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INTRODUCTORY COURSE INFORMATION

INTRODUCTION:

The world's oceans are incredibly important. About 71% of earth's surface is covered by salt water. The oceans harbor the highest diversity of organisms, at higher levels of classification, on earth, and comprise the largest habitable environment on earth. Oceans interact with the atmosphere, they affect the earth's climate, they are producers of 1/2 or more of the world's oxygen and are an enormous carbon reservoir. Every citizen of earth should know about oceans. Marine Ecology is an ecology course, in which we will attempt to gain some understanding of the ecological importance of the ocean world.

MY PHILOSOPHY AND GOALS FOR THIS COURSE:

My philosophy about teaching is that I want to share as much knowledge and understanding of the subject with students as possible. I also believe it is my job as instructor to challenge people. I want you to learn course materials because I care about you. I firmly believe that the more people know, the happier they can be, and the more they can appreciate and enjoy the world around them. I want students to be thoroughly involved in my courses and in their education in general. The more people put into something the more they get out of it; therefore, I expect this class to be high on your priority list, and I expect you to put in plenty of quality time and effort on it. Likewise, I will spend much effort in trying to make the course a valuable experience for you.

My goal for this course is that all participants learn about ecological aspects of, and come to appreciate, marine environments. Baba Dioum, a Senegalese ecologist said, "In the end we will conserve only what we love. We love only what we understand. We will understand only what we are taught." I want everyone in this course to understand marine ecology enough that we come to love, and support as much as possible throughout our lives, the conservation of marine environments.

COURSE DESCRIPTION:

Marine Ecology is a senior-level ecology course. It is a 4-unit lecture and laboratory course. It satisfies the ecology requirement for the Biology major, is an elective in Biology, is required for the Marine Biology concentration, and is one of the options under part c of the Ecology and Field Biology concentration. Prerequisites are: Botany 1050 and Zoology 1050 or equivalent, and one semester of invertebrate zoology or Botany 3130, or consent of instructor. Lecture = MWF 9:05 - 10:03; Lab = Wed. 2:30-5:38.

SPECIFIC COURSE OBJECTIVES, i.e., WHAT SHOULD YOU BE LEARNING?

1. This is a content-heavy course; the primary learning objective is therefore mainly to learn course content. You need to thoroughly learn the information presented in lecture and lab. The text is primarily for background reading and pictures/diagrams, unless it is noted that you especially need to know specific pages. You need to bring your text to class every day. The Course Pack includes information for some labs and some lectures. You need to bring it to class every day.
2. A second set of learning objectives is for you to learn methods for doing ecological research, how to analyze ecological data, and how to write research reports in scientific format. These will be accomplished through laboratory and field trip activities and reports on those activities.

ASSESSMENT METHODS, GRADES and GRADING:

1. The best assessment measure for content-heavy courses is exams. Most of your grade will be based on exams. There will be three exams during the semester. The exams will cover material from lecture, labs and field trips.
2. The assessment measures for learning objective #2 are the various lab and field reports listed, with their due dates, on the course schedule.

Grades: A – F; Cr/NC is not an option in this course. This course will be graded plus/minus. I do not grade on a curve.

A = 90% or higher (90-92 = A-, 93 and above = A)

B = 80 – 89% (80-82 = B-, 83-86 = B, 87-89 = B+)

C = 70 – 79% (70-72 = C-, 73-76 = C, 77-79 = C+)

D = 60 – 69% (60-62 = D-, 63-66 = D, 67-69 = D+)

