Syllabus for: Introduction to Oceanography		
Semester & Year:	Fall 2013	
<b>Course ID and Section Number:</b>	OCEAN 10 #M3833	
Number of Credits/Units:	3	
Day/Time:	Tuesday 12:45 pm - 3:45 pm	
Location:	MM122	
Instructor's Name:	Leslie Kashiwada	
Contact Information:	Office location and hours: By appointment	
	Phone:	
	Email: leslie-kashiwada@redwoods.edu	

#### Course Description (catalog description as described in course outline):

An introduction to the Earth's ocean including marine environments, geology, plate tectonics, fundamental chemical and physical properties of seawater, atmospheric-oceanic relationships, oceanic circulation, coastal environments and biological productivity.

#### Student Learning Outcomes (as described in course outline):

- 1. Use the formal methodology of the scientific method as an inquiry-based tool to critically evaluate oceanic phenomena.
- 2.Describe how energy is transferred between different elements of the Earth's geologic, oceanic, atmospheric and biological systems.
- 3. Apply oceanographic principles to describe how coastal materials and landscapes change over time.
- 4. Apply concepts of physics and chemistry to quantitatively explain variations in the characteristics of the oceanic environment.

**Special accommodations:** College of the Redwoods complies with the Americans with Disabilities Act in making reasonable accommodations for qualified students with disabilities. Please present your written accommodations document to me as promptly as possible so that necessary arrangements can be made. If you have a disability or believe you might benefit from disability related services and may need accommodations, please see me or contact Disabled Students Programs and Services.

**Academic Misconduct:** Cheating, plagiarism, collusion, abuse of resource materials, computer misuse, fabrication or falsification, multiple submissions, complicity in academic misconduct, and/ or bearing false witness will not be tolerated. Violations will be dealt with according to the procedures and sanctions proscribed by the College of the Redwoods. Students caught plagiarizing or cheating on exams will receive an "F" in the course.

The student code of conduct is available on the College of the Redwoods website at: <a href="http://redwoods.edu/District/Board/New/Chapter5/AP%205500%20Conduct%20Code%20final">http://redwoods.edu/District/Board/New/Chapter5/AP%205500%20Conduct%20Code%20final</a> %2002-07-2012.pdf

Additional information about the rights and responsibilities of students, Board policies, and administrative procedures is located in the college catalog and on the College of the Redwoods homepage.

College of the Redwoods is committed to equal opportunity in employment, admission to the college, and in the conduct of all of its programs and activities.

# OC -10 INTRODUCTION TO OCEANOGRAPHY Tuesdays 12:45 - 3:55 p.m.

College of the Redwoods - Mendocino FALL 2013

Instructor: Dr. Leslie Kashiwada email: <a href="mailto:leslie-kashiwada@redwoods.edu">leslie-kashiwada@redwoods.edu</a>

Office Hours: By appointment

Texts: Trujillo and Thurman. 2013. Essentials of Oceanography, 11th ed.

Kashiwada, L. 2013. Oceanography Course Packet

Required materials: 3-ring binder and pencils, access to a computer with internet connection

Recommended materials: set of colored pencils

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DATE	TOPIC <u>TENTATIVE LECTURE SCHEDULE*</u>	READINGS
Aug 27	Course Introduction: Origins & Structures of the Earth	Intro & Ch. 1
Sep 3	Plate Tectonics; Marine Provinces	Ch. 2 & Ch. 3
Sep 10	Marine Sediments; Physical Properties of Water & Seawater	Ch. 4 & Ch. 5.1-5.2
Sep 17	UNIT EXAM 1**; Chemical Properties of Seawater	Ch. 5
Sep 24	Air-Sea Interaction; Research Paper outline due	Ch. 6
Oct 1	Ocean Circulation	Ch. 7
Oct 8	Waves & Tides	Ch. 8 & Ch. 9
Oct 15	UNIT EXAM 2; Coast: Beaches & Shoreline	Ch. 10
Oct 22	Coastal Ocean	Ch. 11
Oct 29	Marine Life & Environment; Research Paper 1st draft due	Ch. 12
Nov 5	Biological Productivity & Energy Transfer	Ch. 13
Nov 12	UNIT EXAM 3; Pelagic Environment	Ch 14
Nov 19	Benthic Environment - Coastal; Research Paper 2nd draft du	<u>te</u> Ch. 15.1-15.3
Nov 26	Benthic Environment - Deep Sea; Research Paper due	Ch. 15.4
Dec 3	Climate Change; Research Presentations	Ch. 16
Dec 10	UNIT EXAM 4; Continuation of Research Presentations (if ne	eded)

<sup>\*</sup> Note: The Instructor reserves the right to make changes to the course schedule as deemed necessary. All changes will be announced in class and a revised schedule issued.

