GENERAL OCEANOGRAPHY
Geology 105 – Spring 2010
Sections 80, 81, and 82
San José State University
Greensheet – (Ver. 2 – 1/26/10)

Instructor:

Don Reed (yes, I am a doctor, Ph.D., and full professor, but just

call me "Don")

Office Location: 305 Duncan Hall

Telephone: (408)-924-5036 (not the best way to reach me, use Blackboard email)

Voicemail will be checked Tues., Wed. and Thurs. once a day

Video Conference Skype or Video iChat by request

Email:<u>oceansjsu@yahoo.com</u> (after February 1 use only Mail within Blackboard CE for all communication as it is the best way to reach

me). All email to the instructor in Blackboard CE will be answered within 24 hours of being received, Monday through Thursday. Email sent on Friday after 11:00 AM will not be answered until Monday afternoon between hours of 3:00 and

4:00 PM.

Office Hours at SJSU: M 11:15-12:15

Online Office Hours: T 1:00-2:00; W 11:15-12:15; R 12:00-1:00 or by appointment

Course Website: http://oceansjsu.com

Faculty Furlough Days Feb. 17, 26; Mar. 10, 19; Apr. 12, 13; and May 6, 11;

Prerequisites: Completion of all core GE courses, completion of WST test,

passing score on ELM Test and Math 7 (Intermediate Algebra)

or equivalent.

Students must have access to a computer (color graphics, CD-

ROM/DVD, sound card and speakers) with a high-speed

connection to the Internet (DSL, Cable or T1).

GE/SJSU Studies

Category:

Area R: Earth and Environment

Course Fees: If you are enrolled in class, then you automatically paid

field trip fee at time of registration at MySJSU

Course Website and Use of Blackboard CE

The course web site, http://oceansjsu.com, will serve as the forum for the class and will open on Tuesday, January 26 at 1:00 PM.

We will also use Blackboard CE through links at http://oceansjsu.com. Blackboard CE will be for electronic discussions, email, submitting graded assignments, and taking quizzes and exams. The course website at http://oceansjsu.com will provide the course content and Blackboard CE will be used for communicating with the

instructor and other students in the class. Students will learn how to access Blackboard during the first assignment in the class at http://oceansjsu.com

Course Description

This course will focus on the scientific examination of the impact of the oceans on global society, and human impacts on the oceans, through web-based exercises, bulletin board discussions, and field studies of local shoreline habitats. This course meets Area R for SJSU Studies requirements. Courses to meet Areas R, S, and V of SJSU Studies must be taken from three different departments, or distinct academic units.

Course Goals and SJSU Studies Area R Student Learning Objectives

Upon successful completion of this course, students will be able to:

- 1) appreciate the methods and limitations of scientific investigations of the global ocean; (Learning Outcome #1)
- 2) distinguish between science and pseudo-science; (Learning Outcome #2)
- 3) apply the methods of science to a problem involving the earth and environment; (Learning Outcome #3)

Students will also:

- 1) increase their knowledge of the oceans and its life forms;
- understand that oceanography is global in nature and of special interest to diverse societies of the Pacific Rim, including the multicultural population of California

Required Textbook, Course Workbook and Other Reading Assignments

The required text in the class is Mapping the Deep: The Extraordinary Story of Ocean Science by Robert Kunzig, 432 pages (October 2000), W.W. Norton & Company; ISBN: 0-393-32063-4. The book is available at Spartan Bookstore, Roberts Bookstore, and through online stores such as Amazon.com and Barnes&Noble.com for \$12.76 to \$17.95 (depending on where purchased or if new or used version) BUY IT NOW!!!!

A course workbook is to be purchased at A.S. Print Shop next to SJSU Student Union for approximately \$17.

Additional required readings are listed in Course Schedule of this greensheet.

