

**Oceanography 10 - Introduction to Oceanography**  
**El Camino College**  
**Fall 2009**

**Course Information**

Course:	Oceanography 10	
Ticket #:	1328	
Units:	4 (3 hours of lecture and 3 hours of lab)	
Room:	NATS 219 (Lecture) and NATS 218 (Lab)	
Class Meetings:	Wednesday	1:00 - 4:10 p.m. (Lecture)
	Friday	1:00 - 4:10 p.m. (Lab)

**Instructor Information**

Name:	Dr. Douglas S. Neves, Ph.D. (i.e., Doug)	
Email:	dneves@elcamino.edu	
Phone:		
Office:	NATS 209	
Office Hours:	Wednesday	12:30 - 1:00 p.m.
	Fridays	12:30 - 1:00 p.m. and 4:00 - 5:00 pm

**Course Description**

This is a 4 unit course that meets twice a week for 3 hours of lecture and 3 hours lab. Recommended preparation is eligibility for English 84. Credit for this class is degree applicable and transferable to the CSU and UC systems. The 2009-2010 El Camino College catalog says this:

*“This introductory course in Oceanography presents the ocean in terms of its physical, chemical and biological environments. The topics include studies of: formation and modification of various wave types; tidal behavior; formation of water masses and ocean currents; beaches and the changing shoreline; coral reefs; physical and chemical properties of ocean water; marine environments; marine sediments; origin of sea floor and coastline features; the spreading sea floor and drifting continents.”*

**Textbook and Lab Manual (Required!)**

1. *Essentials of Oceanography, El Camino College Custom Edition*, by Thurman and Trujillo, or *Essentials of Oceanography, 9<sup>th</sup> Edition*, by Thurman and Trujillo [ISBN-10: 0-13-240122-3]

Textbook Companion Website: [www.prenhall.com/trujillo](http://www.prenhall.com/trujillo)

2. *Exploring Southern California Oceanography, (18<sup>th</sup> Edition)*, ECC Earth Sciences Department Faculty.

**Goals of this Course**

By the end of this course each student will be able to demonstrate his or her knowledge of the topics above by clearly and succinctly describing:

1. How the ocean and living things in the ocean affect the lives of humans.
2. How the actions of humans affect the ocean and living things in the ocean.

The goals of this course are accomplished by regular attendance and participation, reading from the textbook, taking accurate lecture notes, paying attention to all videos shown in class, completing all assigned lab activities, passing all exams and tests, presenting a student internet project, and attending three Alternate Site Activities.

### **Student Learning Outcomes**

1. 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.)

*Assessment:* A quiz at the beginning and the end of the semester.

2. Students recognize and can accurately articulate how the ocean affects humans' lives and how human activities affect the ocean.

*Assessment:* A written assignment at the end of the semester.

3. 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, etc.

*Assessment:* A written assignment at the end of the semester.

### **Course Objectives**

1. Explain the theory of plate tectonics and the formation and evolution of ocean basins through time and evaluate the data upon which the theory is based.

2. Analyze the chemical and physical principles involved in the changing characteristics of ocean water and how these properties affect the behavior and movement of seawater.

3. Explain interactions between the ocean and atmosphere, including how the ocean affects climate and the impact of global warming on the ocean.

4. Compare and contrast the formation of surface ocean currents and the circulation of deep ocean water in terms of wind forces, Coriolis Effect, and thermohaline differences.

5. Explain how various wave phenomena such as refraction, reflection, standing waves, wave dispersion, the formation of surf, and the formation of tsunamis affect the formation of waves on the ocean.

6. Evaluate the formation of tides in terms of dynamic and equilibrium theories and the daily and monthly cycles of tides and why these cycles occur.

7. Explain the origin of coastal features such as marine terraces, barrier islands, spits, and tombolos in terms of wave energy, tidal influx, and sediment dynamics.

8. Explain the origin and movement of marine sediments through the oceanic environment and explain the chemical and biological factors involved in the deposition and modification of sediments.