# Important dates to remember:

last day to withdraw and receive a refund - 9/06 last day to petition for the pass/no pass option - 9/20 last day for student initiated drop (no refund)- 11/01

<sup>\*\*</sup> Unit exams are noncumulative. Make-ups for unit exams must be taken within one week of the regularly scheduled exam date and are only given if absence is due to exceptional circumstances.

#### **BASIS OF GRADING:**

4 Unit Exams (150 points each)	600 points
Homework (6 points each + 4 points if all completed)	100 points
Class Participation (10 points per class meeting)	150 points
Research Paper	100 points
Research Presentation	50 points

Your final course grade will be based on the total number of points that you accumulate throughout the semester (out of 1000 possible points). Letter grades will be assigned from a curve constructed from the sum of the highest scores attained on each assessment.

A = 100-90% of the highest score, but no lower than 87% of the total points possible (1000 points X 0.87 = 870 points)

B = 89-80% of the highest score, but no lower than 77% of the total points possible

C = 79-70% of the highest score, but no lower than 67% of the total points possible

D = 69-60% of the highest score, but no lower than 57% of the total points possible

F = less than 60% of the highest score, or 57% of the total points possible

The above scheme allows for grading on a modified percentage basis. After each unit exam I will post the total points to date. Keep track of your scores on the table provided below so that you will be able to track your interim grade throughout the semester.

#### **DESCRIPTION OF EACH COURSE ASSESSMENT:**

<u>Unit Exams (150 points each)</u>: Part of the goal of this college course is to foster a greater understanding of the language, content, and methodology of oceanography. As a means of assessing your understanding of oceanographic vocabulary and its context in the "bigger picture," multiple-choice questions will be presented in the unit exams. To gauge your conceptual understanding of the content and methodology while encouraging development of written communication skills, each exam will also include a significant written component in the form of essay questions. To best prepare for exams review your lecture notes and homework assignments, and re-read each chapter, especially the essential concepts review at the end. **All exams will count towards your final grade**.

# **Essay Grading Rubric**

Excellent (9-10 points)	Satisfactory completion	Unsatisfactory
	(7-8 points)	completion (0-6 points)
Thoughtful and critical answer to all portions of	Answers provided but critical analysis is	Little or no evidence of adequate reflection.
the written essay	missing or incomplete;	Response is exceedingly
question and appropriate examples to support	or examples to support argument are provided	brief or absent. Answer simply listed rather than
argument are provided.	but are either not	presented in organized
	appropriate or not explained sufficiently.	paragraph format.

Homework Assignments (6 points each): The key to comprehending the material in scientific texts is SPAR (scan, process, associate, and review). The homework assignments will mostly focus on the first of these (scan) by directing you to peruse each chapter for vocabulary and essential concepts. In order to meaningfully participate in collaborative group activities you must complete the homework assignments. You are expected to turn in your homework assignment(s) as you enter the classroom. Homework assignments must be turned in the day they are due (except under exceptional circumstances to be determined by the instructor). If all 16 homework assignments are turned in when due a bonus of 4 points will be given.

**Homework Grading Rubric** 

Excellent (6 points)	Satisfactory completion	Unsatisfactory	
	(4-5 points)	completion (0-3 points)	
Turned in at the	Turned in at the	Turned in at the	
beginning of class.	beginning of class.	beginning of class.	
Completed with	Mostly completed or	Mostly not completed or	
thoroughness and	completed with	completed with little	
attention to detail.	moderate attention to	attention to detail,	
Legible.	detail, and/or mostly	and/or not legible. Or	
	legible	completed during class.	

<u>Classroom Participation (10 points per class meeting)</u>: Classroom participation will mostly focus on the second and third elements of SPAR (process and associate) through collaborative activities. Students will be placed in small groups to answer a complex question or develop solutions to a problem using the material being covered that day (thus the need for homework assignments to be completed before the start of class; if it is not completed, then the homework assignment must be done during break or class time before the student can be allowed to join a group). These classroom activities will not be graded per se, but level of participation will be assessed.