Other equipment / material requirements

Colored Pencils (necessary for completely diagrams in expedition worksheets Calculator (necessary for online work and exams)

Nature of Weekly Work and Responsibilities of Students

Students in the class will play an active role in their learning through the timely, but self-paced, completion of online virtual expeditions in which students take on the role of a research oceanographer. Students are also required to participate in electronic

discussions, often problem-based and issue-oriented, with other students on issues based on reading assignments. Students will participate in one or two virtual expeditions each week, similar to attending two class meetings each week. The expeditions, which replace classroom lectures, are web-based exercises that come in two forms. One form is a self-paced tutorial, composed of text, graphics, animations, and short segments of newscasts in streaming audio/video. Students work their way through an expedition by viewing the pages and writing answers to questions in the course worksheet and taking notes. The answers to questions in the course workbook serve as the notes from which to study for exam. Students are strongly advised to post any questions or thoughts on a particular expedition in the associated "Any Questions" discussion on the Blackboard CE site. The weekly expeditions go online each Tuesday at 1 PM and are, with few exceptions, to be completed by the following Friday or Tuesday at 1 PM.

At the end of many expeditions, students are required to e-mail a "Bye Don" through the Blackboard CE site to confirm completion of the work. More importantly, this confirmation of the completed work provides a valuable opportunity to ask questions about the material in the expedition and for the instructor to provide information on upcoming assignments.

Students also join a field study of bay habitats and organisms of the San Francisco Bay during a four-hour Saturday voyage with the Marine Science Institute in Redwood City.

It is virtually impossible to estimate the amount of time required for individual students to complete the weekly assignments because everyone works at their own pace, which varies greatly from student to student in an online environment. Students learn at different rates and the rate of has little or no relationship to the quality of learning. Indeed "slow" learners comprehend just as much, if not more, than "fast" learners. Please consider that a three-unit course during an academic semester meets for a total 37.5 hours, plus the 2 hours and 15 minutes for the final exam or nearly 40 hours of "class time." An online course requires at least the same amount of time, if not more, since the work involves a larger amount of reading and writing than the equivalent classroom lecture format. Students can, however, complete the work at their convenience each week. Rough estimates of the minimum time required to complete weekly work are given at beginning of each expedition, but most students require more than this estimate. These estimates DO NOT include time for the assigned readings, writing assignments, including discussions, or preparing for exams. Please consider the extra time as "homework" just as you would have in classroom sections.

Dropping and Adding

Students are responsible for understanding the policies and procedures about add/drops, academic renewal, etc. <u>Information on add/drops are available at http://info.sjsu.edu/web-dbgen/narr/soc-fall/rec-324.html</u>. <u>Information about late drop is available at http://www.sjsu.edu/sac/advising/latedrops/policy/</u>. Students should be aware of the current deadlines and penalties for adding and dropping classes.

Assignments and Grading Policy

Grades in the class are based on combination of assignments, listed individually below, resulting in a total of 1000 points. No extra credit is available in the class.

Area R Writing Requirements

It is now required that <u>all SJSU Studies GE courses</u> have <u>at least 3000 words of written assignments</u>, <u>which is about 12 pages</u>. SJSU course regulations also specify that this requirement be spread across more than one assignment in order to give appropriate feedback on the quality of writing. In this class the 3000 word requirement is covered by the four Blackboard CE discussion assignments (a total of about 1050 words), an essay on the science of marine fisheries assessment and management (1150-1250 words), and the final exam (about 750 words).

Online Expeditions (0 points, however, see third paragraph in this section)

Self-paced, online tutorials, called expeditions, take the place of classroom lectures. Students take on the role of practicing oceanographers in a series of virtual oceanographic research activities. By participating and completing these expeditions, students will meet Area R GE learning outcomes 1 and 3 – see list under "Course Goals and Student Learning Objectives" in this greensheet)

New expeditions will be posted on Tuesday of each week at 1 PM and are to be completed according to the dates listed in course schedule, generally one expedition will be due by Friday morning each week by 1 PM and the second expedition will be due by the following Tuesday by 1 PM.

Students must answer <u>all of the questions</u> on each expedition worksheet (honest, but incorrect, attempts <u>are not</u> marked down). The completed worksheets are turned in all at once as part of your course workbook after the final exam — they are <u>not turned in each week</u>. The worksheets constitute an outline for taking notes on the materials and will be used to prepare for exams. A deduction of 8 points will be assessed for each expedition that was not attempted in course workbook. More than two skipped questions in an expedition will result in a penalty deduction of 4 points on course workbook and more than 5 skipped questions will receive a 5-8 point deduction.

