADING - Lecture:**

(a) 4 Midterm Exams (100 pts each) (SCANTRON and short answer). Midterm examinations will be given at the beginning of the designated class meeting. Time for each midterm examination is 60 minutes. If you are late to the examination, you will only have the remainder of the designated time to complete the examination. Closed notes. No make-up midterm exams. Lecture materials follow the exam. Dictionaries (electronic or paper) are not allowed on the midterm exams or the final examination.

(b) Final Exam (100 pts) The mandatory final exam consists of two parts. PART I: closed notes, covers lecture materials from Weeks 14-16. PART II: 3 essay questions - comprehensive, open notes only. You cannot use the textbook or any materials from the textbook, or any other textbook or internet on PART II. If you do so then you will receive a failing grade. No make-up final exam without a verifiable excuse. Date = **12/16/09**

(c) Research paper (100 pts) 3 to 5 pages in length on any aspect of oceanography. Topics **must be** approved ahead of time. The paper will follow a scientific format to be discussed in class. Encyclopedias & CD-ROM encyclopedias are prohibited. References from the Internet are acceptable (as discussed in class). Submission deadline = **11/30/09**. Must turn in paper/projects at the beginning of class. If turned in after lecture begins, then 10 % late fee deduction. If turned in after lecture finishes on **11/30/09**, then receive a 35 % late fee deduction.

(d) Other assignments during the semester (TBA). Consist of answering questions from the book, reaction papers, and other in-class assignments. If you are not present for the in-class assignment, then you lose the points for this assignment. All TBA assignments are due at the beginning of class. Total points = 100.

(e) Attendance is important. Arriving at class on time is important. If you miss a class, or are late to class, you are responsible for acquiring the materials that you missed. Late arrival on alternate site activities without a written valid excuse will receive a 35 % deduction. Must turn in assignments at the beginning of class. If turned in after lecture begins, then 10 % late fee deduction. If turned in after lecture finishes, then receive a 35 % late fee deduction. The final deadline for turning in all late work is Thursday, **12/3/09** in my office at 6:00 pm. Work submitted after this time will not be counted toward your final grade.

**Calculation of lecture grade based on:**

4 Midterm Exams = 57.2 % (14.3 % each)

Other TBA Assignments = 14.3%

Final Exam = 14.3 %

Paper/Project = 14.3 %

**Laboratory grade** is based on completion of all weekly lab activities, quizzes, and alternate site activities. Late laboratory activities will receive a 35% late fee deduction. There are no make-up laboratory assignments without a verifiable written excuse. Alternate site activities are possible if cannot attend a regularly scheduled activity. Laboratory Practicum Midterm Exam and Practicum Final Exam will be completed by pairs or singles only. Laboratory activities will be completed by pairs or singles only. If you are observed not contributing to completing the activity or examination materials, then you will not receive credit for the activity or examination. If you continue to not contribute to the lab activities or midterm or lab. final, then you will be required to work alone. (pairs = 2).

**Final grade:** Lecture = 650 pts (65.0 %) Laboratory = 350 pts (35.0 %). Final Grade Total = 1000 pts

**Grade Scale:** A = 90 - 100 % B = 78 - 89 % C = 65 - 77 % D = 52 – 64 % F = ≤ 51 %

All policies and procedures regarding academic integrity according to the Code of Conduct in the El Camino College Catalog will be followed in this classroom. Turn off all pagers, cell phones, and other electronic devices before entering the classroom. Do not use cell phones or pagers during class time. Leave the classroom if must use your cell phone for communications. Do not use Entertainment Listening Devices (ipods) during classtime. You are expected to conduct yourself in a mature fashion while enrolled in this class. If you cannot do so, then you will have to leave. Excessive cellphone text messaging during classtime – meaning that you were asked more than one time to stop text messaging during class time - will require you to leave the classroom. Any violation of academic standards will be reported using Academic Dishonesty Report Form C, and/or Violation of Standards of Student Conduct Form A.

<u>WEEK</u>	<u>TOPIC</u> (subject to change)	<u>READING</u>
1 (8/31)	Introduction Origin of the Earth & Moon	Ch. 1 Ch. 1
2 (9/7)	<b>Labor Day – No Class (Wed 9/9 = there will be laboratory)</b>	
3 (9/14)	Origin of Earth and Moon, continued Plate Tectonics,	Ch. 2
4 (9/21)	Marine Provinces Marine Sediments	Ch. 3 Ch. 4
5 (9/28)	Water & Seawater <b>1st MIDTERM EXAM</b>	Ch. 5
6 (10/5)	Water & Seawater, cont...	
7 (10/12)	Air-Sea Interaction,	Ch. 6
8 (10/19)	Air-Sea Interaction, cont... <b>2nd MIDTERM EXAM</b>	
9 (10/26)	Ocean Circulation	Ch. 7
10 (11/2)	Ocean Circulation, cont... <b>3rd MIDTERM EXAM</b>	
11 (11/9)	Waves & Water Dynamics	Ch. 8
12 (11/16)	Tides	Ch. 9
13 (11/23)	The Coast <b>4th MIDTERM EXAM</b>	Ch. 10-11
14 (11/30)	The Marine Habitat Primary Producers <b>PAPER/PROJECTS DUE</b>	Ch. 12 Ch. 13
15 (12/7)	Communities Plastic in the Sea	
16 (12/14)	Climate Change – Global Warming <b>Lecture FINAL EXAM (Wednesday – 12/16/09)</b>	

Student Learning Outcomes:

- Students can identify the salient features of the basic concepts of oceanography. (This includes the ability to recall the definitions of the specialized vocabulary of oceanography.)
- Students recognize and can accurately articulate how the ocean affects humans' lives and how human activities affect the ocean.
- Students can identify the key elements of the scientific method (hypotheses, tests, observations, conclusions/interpretation of observations) in popular accounts of scientific research in magazines, newspapers, journals.