

**Introduction to Oceanography ES 331**  
**POLICIES AND PROCEDURES**  
Fall Term 2005 - Western Oregon University  
3 CR MWF 2:00-3:00 PM Room 101 Natural Sciences Bldg.

INSTRUCTOR: Dr. S. Taylor

OFFICE: RM 210 Natural Sciences Bldg

OFFICE HOURS: MW 3-4 PM  
R 11-12, 4-5 PM

PHONE: (w) 838-8398 (cell) 541-760-9216  
E-MAIL: [taylor@s.wou.edu](mailto:taylor@s.wou.edu)  
WEB SITE: [www.wou.edu/taylor](http://www.wou.edu/taylor)

**COURSE DESCRIPTION:**

This course is an introduction to physical oceanography, which is the application of geology, chemistry, and physics to ocean systems. The course emphasizes ocean processes and related phenomena with topics including seafloor tectonics, ocean basin physiography, sediment production and transport, physical properties of sea water, chemistry of sea water, air-sea interaction, ocean circulation, tides, waves, and coastal processes. Concepts of physics, chemistry, geology, and mathematics (through algebra) will be incorporated as needed to supplement topical discussions of ocean processes.

Students will learn observational techniques in the spirit of the "scientific method", and generally raising our awareness of the natural environment around us. The "lab" portion of the course will provide the student with an opportunity for "inquiry-based" discovery of concepts developed during the lecture period.

**PRELIMINARY COMMENTS AND COURSE PHILOSOPHY:**

This course will be qualitative (conceptual) and quantitative in nature. Basic mathematical skills will be reviewed and utilized to complete the exercises. Creative instructor-student interaction will be faithfully encouraged to provide a truly relaxed educational atmosphere. A user-friendly approach to science will be emphasized by the instructor.

**REQUIRED TEXTS:**

Thurman and Burton, Introductory Oceanography 9<sup>th</sup> Ed., Prentice Hall

Pipkin and others, Laboratory Exercises in Oceanography 3<sup>rd</sup> edition, W.H. Freeman and Co.

**CLASS NOTES:**

A comprehensive set of instructor class notes are available for download via the internet. The class web site is at **URL <http://www.wou.edu/taylor>** ... and follow the links to the "ES331" home page.

The class notes are available as Adobe Acrobat Reader files (\*.pdf file). Acrobat Reader is free and is installed on many campus PC's. For home installation, Acrobat Reader is also available for download at the class web site, but you will be responsible for properly installing the software (and will do so at your own risk!).

Based on prior student suggestions, I have assembled my class notes and made them available. These notes may be freely printed at any campus internet station (e.g. ITC Bldg - Student Lab, Library, local department computer labs). The notes are in outline form and are very comprehensive. "Exam Study Guides" will also be posted on the web site as the term progresses.

**EVALUATIONS AND EXPECTATIONS:**

Student performance will be evaluated on the basis of in-class assignments, lab exercises, quizzes, and two (2) exams. The following is a breakdown of evaluation points and letter grades:

Lab Exercises	90 pts	20%
Homework Assignments	60 pts	14%
Two Quizzes	45 pts	10%
Mid-Term Exam	100 pts	25%
Final Exam	135 pts	31%
Total		430 pts 100%

#### Final Grading Scale

Percent Range of Total Points	Letter Grade	Percent Range of Total Points	Letter Grade
94-100%	A	77-79%	C+
90-94%	A-	73-76%	C
87-89%	B+	70-72%	C-
83-86%	B	67-69%	D+
80-82%	B-	63-66%	D
		60-62%	D-
		<60%	F

**Class and Lab Assignments:** Class and lab assignments will be worked **BOTH** during class time and outside of class time each week. **You will have lab, reading, and homework assignments that may take up to 3 or 4 hours to complete, maybe more in some cases, depending on your skill levels and ability.** Please plan your schedule accordingly. Late assignments will not be accepted after the deadline prescribed by the instructor. Special arrangements for turning in late assignments with administrative excuses should be arranged in advance.

**Exams:** Mid-term quizzes and exams will generally cover only the material that was most current prior to that exam. The final exam will be comprehensive with test material drawn from throughout the term. Tests will be objective, qualitative, and quantitative in nature (multiple choice, matching, true/false, completion, short answer essay, and lab-style problems).

**Exams and Scantron Erasure Mark Policy:** Portions of the class exams may involve use of "scantron" answer sheets. Scantron erasure errors are common in instances where students do not effectively erase all unwanted pencil marks from the answer sheets. Erasure "shadow" marks can result in scantron mistakes with erroneous point subtraction and grade errors. The instructor commonly deals with erasure errors on a case by case basis. One or two erasure errors per exam are no problem and are commonly corrected on the spot. In instances where students claim greater than three scantron erasure errors, the instructor reserves the right to request that the student retake the exam in its entirety.