F = below 60%

EXPECTATIONS OF STUDENTS

1. As a general philosophy, you should attend all class meetings. If you must miss a class meeting, it is your responsibility to make up any work missed and to obtain and learn all information you missed.
2. Be on time to lecture, lab, and field trips. Do not leave lab early. Lecture, BIOL 4630, times are MWF 9:05-10:03. Lab, BIOL 4632, times are Wed. 2:30-5:38. Field trip dates and times are listed on Lecture, Lab, Field Trip and Reading Schedules page.
3. Students are expected to take exams on days and times listed in the class schedule. If you have a legitimate excuse to miss an exam, the instructor needs to know the reason, in writing, at least a week before the exam date. Arrangements for taking the exam at another time must be made at the time of the written request. If you have an emergency

less than a week before an exam, you must let me know of the emergency prior to the exam time if possible. You must provide a valid, written excuse on or before the next class period after the exam date, in order to be able to take the exam at an alternate time. If the emergency lasts beyond the next class period after the exam, you must at least let the instructor know about the situation, and you must bring valid, written excuse as soon as you return to school. The instructor will determine the appropriateness of taking the missed exam in this case. Normally, exams cannot be taken after the instructor has returned graded exams to the rest of the class.

4. Observe lab safety and cleanliness procedures.
5. Observe all field trip precautions and all field trip regulations.
6. Participate fully and in a positive manner in all class activities.
7. Do not hesitate to raise your hand and ask questions during lecture. You will notice a higher retention rate and gain greater confidence in the material if you reread your lecture notes and the text after each class as well as making flashcards or other means of studying. You should try to learn material from class after each class period. Don't wait until just before an exam to study.
8. Cheating in any form is unacceptable in science, including in all biology classes. This includes Marine Ecology. It is the policy of the Department of Biological Sciences that anyone caught cheating will receive a grade of F for the course. The instructor reserves the right to request any student even suspected of cheating to take a second, different, exam from the rest of the class. In this course, plagiarism is considered a form of cheating.
9. Talking, whispering and giggling among students during lectures is disruptive for both classmates and the instructor. It is expected that students will refrain from these activities while anyone is lecturing at any time during lecture or lab time. If this becomes a problem, students will be asked to leave class for the duration of these activities.
10. Cell phones, pagers, Ipods, and any other item other than laptop computers, electronic or otherwise, must be turned off while anyone is lecturing at any time during lecture or lab time. Cell phones, pagers, I-pods, laptops, etc. must be turned off, and must be placed out of sight or hearing of any student in the class, during all exams. Laptops that are on during lectures may only be used to write lecture notes or otherwise legitimate activities approved by the instructor and related to the course and the topic at hand.
11. The field trip regulations (on separate pages from this introductory information) that do not specifically pertain to being in vehicles, pertain to all parts of class, i.e., lecture and lab as well as field trips. These are not limited to, but especially include numbers 4, 7, and 8 of the Department of Biological Sciences Field Trip Regulations and number 2 of the CSU Stanislaus Field Trip liability Waiver. (See Course Pack).

12. People learn best when they take responsibility for their own learning. You need to accept that responsibility.

EXPECTATIONS OF THE INSTRUCTOR

1. Numbers 1 – 12 above.
2. Be open to feedback on the course and be flexible in order to make appropriate changes to meet student needs.
3. Be fair in assessment of student learning.

It is my hope and expectation that we will all work together to make this course an outstanding experience for all involved.

LECTURE, LABORATORY, FIELD TRIP AND READING SCHEDULES

<u>Date</u>	<u>Lecture</u>	<u>Reading</u>	<u>Laboratory/Field Trips</u>
Feb. 17	Introduction	Ch 1	Salmon video and discussion; field trip & other forms
19	Introduction	Ch 1	
22	Physical Ocean Factors	Ch 1	
24	Physical Ocean Factors	Ch 1, 6-tides	Report Writing, Statistics
26	Physical Ocean Factors	Ch 1, 6-tides	
Mar. 1	POF or Food Chains	Ch 1	Physical Ocean Factors and Midway Island
3	Food Chains	Ch 1	
5	Food Chains/Productivity	Ch 1	
8	Nekton, Fisheries	Ch 3, 11	
10	Fisheries	Ch 3, 11	
12	Fisheries	Ch 3, 11	
15	Float Communities		
17	Float Communities		Finish Floats lecture; Early Succession Floats data
19	EXAM I (through fisheries)		FIELD TRIP – MBA? Floats/Succession, Plankton
20			
22	Plankton	Ch 2	Plankton
24	Plankton	Ch 2	
26	Plankton	Ch 2	
29	Plankton	Ch 2	Holiday-Cesar Chavez Day
31	Holiday		
Apr. 2	Rocky Intertidal	Ch 6	
3-11	Spring Break		Spring Break