Electronic Discussion Boards (140 points – 16% of course grade)

At the end of expeditions 9 and 17, students will participate in a required discussion at the Blackboard CE site. Students will make an initial posting, approximately 325-375 words long (about 20-25 sentences) and reply to another student with a posting of approximately 50-75 words (about 4 to 5 sentences). The original posting and subsequent reply to at least one other student must be separate postings. Personal insight and accurate knowledge, gained from the associated reading assignments, and the quality of writing for communicating this knowledge to other students in the class are the important grading criteria for the initial posting in discussion. Discussions associated with expeditions 9 and 17 are worth 50 points each (see course schedule section in this greensheet for dates of required discussions). Out of the 50 points, 30 points will be assessed for content knowledge (what you say), including accuracy, and 20 points for writing quality (how you say it). The deadline

for participating in required discussions, both the initial posting and reply to at least one other student, is same as the expedition in which it is assigned (see course schedule).

Grading criteria of the Expeditions 9 and 17 discussions will be based on the following rubric:

- 50-45 points = excellent work; well-written, insightful, and provides discussion beyond requirements of assignment
- 44-40 points = very good work; meets requirements of assignment by repeating what is provided in book; may have a few errors in understanding or writing quality, possibly a few awkward sentence constructions
- 39-35 points = Good to fair work; a number problems in writing style or comprehension of associated assigned reading, but meets criteria of assignment, may need better organization of thoughts, and overall work needs to improve
- 34-30 points = Poor Work, little or no analysis, poor quality writing; does not show insight from reading assignment; no reply,
- 30-0 points = not university-level work, does not follow requirements of assignment or use material from reading assignment as supporting evidence, poor writing quality

No reply to another student (5 point penalty)

Initial postings of less than 325 words will receive a 5 to 15 point penalty, depending brevity of posting

Exceeding 375 words in posting may result in a 5 point penalty.

The requirements for discussions under expeditions 22 and 23 are somewhat different, so students should consult the web site and appropriate section in course workbook for more details. By participating in these discussions students will meet GE Area R learning outcomes 1 and 2 – see list under "Course Goals and Student Learning Objectives" in this greensheet.

Due Dates and Late Policy on All Assignments (except quizzes, exams and final)

The due dates for each and every assignment, quiz, and exam is given in Course Schedule section of this greensheet. It is the responsibility of each student to follow the course schedule. The following deductions will be assessed for all work submitted after the due dates given in course schedule:

0-6 hours late – 5% deduction 6-24 hours after deadline – 10% deduction 25-48 hours after deadline – 20% deduction Late submissions will not accepted if more than 48 hours after deadline

Quiz and Essay on Marine Fish Stock Assessment (160 points – 16% of course grade)

This is a two-part assignment consisting first of a short quiz to identify the key topics from the reading assignments to be included in the essay, worth 60 points. Students should review the "Marine Fisheries Assessment and Management Essay

Instructions" section of course workbook for additional information and study suggestions prior to beginning quiz. After students review instructor feedback from quiz, and review the "Marine Fisheries Essay Instructions" section of course workbook for additional information, they will compose a three to four page essay (approximately 1150 to 1250 words), worth 100 points, on the methods and limits of science in assessing and managing marine fish stocks. The essay is to be **submitted in Microsoft Word format (.doc) to Marine Fish Stock Assessment Essay section** at www.turnitin.com. Students must complete this assignment on their own and shall NOT copy material from any publication, including web sites, even if enclosed in quotation marks. One objective of the assignments is to assess the quality of student writing (not the ability to use quotations). A late penalty of 10 points will be assessed for each 24-hour period after due date and time. By successfully completing this assignment, students meet GE Area R learning outcome 1 – see list under "Course Goals and Student Learning Objectives" in this greensheet.

Online Exams (240 points each - 48% of course grade)

Student will complete two "open book/open notes" online exams lasting approximately 90-100 minutes each. Students may take exam anytime within a 24-hour period, but must complete exam in one sitting (no logging out and back in). Exam #1 will cover the materials and associated reading assignments in Expeditions 5 through 13. Exam #2 will cover the material and associated reading assignments in Expeditions 14 through 21. Exam review sheets and study suggestions provided in the course workbook. All expeditions and answer keys, if provided, will be removed from the course web site at the beginning of the exam period.