9. Analyze the nature and distribution of productivity within the marine environment and the movement of energy through higher trophic levels.

10. Compare and contrast the adaptations of organisms within different marine environments in terms of their response to physical and chemical factors.

11. Interpret nautical charts, bathymetric maps and profiles.

12. Perform dimensional analysis calculations and calculate percent, area, and volume.

13. Prepare and analyze graphs, including time-series graphs, histograms, multivariate graphs, scatter plots, and pie charts.

14. Utilize the scientific method to assemble a logical chain of reasoning from observation to inference.

## **Attendance and Class Participation**

This is a fast paced course. Attendance is crucial to the successful completion of this course. The 2009-2010 El Camino College catalog says this about attendance:

### ***“Attendance at First Class***

*Students who enroll in class but do not attend the first scheduled class meeting may be dropped from the roster and their places given to waiting students who were unable to enroll at the time of registration.”*

### ***“Attendance During Semester***

*Regular attendance is expected of every student. A student may be dropped from class when absences from class exceed the number of units assigned to the course. This rule also applies to excessive absences due to illness or medical treatment. The student who has been absent due to illness or medical appointment must explain the absence directly to the instructor. The student who has been absent due to a communicable disease or quarantine must report directly to the Health Center for clearance before returning to classes.”*

Attendance will be taken at the beginning and end of each lecture and lab. If you miss **3 or more lectures** or partial lectures or **3 or more labs**, for any reason, you will be dropped from this course. If the 3 missed lectures or labs occur after the final drop date you will receive a letter grade of “D” for this course. Please come to class on time. Class starts at 1:00 pm. Showing up late or leaving early on a regular basis will result in a loss of participation points for the day. However, perfect attendance can help your final letter grade. For example, if at the end of the semester your final total-point percentage is borderline (i.e., 69%=D, 79%=C, or 89%=B) and you have not missed any lectures or labs you may receive the next higher letter grade.

## **Lectures**

Lectures will generally be made up of, but not restricted to, PowerPoint presentations, note taking, videos with worksheets, animations of key concepts, visits to internet websites with current trends and news about Physical Geology, map and diagram completion in class, review quizzes, and interactive class discussions. You are responsible for and may be tested on any and all material presented and discussed in lecture. If you miss a lecture you will need to get the notes, handouts, etc., from a fellow student. Audio and videotaping of lectures is prohibited. Googling, Yahooing, Binging, E-Mailing, Blogging, Texting, Twittering, FaceBooking, MySpacing, Flickering, etc. during lectures is also prohibited. Regular and/or excessive use of any of these, as well as any other disruptive classroom behavior, will result in a loss of participation points for the day and possible expulsion from class.

## **Labs**

The purpose of our lab activities is to have a hands-on learning experience with oceanography. To that end, all lab exercises will be completed in **Pencil** (except for the ASA's) and graded at the end of each lab meeting. Any lab not completed in pencil will lose 1 point. Any lab not completed during lab time will lose one point. If you come to lab more than 15 minutes late or leave more than 30 minutes early, or leave without finishing the assigned lab you will lose one point. You will need to bring both your **Textbook and Lab Manual** to lab each week. A small, inexpensive calculator will also come in very handy. There are no make-up labs. We will be going on at least 3 *Alternate Site Activities* this semester.

## Internet Research Project and Presentation

You will be giving a three-minute oral presentation to the class about a topic in oceanography. You will need to choose a topic by the assigned deadline date and have it approved by me. If you fail to choose a topic by the deadline date you will lose 5 points for every class meeting that passes until you choose a topic. Once you have chosen your topic you will need to research that topic on the internet. You must use original sources for your research. You are not allowed to use Wikipedia. You will then put together either a Poster Board or a PowerPoint presentation for your oral presentation. You will then have three minutes to tell the class everything you learned about your topic. You will also need to turn in a three-page write-up of your project topic. The write-up needs to be typed, double-spaced, with one inch margins. The third page needs to be a list of your internet references and sources for all text, diagrams, maps, photos, etc. that you used in your presentation.