Classroom Participation Rubric

Excellent participation	Satisfactory participation	Unsatisfactory
(9-10 points)	(6-8 points)	participation (0-5 pts)
Active participation.	Relatively active	Does not participate in
Contributes to	participation.	collaborative activity
collaborative activity	Contributes to	because completing
with information and	collaborative activity	homework assignment
insights drawn from text,	with information or	or does not actively
lecture, or personal	insights. Dominates	contribute to group.
experience. Does not	group or shies from full	
dominate group.	participation.	

Research Paper (100 points): You will complete a grant proposal that has 4 components: background information about your chosen topic based on library and/or web-based research, a discussion of issues and unanswered questions that hinder our ability to make meaningful decisions or take meaningful action about the topic, a plan to conduct either observational research or experiment research to answer one of these questions including a brief methodology, and a conclusion. More information, including a grading rubric, will be provided about the research paper in a separate document.

Research Presentation (50 points): You will give an oral presentation of your grant proposal to the class of 5-10 minutes in length. More information, including a grading rubric, will be provided about the research presentation in a separate document.

Unit Exam 1		Rese	arch Paper		(out of 100)
Unit Exam 2		Pres	entation		(out of 50)
Unit Exam 3					
Unit Exam 4					
EXAM TOTAL	(	(out of 600)			
Home Assign	ments	Clas	s Participation		
Chapter 1		8/27			
Chapter 2		9/3			
Chapter 3		9/10	)		
Chapter 4		9/17			
Chapter 5		9/24	ļ		
Chapter 6		10/1			
Chapter 7		10/8	3		
Chapter 8		10/1	15		
Chapter 9		10/2	.22		
Chapter 10		10/2	29		
Chapter 11		11/5	<u> </u>		
Chapter 12		11/1	2		
Chapter 13		11/1			
Chapter 14		11/2	26		
Chapter 15		12/3	3		
Chapter 16		PARTICIPATION TOTAL	(ou	t of 150)	
Ch TOTAL		- 11 f HOMEWORK MODAY	<i>(</i>	10)	
BONUS		add for HOMEWORK TOTAL _	(out or 10		

**POINT KEEPER:** Use the spaces below to keep track of the points you earn:

# Attendance / Make-up Policy:

Being present and on time to class will greatly enhance your ability to succeed in this course. If you are late to class, please respect the instructor and your classmates by entering quietly. If you must miss a lecture keep in mind that a portion of the material covered in this class may not be found in the textbook but will be on the exams so please make sure you obtain the notes and other material from a classmate or from me. WITHDRAWAL FROM THIS COURSE IS YOUR RESPONSIBILITY. After the census period (9/09) students who do not show up for class will <u>not</u> be automatically dropped. If you must drop or withdraw from this class, please be aware of deadlines and college policy regarding these issues (refer to important dates on the first page of this syllabus). If you are thinking of dropping the class I encourage you to make an appointment to talk with me.

# **College of the Redwoods Resources and Information**

<u>Online and Information and Databases</u>: The college website www.redwoods.edu contains a great deal of information including policies, procedures, calendars, and other online resources. The Quick Links menu is the easiest way to navigate the website. If you need help finding information or if you do not have access to a computer with an internet connection please make an appointment to see me.

<u>Disabilities</u>: College of the Redwoods is dedicated to providing access to all classes for persons with disabilities. If you have a verified disability and need accommodation, or suspect you have a disability and wish to be evaluated for eligibility, you are encouraged to speak with Carole Freeman at (707) 962-2638.

# **Academic Honesty Policy**

You are encouraged to work together to complete homework assignments, review notes from lectures, and to formulate ideas for your research paper. However, all work you turn in must be your own independent, original work. In the event that any work is copied from another student, zero credit will be given to all students involved (regardless of who copied from whom).

All students are expected to abide by the rules for academic honesty outlined by the college. Any breach of academic honesty (cheating or other dishonest practice) in this course will result in a zero on that assignment and may result in dismissal from the class. Plagiarism is using someone else's ideas or words without proper attribution. Copying of exams, homework assignments, research paper, or having another person do your work for you constitute plagiarism. Even though you will work in groups in class, each individual will be held responsible for the material covered during collaborative activities.

<u>Academic Misconduct:</u> Cheating, plagiarism, collusion, abuse of resource materials, computer misuse, fabrication or falsification, multiple submissions, complicity in academic misconduct, and/or bearing false witness will not be tolerated. Violations will be dealt with according to the procedures and sanctions proscribed by the College of the Redwoods. Students caught plagiarizing or cheating on exams will receive an "F" in the course.

Academic dishonesty in any form may be reported to the vice president of CR, as per the student code of conduct available at http://www.redwoods.edu/District/Board/New/Chapter5/Ap5500.pdf In particular, refer to page 9, Article VIII which begins "Students are expected to demonstrate qualities of morality, integrity, honesty, civility, honor, and respect."