Students must work alone during exam and use only their own work to answer the questions. Students may not use information from outside web sites, for example, Wikipedia, during exam or information from students in previous classes. Any violation of these instructions will result in a failing grade on exam (0 points) and considered a violation of the SJSU Policy on Academic Integrity.

Exams will consist of approximately 15-20 multiple choice questions as well as one or two essays that will examine the ability of students to integrate course work into the key learning outcomes in the Area R (Earth and Environment) Category of the SJSU Studies GE program. Since the essay questions may ask students to place the content of the course in the specific context a scientific research experience, students will meet GE Area R learning outcomes 1, 2, and 3 – see list under "Course Goals and Student Learning Objectives" in this greensheet.

Students may request a change in the date and time of exams for personal circumstances, such as other exams on same day, computer/internet access issues, work schedule conflict, family obligations, and personal illness. All such requests must be emailed or called in to instructor before the start of the exam period. Students who do not take exam within scheduled period and who do not contact the instructor in advance of exam will be assessed a late penalty of 25 points for each 24-hour period after scheduled end of exam.

Field Study

Discovery Voyage on San Francisco Bay: Students will participate as scientists on a 4 hour-long marine expedition with the Marine Science Institute on the R/V Robert G. Brownlee in Redwood City. This is a "hands on" activity in formulating hypotheses, acquiring data to test these hypotheses, and analyzing data aboard the research vessel. We will place the work in the context of all three Area R learning outcomes. Students have a great time on this trip!

By successfully completing this activity, students will meet GE Area R learning outcomes 1, 2, and 3 – see list under "Course Goals and Student Learning Objectives" in this greensheet.)

Course Workbook (100 points – 10% of course grade)

Students are required to complete expedition worksheets in the course workbook. All Every student must submit a workbook for grading. The workbook should be dropped off at or mailed to Geology Department office (DH321) after final exam has been completed. Instructions for this assignment can be found at the beginning of course workbook. Students who do not submit course workbook by due date will receive an incomplete (I) grade in the class. The incomplete will be cleared after the workbook is received by the Geology Department and the end of semester grading deadline. A late penalty of 8 points will be assessed for each 24-hour period after due date and time. By successfully completing this compilation of research results from the virtual expeditions, students will meet GE Area R learning outcome 3 – see list under "Course Goals and Student Learning Objectives" in this greensheet.)

Final Exam (100 points – 10% of course grade)

Students will begin working on the final exam by participating in the required Blackboard CE discussions associated with Expeditions 22 and 23. These discussions will help students focus on potential ideas to develop in more detail on final exam.

The final exam is open book and open notes, but <u>during exam</u>, <u>students may not use</u> <u>any sites on the WWW other than the course web site</u>. The final exam will consist of 1 to 3 essay questions, which in combination require about 800-900 words of writing. Students will apply a scientific approach to current scientific questions dealing with the ocean. Grading of exam will be based on writing quality (20 points), critical and creative thinking, and scientific knowledge of the topics covered in this class (80 points).

One objective of the assignment is to assess the quality of student writing (not the ability to use quotations). Consequently, students shall NOT copy material from any publication, including web sites, even if enclosed in quotation marks. Students will be required to submit their final exam to an originality check at www.turnitin.com. By completing this assignment, students meet GE Area R learning outcomes 1 and 3 – see list under "Course Goals and Student Learning Objectives" in this greensheet.)

Course Grade (1000 points)

The <u>course grade</u> will be based on a combination of written essays, online discussions and quizzes, two exams, a workbook of online work and a final exam with a combined total of 1000 points. Keep track of scores on required assignments to determine your grade at anytime during course.

Assignment	Score (possible)
Participation in Required Blackboard CE Discussions (160 p	ots.)
Expedition 9 - Science from Pseudoscience	(50)
Expedition 17 - Iron Fertilization	(50)
Expedition 22 – Top Ten	(30)
Expedition 23 – Your Question or Hypothesis	(30)
Marine Fisheries Stock Assessment and Management Essa	y (160 pts.)
Quiz	(60)
Essay	(100)
Exam #1 (online)	(240)
Exam #2 (online)	(240)
Final - Exam (online)	(100)
Course Workbook	(100)
Total Points at end of course	(1000)

Letter grades are not assigned individual assignments, but can be estimated using the percentage of points awarded out of the total points possible and by applying the scale below.