**Lab Assignments:** Due to the large number of students and assignments, the instructor will not grade this work in detail. The homework and assignments will be checked for completeness, with questions randomly chosen for content and accuracy. Grade points will be assigned on the basis of these two criteria. With a modicum of effort, you will do well in this portion of the class. Exercise answer keys will be posted on the class web site by the instructor. **It is your responsibility to: (1) check your work against the lab key, (2) make sure you understand how to complete the exercises, (3) find help if you have trouble with lab exercises, and (4) study / learn the exercise skills and material for the quizzes and exams. If I do not hear from you, I assume all is well. If you do not understand a particular concept or technique, you are expected to ask questions in class or visit my office.**

## **Make-up Exams and Incompletes**

Under NO circumstances will make-up exams be administered without prior arrangement (at least five days) and good reason, with a signed administrative excuse. Please show up on exam day! Under NO circumstances will a grade of "incomplete" be issued in the last week of class. If you find yourself in a situation where you can't complete the required course work, please make arrangements with the instructor prior to the last week of class. Contact the Office of Student Affairs (838-8365) for assistance in arranging incompletes.

## **ATTENDANCE AND ASSIGNMENT POLICY:**

There is a direct correlation between attendance and student performance. Attendance is necessary for students to properly digest intellectual concepts presented in a college classroom format. The class assignments are designed to reward students who attend class on a regular basis. Absences with written excuses for medical reasons or university-related functions may be used to arrange make-up work with the instructor. As with incompletes, contact the Office of Student Affairs to arrange for written excuses (838-8365).

## **STUDENT HONOR POLICY:**

Plagiarism and cheating will not be tolerated. Cheating includes copying others work and using cheat sheets on exams. However, students are encouraged to interact in small groups during class assignments, i.e. you can freely discuss concepts in all portions of the class, except quizzes and exams.

## **OTHER REQUIRED MATERIALS:**

Students will also need a scientific calculator, colored pencils, ruler, and protractor. You will be required to use these materials during lecture, lab, and exams. Please plan accordingly, or you will have trouble successfully completing the class.

## **STUDENTS WITH DISABILITIES**

Any student who has a disability that requires accommodation, please make an appointment to see me.

## **A NOTE ABOUT THE LAST WEEK OF CLASS:**

Given that the Oregon University System employs the "quarter-method" of academic scheduling, upper division courses are by nature "compressed" with much detailed content to cover in a relatively short period of time. As such, the 10th week of class is as critical to content coverage as the 1st week. Students should anticipate a full slate of "normal" activities during the last week of class, including lectures, lab exercises, written reports, etc. The class is not over until after the final exam! **Plan your schedule accordingly.**

## **A NOTE ABOUT LOST OR MISSING WORK**

The instructor will only grade work that is received and physically visible. Any missing work (lab assignments, homework, quiz/test answer sheets) will receive a "0" on the grade sheet. This policy applies to work lost by the student or instructor. If the student demonstrates that the work was turned in, but is missing due to the instructor's incompetence, then the student will be afforded an opportunity to make up the work and resubmit it for graded credit. Otherwise, the student will not receive credit for lost or missing work.

## **CHANGE OF SYLLABUS - POP QUIZZES - UNANNOUNCED HOMEWORK ASSIGNMENTS**

The instructor reserves the right to modify the syllabus and class schedule at any time during the term. Students will be notified of such changes in a timely manner. The instructor also reserves the right to administer pop-quizzes and assign unscheduled homework / class assignments at any time. All students will be responsible for completing this work and it will comprise part of the final class grade.

**TENTATIVE COURSE OUTLINE:** This outline should be considered tentative at best. The following schedule may be modified as class ideas evolve throughout the semester.

<u>Week</u>	<u>Dates</u>	<u>Class Content</u>	<u>Thurman Reading Assignment</u> (author / page)	<u>Pipkin Lab Exercise</u>
1	9/26-9/30	Introduction, overview, intro to physical geology, basic math/science review	Ch 1, 2	1,2 Bathymetry, Maps/Charts
2	10/3-10/7	Plate tectonics, marine geology	Ch 3	3,4 Tectonics, Ocean Geography
3	10/10-10/14	Marine provinces, environments,Ch 4, 5 sediments		4, 5 Ocean Geography, Sea floor materials
<b>Quiz 1 - Monday Oct 10</b>				
<b>Dr. Taylor at GSA National Meeting 10/14 and 10/17 – Guest Lecturer or Make-up Assignment</b>				
4	10/17-10/21	Physics and chemistry of seawater	Ch 6,7	6, 7 Seawater Temperature, Salinity
5	10/24-10/28	Physics and chemistry of seawater	Ch 6,7	6, 7 Seawater Temperature, Salinity
<b>Mid-Term Exam – Friday Oct 28</b>				
6	10/31-11/4	Open Schedule		
<b>Friday Nov 4 – Last Day to Drop w/o Grade Penalty: Take Home Midterm Project Due Friday Nov. 5</b>				
7	11/7-11/11	Air-sea interaction	Ch 8	8, 13 Water Masses, Hurricanes
<b>No Class Friday 11/11/05 – Veterans Day</b>				
8	11/14-11/18	Ocean circulation	Ch 9	9 Surface Currents
9	11/21-11/23	Waves, Tides	Ch 10, 11	10 Tides
<b>Quiz 2 – Wed. Nov 23; No Class Friday Nov. 25 – Thanksgiving Break</b>				
10	11/28-12/2	Coastal Processes / Landforms	Ch 12, 13	12 Waves, Beach Erosion
11	12/5-12/9	<b>Finals Exam (check schedule)</b>		