## Lecture Exams and Lab Tests

There will be four (4) non-comprehensive one-hour lecture exams in this course and two (2) non-comprehensive lab tests. Lecture exams and lab tests will consist of multiple choice, true/false, matching, diagram recognition, fill in the blank, and short answer questions. Lab tests will be “open lab manual.” There are **no make-up exams** in this course and the **Final Exam (i.e., Exam 4) and Final Lab Test (i.e., Lab Test 2) are required**. If you think you are going to miss an exam or test, for any reason, you will need to make prior arrangements with me, the instructor, to take the exam or test at another time. For each exam and test, you will need to supply your own scantron answer sheet (882-E) and #2 pencil. All exams and tests will be given in class. Please be on time to all exams and tests. One point will be deducted for every minute that you are late to an exam or test, and no exam/test will be given out after the first person finishes his or her exam and turns it in. Texting and/or cell phone use during any exam or test is prohibited. Cell phones cannot be used as calculators on any exam or test. Please take care of all biological needs before any exam or test. If you need to leave an exam or test you must get permission from the instructor.

## Grades

Letter grades in this course are performance based. In other words, earning as many points as possible throughout the semester. Letter grades are determined by reaching a predetermined percentage of the total points possible for the course (see below).

Activity	Points	Grade Breakdown by Percent	
Exams (4)	450	A	90-100%
Internet Assignment	50	B	80-89%
Lab Exercises	200	C	70-79%
<u>Lab Tests</u>	<u>200</u>	D	60-69%
<b>Total</b>	<b>900</b>		

There is no “curve” for letter grades in this class. All points are important. To get an “A” in this course you need to do well from beginning to end.

### **Dropping/Withdrawing from a Class**

Regular attendance is expected of every student. While an instructor may drop a student who has poor attendance, or when the number of hours absent exceeds the number of units assigned to the course, it is ultimately the responsibility of the student to officially drop/withdraw when unable to continue the class. This rule also applies to excessive absences due to illness or medical treatment. The student who has been absent due to illness or medical appointment must explain the absence directly to the instructor and provide a doctor's note. The student who has been absent due to a communicable disease or quarantine must report directly to the Health Center for clearance before returning to classes. **Again, it is the responsibility of the student to officially drop/withdraw from a class by the deadline date.** The neglect of any course in which you are enrolled may result in no credit earned for the course and/or a substandard grade posted on your permanent student record.

### **MyECC Portal Course Page and E-Mail**

As a registered student in this course you have access at home or on campus to the MyECC Portal "Course Page" for this course, as well as your ECC e-mail account. This will be the primary means by which I communicate with you as a class during the semester. Our "Course Page" will contain class announcements, assignments, handouts, quiz and exam study guides, a class discussion area, links to important websites, and photos. If you do not have access to the internet at home you can always use the free student computer labs (with your student ID) that are scattered across the campus. Hours of operation vary with each lab so check before going. You can also access the El Camino College "Mobile" website via your cell phone, iPhone, Blackberry, etc.

### **Emergency Procedures and Safety Issues**

If required to evacuate the lab room, we will proceed to a clear and safe area away from the building. For general safety purposes, food and beverages are not allowed in the classroom and all electronic devices (i.e., cell phones, ipods, etc.) are to be turned off when lab begins.

### **ECC Mission Statement:**

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

### **Non-Discrimination Policy:**

The policy of the El Camino Community College District is to provide an educational and employment environment in which no person shall be unlawfully denied full and equal access to, the benefits of, or be unlawfully subjected to, discrimination on the basis of ethnic group identification, national origin, religion, age, sex, race, color, ancestry, sexual orientation, physical or mental disability, or retaliation in any program or activity that is administered by, funded directly by, or that receives any financial assistance from, the State Chancellor or Board of Governors of the California Community Colleges.