100-92% A	79.9-78% C+	61.9-60% D-
91.9-90% A-	77.9-72% C	Below 60% F
89.9-88% B+	71.9-70% C-	
87.9-82% B	69.9-68% D+	
81.9-80% B-	67.9-62% D	

At the end of the course, letter grades will be based on the following scale:

1000-915 = A	814-795 = B-	694-675 = D+
914-895 = A-	794-775 = C+	674-615 = D
894-875 = B+	774-715 = C	614-595 = D-
874-815 = B	714-695 = C-	594 or less =F

University Policies

Academic Integrity

Students should know that the University's <u>Academic Integrity Policy is available at http://www.sa.sjsu.edu/download/judicial affairs/Academic Integrity Policy S07-2.pdf</u>. Your own commitment to learning, as evidenced by your enrollment at San Jose State University and the University's integrity policy, require you to be honest in all your academic course work. Faculty members are required to report all infractions to the office of Student Conduct and Ethical Development. The website for <u>Student Conduct and Ethical Development is available at http://www.sa.sjsu.edu/judicial affairs/index.html</u>.

"Word for Word" copying from articles or web sites, or using quotations, does not meet the Area R writing requirement and is therefore forbidden in this class. As in any university work, students can use ideas and concepts from web sites or hardcopy materials, if the source is properly cited. Instances of academic dishonesty will not be tolerated in this class. Cheating on exams or plagiarism (presenting the work of another as your own, such as using outside web sites for information during exam, or the use of another person's ideas in writing assignments without giving proper credit) will result in a "0" grade, plus additional point penalties, generally negative point deductions of the magnitude of specific assignment (e.g. 100 pt. assignment, -100 point score on assignment) and sanctions by the University. For this class, all assignments, including electronic discussions, are to be completed by the individual student unless otherwise specified. Students who provide information about guizzes and exams, or material for writing assignments, to other students will also be subject to the penalties described above. If you would like to include in your assignment any material you have submitted, or plan to submit for another class, please note that SJSU's Academic Policy F06-1 requires approval of instructors. Quizzes and exams are assignments to be completed alone; evidence of collaborating with another person while taking the guiz or essay will result in an "F" in the class and submission of Academic Integrity Violation Report to the university.

Campus Policy in Compliance with the American Disabilities Act

If you need course adaptations or accommodations because of a disability, or if you need to make special arrangements in case the building must be evacuated, please

make an appointment with me as soon as possible, or see me during office hours. Presidential Directive 97-03 requires that students with disabilities requesting accommodations must register with the DRC (Disability Resource Center) to establish a record of their disability.

Blackboard CE Resources

For students experiencing technical problems with BlackBoard CE6 (eg. unable to log in, need password re-set, etc.), please contact San Jose State University's Information Technology Support Services (ITSS) at 408-924-2377, or email at helpdesk@sjsu.edu ITSS is located on the first floor of the Academic Success Center in Clark Hall, if students wish to speak with someone in-person.

Learning Assistance Resource Center

The Learning Assistance Resource Center (LARC) is located in Room 600 in the Student Services Center. It is designed to assist students in the development of their full academic potential and to motivate them to become self-directed learners. The center provides support services, such as skills assessment, individual or group tutorials, subject advising, learning assistance, summer academic preparation and basic skills development. The LARC website is located at http://www.sjsu.edu/larc/.

SJSU Writing Center

The SJSU Writing Center is located in Room 126 in Clark Hall. It is staffed by professional instructors and upper-division or graduate-level writing specialists from each of the seven SJSU colleges. These specialists have met a rigorous GPA requirement, and they are well trained to assist all students at all levels within all disciplines to become better writers. The Writing Center website is located at http://www.sjsu.edu/writingcenter/about/staff/.

Course Schedule

The course schedule is subject to change with fair notice through messages in Blackboard Mail or posting on course website. Weekly Expeditions <u>will go online</u> <u>each Tuesday morning at 1 PM</u>. Each expedition needs to be completed by the due date listed in course schedule on next page, usually the Friday or Tuesday. The schedule of <u>expedition</u> work changes in week 15, the last week of instruction.

"MD" refers to required reading assignment in Mapping the Deep and "WWW" refers to required reading assignment, which can be downloaded for Reading Assignment section of course website.