## Homework Assignments

The homework assignments are designed as online exercises using your textbook, the internet, and campus software called "WebCT". I have prepared a set of online, fill-in-the-blank homework exercises that are keyed to chapter readings in your textbook. By using the WebCT software, your homework exercises are administered and graded online. This eliminates much paperwork on my end, and makes your homework seem more like a video game (which makes it slightly more enjoyable for both of us). Individual weekly homeworks will be available for one week at a time throughout the term. **You will only be able to complete and submit the assigned online homework during the availability time. If you miss the deadlines you will receive a "zero" for the homework. Pay attention to the dates listed below!**

**The following are procedures for accessing the online homework assignments:**

- (1) You will have an individual student account set up on WebCT with a username and password.
- (2) The WebCT website may be accessed in the following ways:
  - (a) from the class homepage (www.wou.taylor ... follow the links to GS331 ... then follow the links to "WebCT" in the Homework Assignments section), or
  - (b) by surfing to **http://www.wou.edu/webct**
- (3) Once at the site, choose the "Log On to My WebCT" option. **DO NOT CHOOSE "Create myWebCT", this has already been done for you.**
- (4) Enter your WebCT student username- **This will be the same as your student server username** (the first letter of your first name + the first 6 letters of your last name, for e.g. *jsmith* or *jwoodwa*)  
**Use all lower case letters only!!!**
- (5) Enter your username again for the password. **Use all lower case letters only!!! Your password will be the last 4 digits of your V#, just like your student server account.**
- (6) Once you are logged in, look for the "Change Password" icon... you can change your password at any time!
- (7) Click on the "Homework Assignment" icon.
- (8) Click on the homework assignment you wish to complete, and begin the online assignment.
- (9) **For each question, type in an answer in the blank box provided and click on the "save answer" radio button. When finished with all questions in the homework, click on "Finish". IF YOU DON'T SEE YOUR "HOMEWORK GRADE" AFTER YOU SUBMIT, THEN YOU DID NOT FOLLOW THE ABOVE INSTRUCTIONS. REMEMBER TO "SAVE ANSWER" FOR EACH QUESTION AND "FINISH" WHEN YOU HAVE COMPLETED THE HOMEWORK.**
- (10) You may stop and begin the assignment as many times as you wish, but only until you click "submit for grading".
- (11) **Make sure you print a hard copy of your homework answers and/or save them as a file on your local drive! The print out will be your hard-copy record that you completed the work. IF YOU DO NOT SAVE A HARD COPY OF YOUR WORK, AND THE COMPUTER RECORDS IT AS "0" THEN YOU WILL RECEIVE A "0"... SAVE A HARD COPY OF ALL YOUR WORK AS A BACK-UP RECORD.**

**Note:** Pay attention to the availability dates, once the deadline has passed you are out of luck! You have unlimited time and an unlimited number of tries to correctly answer and submit the questions. Your highest score will be recorded as the grade.

**Note:** Print your questions and answers from the browser icon... this will be your written record of completing the assignment!!

### Tips and Tricks for Completing the Online Homework:

- (1) Read the text chapter in question before you start. The text readings are listed on the schedule above.
- (2) Log-on to WebCT and print out a copy of the homework questions.
- (3) Answer the questions on paper with your textbook, prior to working and submitting them online.
- (4) Log-on to WebCT and finish the online assignment.
- (5) Print a copy of your completed online homework, this is your hard-copy record that you completed the assignment (remember - if there is a way for a computer to make a mistake, it will happen to you!).

### Homework Assignment Schedule

*Note: All online homework assignments are due on Mondays by 10 PM*

No.	Topic	Week	Online Availability Dates
1	Intro	1-2	9/26/05 – 10/3/05
2	Plate Tectonics	2	10/3/05-10/10/05
3	Marine Provinces/ Sediments	3	10/10/05-10/17/05
4	Physical Properties of Sea Water	4	10/17/05-10/24/05
	No Homework – Midterm	5	
5	Chemistry of Sea Water	6	10/31/05-11/7/05
6	Air-Sea Interaction	7	11/7/05-11/14/05
7	Ocean Circulation	8	11/14/05-11/21/05
8	Waves/Tides	9	11/21/05-11/28/05
9	Coasts / Shorelines	10	11/28/05-12/05/05