### **Disclaimer Statement:**

Students will be notified ahead of time when and if any changes are made to course requirements or policies.

## **Finally**

If you have any questions concerning any aspect of this course please talk to me. I will make time or schedule an appointment to talk with you and discuss any issue you may have. My purpose as the instructor is to help you learn the material and make this course an interesting and enjoyable learning experience.

## **Important Dates**

Weekday Classes and Add Period Begin	Monday, August 31, 2009
Labor Day Holiday – Campus Closed	Monday, September 7, 2009
First Day to Apply for Fall Graduation and Certificates	Tuesday, September 8, 2009
Last Day to Drop for an Enrollment Fee Refund (Full Semester Classes)	Friday, September 11, 2009
Last Day to Drop Without Notation on Permanent Record	Friday, September 25, 2009
Veterans Day Holiday – Campus Closed	Friday, November 13, 2009
Last Day to Drop with a “W”	Friday, November 20, 2009
Thanksgiving Break - Campus Closed	Thursday-Sunday, Nov. 26-29
Fall Semester Ends	Friday, December 18, 2009
Winter Holiday Break Begins - Campus Closed	Thursday, December 24 - Sunday, January 3, 2010

## **Cheating or Plagiarism**

Cheating violates Section I.B.1 of El Camino College’s Board Policy 5138, Standards of Student Conduct.

The El Camino College faculty, staff and administrators are dedicated to maintaining an optimal learning environment and will not tolerate academic dishonesty. To uphold the academic integrity of the institution, all members of the academic community, faculty and students alike, must assume responsibility for providing an educational environment of the highest standards characterized by a spirit of academic honesty. The following statement is part of Board Policy 5138, Standards of Conduct: “Dishonesty, including but not limited to cheating, plagiarism or knowingly furnishing false information to the college.” When there is evidence of cheating or plagiarism in classroom work, students may receive an F for that piece of work or may be suspended from all classes for that term and the following term if deemed appropriate. Examples of Cheating or Plagiarism are: Representing the words, ideas or work of another as one’s own in any academic exercise (plagiarism), including the use of commercial term paper companies; Copying or allowing another student to copy from one’s paper or answer sheet during an examination; Allowing another individual to assume one’s identity for the purpose of enhancing one’s grade in any of the following: testing, field trips or attendance; Falsifying or attempting to falsify attendance records and/or grade rosters; Changing answers on a previously scored test, assignment or experiment with the intent to defraud; Inventing data for the purpose of completing a laboratory experiment or case study analysis with the intent to defraud; Giving and/or taking information during an examination by any means such as sign language, hand signals or secret codes; Obtaining copies of notes, exams or exam questions by any means other than distribution from the instructor. (This includes copying and removing exam questions from the classroom for any purpose.); Using study aids such as calculators, tape recorders or notes that have been specifically prohibited by the instructor.

## **Responsibility of El Camino College Students**

It is the responsibility of each student to conduct him/herself in a manner which encourages learning and promotes honesty; and to act with fairness toward other students in the classroom. This incorporates the notion that students should not seek an unfair advantage over other students when completing an assignment, taking an examination or engaging in any other kind of academic activity.

### **Consequences for Cheating or Plagiarism**

Given alleged violation of the Standards of Conduct, any or all of the following actions may be imposed:

1. The instructor may assign a failing grade to the examination or assignment in which the alleged cheating or plagiarism occurred. This action is based on information that the instructor had.
2. The instructor may dismiss the student from the class or activity for the present and/or following class session(s) as stipulated in BP5138, section IIB5: Removal by Instructor.
3. The instructor may recommend suspension or expulsion of the student from the college as stipulated in BP5138, Section IIB6 and 8. This recommendation must be in accordance with El Camino College's Due Process and Disciplinary Procedures.
4. Complete the Academic Dishonesty Report Form and submit it to your Division Office for distribution.