Week	Expedition Topics, Assignments, Readings, and Due Dates/Times "MD" refers to required reading assignment in Mapping the Deep and "WWW" refers to required reading assignment, which can be downloaded for Reading Assignment section of course website.	
1 1/26-1/31	Expedition #1 An Educated Person and the Oceans; MD: (p. 1-9) – <u>Due 1/29 by 1 PM</u> Expedition #2 Declining Marine Fisheries; <u>WWW</u> : <u>Oceans of Trouble</u> – <u>Due 2/2 by 1 PM</u>	
2 2/1-2/7	Expedition #3 Fisheries Science; MD: (p. 235-267) – <u>Due 2/5 by 1 PM</u> Expedition #4 Fisheries Management – <u>Due 2/9 by 1 PM</u>	
3	Quiz – Available Wed. Feb. 10 at 1 PM to Thurs. Feb. 11 at 1 PM	
2/8-2/14		
Essay Due at http://www.turnitin.com by Wed. Feb. 17 at 1 PM		
2/15-2/21	Expedition #6 Map of the World; MD: (56-76); WWW: Skim Underwater World; Due 2/19 by 1 PM	
5 2/22-2/28	Expedition #7 Commotion Beneath the Ocean; <u>Optional</u> Reading; WWW: <u>This Dynamic</u> <u>Planet</u> (great article, but optional); <u>Due 2/26 by 1 PM</u>	
6	Expedition #8 Boundaries Beneath the Sea; MD: (p. 45-55) Due 3/5 by 1 PM	
3/1-3/7	Sat. Mar. 6 - San Francisco Bay Voyage (7:35-Noon or 12:40-5:00)	
7 3/8-3/14	Expedition #9 The Seafloor at Birth (Discussion #1); MD: (p. 76-85) <u>Due 3/12 by 1 PM</u>	
8	Expedition #10 Whole Lotta Shakin' Goin' On - Due 3/19 by 1 PM	
3/15-3/21	Expedition #11 Tsunami; WWW: <u>Tsunami Threat to California</u> - <u>Due 3/23 by 1 PM</u>	
9 3/22-3/28	Expedition #12 Dive and Discover Expedition; MD: (p. 127-163) - <u>Due 3/26 by 1 PM</u> Expedition #13 Life on a Volcano; MD: 320-325 - <u>Due 4/6 by 1 PM</u>	
10 4/5-4/11	Exam #1 – Available Wed. April 7 at 1 PM until April 8 at 1 PM Expedition #14 The Briny Deep; MD (p.10-27,86-107); WWW: Seawater, Sound & Ice; - Due 4/13 by 1 PM	
11 4/12-4/18	Expedition #15 Supporting the Marine Ecosystem; MD: (p. 108-126) - <u>Due 4/16 by 1 PM</u> Expedition #16 Diving into the Canyon; MD: (p. 164-199) - <u>Due 4/20 by 1 PM</u>	
12 4/19-4/25	Expedition #17 Greening of the Ocean(Req.Discussion #2);MD:(p. 200-234) <u>Due 4/23 by1PM</u> Expedition #18 Global Circulation; <u>Optional</u> <u>WWW: Restless Sea</u> - <u>Due 4/27 by 1 PM</u>	
13 4/26-5/2	Expedition #19 Tracking Drifter Buoys - <u>Due 4/30 by 1 PM</u> Expedition #20 Ocean – The Climate Engine - <u>Due 5/4 by 1 PM</u>	
14	Expedition #21 Where the Water Goes; MD: (p. 268-292) Due 5/7 by 1 PM	
5/3-5/9	Exam #2 – Available Fri. May 7 at 1 PM until Mon. May 10 at 1 PM	
15 5/10-5/16	Expedition #22 Top Ten (Required Discussion #3) - <u>Due 5/14 by 1 PM</u> Expedition #23 The Question (Required Discussion #4) - <u>Due Mon. 5/17 by 1 PM</u>	
	Monday, May 17 is last day of instruction	
Final Exam Opens on Fri. May 21 at 1 PM and Closes Mon. May 24 at 9:00 AM		
	Course Workbook Due at Geology Dept. Office (DH321) on or Before Wed. May 26 by 2:00 PM	

Course Grades will be posted on Blackboard & MySJSU on Wed. June 2.