	12	Rocky Intertidal	Ch 6	
	14	Rocky Intertidal	Ch 6	Rocky Intertidal
	16	Rocky Intertidal	Ch 6	
	17			FIELD TRIP – Rocky Intertidal, Plankton
	19	Rocky Intertidal	Ch 6	
	21	Rocky Intertidal	Ch 6	Rocky intertidal data analysis
	23	Kelp Forests	Ch 5	
	26	Kelp Forests	Ch 5	
	28	Kelp Forests	Ch 5	Kelp Forests
	30	EXAM II Plankton-Rocky Intertidal		
May	3	Wetlands	Ch 8	
	5	Wetlands	Ch 8	No Lab
	7	Wetlands	Ch 8	
	10	Coral Reefs	Ch 9, 10	
	12	Coral Reefs	Ch. 9, 10	Coral Reefs
	14	Coral Reefs	Ch 9, 10	
	15			FIELD TRIP – Plankton, (Wetlands)
	17	Coral Reefs	Ch 9,10	
	19	Deep Seas	Ch 4	Deep Sea videos, etc.
	21	Deep Seas	Ch 4	
	24	Deep Seas	Ch 4	
	26	Deep Seas		No Lab
?????	28	EXAM III 8:30-10:30 am Wetlands-Deep Sea		

Points for grades include:

3 exams – 100 points each

Reports – 10-25 points each

Class participation – 30 points

There may be additional laboratory or other exercises for variable number of points.

These may include exercises listed below. Some of the exercises listed below may be done as class discussions rather than graded individual reports. There may be additional exercises beyond those listed, and we may not do some of the ones listed.

Due dates and points for laboratory exercises/reports (subject to change):

Statistics – March – 15 points

Succession Report - April 2 –25 points

Rocky Intertidal Diversity 25 points (probably will be class exercise)

Plankton - May 21 – 15-25 points

Additional exercises - dates and points to be determined as semester progresses.

Potentials include: multiple effects of overfishing, overfishing solutions, global warming solutions, overfishing & kelp forests, coral reef problems/solutions, etc.

General policy regarding late papers: 10% off for every day assignment is late. Weekends count as 2 days (i.e., 20%). No paper/assignment will be accepted after the instructor has graded and returned said graded paper/assignment to the class. The instructor typically returns assignments before the 10-day, 100% off maximum is reached.

If you fully participate in all class activities, you will get all 30 points for class participation. However, missing a field trip (10 or more points per working day of each field trip), lack of participation in group lab exercises or field trip follow-up analyses, lack of discussion participation, etc. (5 to 10 points each), can add up to more than 30 points. Therefore, lack of participation can result in a negative sum for this part of the grade. Additionally, points may well be taken off for behaviors that negatively impact the class, including anything mentioned in Expectations of Students section as well as anything else perceived by the instructor or students in the class as having negative impacts. Points taken off for this part of the grade are up to the discretion of the instructor. If you have to miss a field trip, you need to let the instructor know why, well before the day of the trip. If you just don't show up before the class leaves campus for a field trip, missing the field trip will be 20 points. NO student can drive his/her own vehicle for field trips (don't drive your car to field trip destination just because you over slept and didn't get to school early enough, for example. Students may not bring spouses, children, pets, etc. on field trips. Any of the activities described after "If you have to miss a field trip"---can result in minus 20 or more points.

Note regarding Friday, Saturday or Sunday field trips: If you leave your car parked all day or over night, you need to park it on campus. The city of Turlock tows cars parked on Monte Vista Ave. after 6 pm on Fridays and on Saturdays and Sundays. If you don't have a campus parking permit, you will need to pay for an all-day campus permit at the machine near the entrance to each campus parking lot. This information is useful for

other courses as well as Marine Ecology.

Reading assignments are from Nybakken & Bertness, Marine Biology – An Ecological Approach, 6th edition.