### **Standards of Student Conduct (Board Policy 5138)**

#### **A. General Policy**

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 in Section B.

#### **B. Misconduct**

1. Dishonesty, including but not limited to cheating, plagiarism or knowingly furnishing false information to the College.
2. Forgery, alteration, or misuse of college documents, records, or identification.
3. Violation of college policies or off-campus regulations, including but not limited to campus regulations concerning student organizations, the use of college facilities, or time, place, and manner of public expression.
4. Possession or use of alcoholic beverages on college property or at any college-sponsored event except where allowed as noted in Section 25608 of the Health and Safety Code.
5. Possession or use of any weapon, firearm or explosives.

6. The use, sale, or possession on campus, or presence on campus under the influence of any controlled substance or any poison classified as such by Schedule D in Sections 11053-11058 of the Health and Safety Code.
7. Continued disruptive behavior, continued willful disobedience, profanity or vulgarity, or continued defiance of the authority of, or abuse of, college personnel or to anyone on campus.
8. Willful misconduct which results in injury or death to a student or college personnel.
9. Assault, battery, sex crimes including sexual assault or rape, or any threat of force or violence upon a student or college personnel.
10. Sexual harassment which includes unwelcome sexual advances, requests for sexual favors, and other verbal or physical conduct of a sexual nature.
11. Participation in hazing or commitment of any act that tends to injure, degrade or disgrace a student or college personnel.
12. Obstruction or disruption of teaching, research, administration, disciplinary proceedings, or other authorized college activities including but not limited to its community service functions or to authorized activities held off campus. Obstruction or disruption includes but is not limited to the use of skateboards, bicycles, radios, and roller skates.
13. Unauthorized entry to or use of college facilities, equipment or supplies.
14. Theft or deliberate damage to property of a college staff member, a student, or a visitor to the college including but not limited to the Library, Bookstore, and Food Service areas.
15. Defacing or damaging any college real or personal property.
16. Failure to comply with the directions of a member of the college certificated personnel, college management or supervisor personnel, or campus police acting within the scope of his or her duties.
17. Smoking in any area where prohibited by law or by regulation of the Governing Board.
18. The commission of any act constituting a crime under California law, on the campus or at a college-sponsored event.
19. Persistent, serious misconduct not listed in Items 1-18 above.



## 30 College Study Tricks

By Gordon W. Green, Jr., *Getting Straight A's*, 1985

### Organization

1. Never miss a class
2. Come to class five minutes before the class meeting begins: This provides a chance to talk to the instructor.
3. Do not leave the class early
4. Plan to spend approximately 2 hours outside of class in study time for each one hour in class.
5. Organize your time, and schedule your study time.
6. Plan doctor's appointments and other obligations around class meetings, not during class meetings.
7. Read the textbook material before the class meeting for which it is assigned.
8. Come to class fully prepared to discuss the subject.

### In Class

1. Ask questions immediately if the instructor doesn't explain something: Participate!
2. Don't "leave the room" physically or mentally.
3. CONCENTRATE: Take extensive notes during lectures, and write down questions.

### Study Tricks: Reading and Studying for the next class meeting

1. After class re-write your lecture notes.
2. While reading the text, keep a dictionary nearby for reference.
3. Read the summary of the chapter first
4. Read the entire chapter through skipping diagrams and tables.
5. Put the book aside and write down the ideas you learned from reading.
6. Re-read the chapter, making notes of major points and of your opinions and impressions.
7. Question what the author is saying until you understand the concepts.
8. If any item in the reading is unclear, write down your question and bring it to class.
9. Combine these notes with notes from the lectures and discussions.