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#### **CLARIFICATION OF PERFORMANCE EXPECTATIONS**

# What can you expect from me? Respect for students is demonstrated by...

## 1. Beginning and ending class on time.

I will start lecture promptly. The lecture period is scheduled for 3 hr and 10 minutes and I will endeavor to provide several 10-minute breaks during that time.

## 2. Being organized.

All due dates for assignments and exams are stated here in the syllabus. All course materials will be provided or be made accessible to you in a timely fashion. If you need clarification on any due dates at any time throughout the semester, feel free to ask me.

## 3. Treating all students fairly.

My policy for turning in late assignments, and the exam make-up policy are both stated above. To remain fair to all students, I adhere strictly to these policies and you can trust that I give no special treatment to any one student. I will answer anyone's questions and help facilitate everyone's learning to the best of my abilities.

## 4. Returning students' work in a timely fashion and grading equitably.

My primary concern when grading is to remain fair, equitable and consistent among all students. Homework will be quickly read, assigned points, and, in most cases will be returned the same day, so legibility is extremely important. If I can't read it, I can't grade it. Classroom assignments will also be read and returned the same day or the following class period. Because I will carefully read your answers in the unit exams and your research paper, I require some time to return them. A minimum one-week turn-around time for grading unit exams and research paper is a reasonable expectation. Exceptions to this prompt return of work may occur, as I am human and life does not always go as smoothly as one would hope.

#### 5. Making sure that the workload of the course is appropriate

As in any science course, there will be a significant amount of work involved in this class. The amount of work required by me is equivalent to (and consistent with) the same class at any other community college, liberal arts college, or four-year university. This course covers similar curriculum, including vocabulary and conceptual-based issues, to what you will find at any other academic institution. The workload of this course is reasonable; I do not assign "busy work." The homework assignments are designed to guide you through the textbook reading, prepare you for the classroom collaborative activities, and help you review before exams.

#### 6. Being responsive to your individual learning needs and communicating effectively.

I will do my best to accommodate the various learning needs of all of my students. Visuals, inclass activities and discussions, use of analogies to explain concepts, and short lecture "chalk-talks" are all provided in order to communicate effectively with the greatest diversity of students. To meet this end, I vary my teaching style throughout a lecture or from day to day.

If you require a specific accommodation, communicate this with me early in the semester so that we can make sure that you have all of the tools necessary for you to succeed.

If you would like clarification on a specific topic or term, please ask. I am always willing and ready to review material. If the amount of material that must be reviewed is too large for the allotted lecture time, a supplemental meeting time/place will be established or I will refer you to an appropriate source for further information.

I encourage your questions, comments, and discussion in class and expect that you will engage in class participation on a regular basis. I do ask that you keep your contributions relevant to our inquiry into oceanography and appropriate for the setting.

7. Being available and accessible to my students.

Because I do not have an office or regular office hours you will need to make an appointment with me to meet and discuss academic issues face-to-face. Of course my email address is another way to communicate with me. If you email me, allow 24 hours for me to return your email, 48 hours on the weekend.

## What do I expect from you? Respect for me and your classmates is demonstrated by...

1. Arriving on time to class and staying for the entire class period.

If you are late, please enter quietly. If you must leave early please do so quietly.

2. Turning your cell-phone and other electronic devices OFF.

Cell-phones, PDAs, I-Pods, etc. must be turned off and in purses and daypacks during class. Bleeps, rings, and all other noises during class are distracting to your fellow students, disrespectful, and rude, and will result in confiscation of the offending electronic device during class. Laptops or notebook computers may be used in class for taking notes, but will be confiscated if not used appropriately. Recorders are also allowed as long as you ask me first.

- 3. Coming to class prepared. This includes the following behaviors:
  - (a) Complete the homework assignment legibly and bring it to class;
  - (b) Read the assigned textbook chapter and take notes;
  - (c) Bring your textbook and questions to class.
- 4. Engaging in proper classroom etiquette as follows:
  - (a) Be courteous and respect other peoples' opinions.
  - (b) Never speak while others (including your instructor) are trying to speak.
- 5. Participating fully in all class activities.
- 6. Turning your work in on time.

Please do not ask for personal exceptions. The assignment due dates and exam dates are explicitly stated in the syllabus, along with the late assignment and make-up policy. These dates will only be adjusted (in rare circumstances) for the good of the entire class as judged by the instructor.