### Studying for Tests and Taking Tests

1. Start reviewing your lecture and reading notes a week before the test.
2. For short-form vocabulary tests study the major terms of the reading so that you can explain them clearly.
3. For longer answers and essay tests know the information well enough to put it to practical use.
4. When taking tests, follow all directions and read the questions slowly for a clear understanding

### Study Tricks: Methods

1. Study in a quiet place.
2. Do not study late at night.
3. Studying in the morning tends to make it easier to retain most of the concepts.
4. Complete an assignment in a single sitting if possible.
5. Make a note of all deadlines in an assignment calendar.
6. Study with friends from the same class.

## **20 Successful College Tips (from the IVC International Student Handbook)**

1. Don't go to class late. Do go to class on time or early.
2. Don't sit in the back of the classroom. Do sit in the front and center so you can hear the instructor and avoid distractions.
3. Don't fall asleep or be reserved. Do participate in class discussions and/or activities.
4. Don't show up to class without reading the chapters. Do assigned reading before attending class.
5. Don't come to class empty-handed. Do bring paper, pens, pencils, and textbook. Be ready to take notes.
6. Don't work on homework during class time while the instructor is lecturing. Do pay attention to the instructor's lecture and take appropriate notes.
7. Don't constantly leave the class. Do wait until the class is over, then leave. If you have personal concerns, tell the instructor and sit by the door so you won't disrupt the class.
8. Don't miss class. Do attend all class meetings and if you have to miss a class due to an emergency, notify your instructor via email or voicemail.
9. Don't disrupt the class by talking to other students, surfing the Internet, text-messaging, listening to your iPhone, or eating and drinking in class. Do be courteous. If you anger instructors by being discourteous, they will be much less likely to go out of their way to help you.
10. Don't ask questions that show you haven't done the assignment reading or that you haven't been listening to the lecture. Do write down questions you want to ask the instructor after the readings and the lectures before asking.
11. Don't expect the instructor to repeat a lecture for you privately if you were absent. Do get another student's notes and have that student explain them to you. Ask the instructor questions about the lecture only when you can't get the answer from your classmates.
12. Don't ask general questions like "Could you explain Chapter 3?" Do take the trouble to read the chapter and ask specific questions about those concepts that are giving you trouble.
13. Don't ask personal questions during class, such as, "When can I take my makeup exam?" Do ask the instructor this type of question during office hours or after class has ended.
14. Don't rush up to the instructor before, during or after class to ask questions about assignments or parts of the lecture you didn't understand. Do ask the instructor specific questions during office hours. If the question is relevant to the whole class, raise your hand and ask it in class.
15. Don't ask for any handouts that you missed because you were absent and don't know the title. Do find out the title of the handout you need from your classmates, then ask the instructor for it by title during office hours or xerox a classmate's copy.
16. Don't expect the instructor to sympathize with your excuses for turning in late assignments. Do turn in assignments on time. Instructors are not likely to sympathize with your excuses more than once or twice. They have heard them all before.
17. Don't expect the instructor to struggle with reading messy assignments or unclear handwriting. Do type, print, or word process neatly. Copy over anything that is too messy. If you cause an instructor to take twice as long to read your assignments because of sloppiness, he or she is likely to resent it.
18. Don't expect your instructor to drop you from the class if you stop attending. Do drop the class if you stop attending. It is always better to drop the class with a "W" (Withdrawal) on your transcripts than getting a grade of "D" or "F."
19. Don't ignore your ESL or Writing Placement. Do follow your ESL or Writing Placement and take the appropriate course in your first semester.
20. Don't interact just with people who are from your own country. Do make an effort to get to know other students from diverse backgrounds.

**Student Syllabus Course Agreement**  
**Oceanography 10 (#1328) El Camino College**  
**Fall 2009**

I (Print Your Name) \_\_\_\_\_  
have received, read, understand, and agree to abide by all of the policies, procedures, and requirements,  
as contained and outlined in the 2009-2010 El Camino College catalog and the course syllabus provided  
to me by the instructor, for “Oceanography 10 (#1328)” at El Camino College for Fall Semester 2009.

Date: \_\_\_\_\_

Student Signature: \_\_\_\_\_

Instructor: Douglas S. Neves