

<i>SDSU Summer 2013 Distance Education Course – OCEAN320 Oceans of Change</i>	
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What is this course about? Given our species ever-increasing impact on the global ocean, we will focus on three oceanographic issues that are increasingly encountered in the media and of broad socioeconomic relevance:

- How our global burning of fossil fuels is warming and acidifying the ocean
- How our global fisheries are affecting ecosystems and driving the rise of aquaculture
- How our global demand for energy and products is affecting the ocean in myriad ways

In the spirit of the GE Explorations, each of these issues will be examined primarily from a scientific perspective, and secondarily from economic, social, and political perspectives. Furthermore, the scientific principles underlying each issue will serve as a foundation for exploring subsequent issues; for example, we will build on our model of global ocean-atmosphere circulation (first issue) to understand why coastal regions historically had such abundant fish populations (second issue) as well as why petroleum reservoirs are found where they are (third issue). In addition, we will examine all three issues as potential examples of the “tragedy of the commons” and “shifting baselines” – two broad conceptual frameworks that will be explored early in the course.

What is its broader context? OCEAN320 fulfills your GE Explorations Natural Sciences requirement and builds upon the goals and skills of your earlier GE Foundation courses. As such, the course employs an interdisciplinary approach with more complex and in-depth theory, deeper investigation of local problems, and wider awareness of global challenges. Such Exploration courses include more extensive reading and written analyses incorporating complex comparisons, well-developed argumentation, and appropriate references to the scientific literature. More specifically, OCEAN320 will promote your ability to: (1) explain basic concepts and theories of the natural sciences; (2) use logic and scientific methods to analyze the natural world and solve problems; and (3) argue from multiple perspectives about issues in natural science that have personal and global relevance.

What are the Student Learning Outcomes (SLOs)? SLOs provide a set of explicit learning goals for students, and thereby directly guide the selection, organization, and delivery of our course content. The course-level SLOs are provided below, and each will be explored within a more detailed set of module-level SLOs provided in the Learning Guide for each module.

<i>Building a Conceptual Framework</i>	<ul style="list-style-type: none"> • <i>Specify how science differs from other ways of knowing (M01)</i> • <i>Explain basic concept of Tragedy of the Commons (M01)</i> • <i>Describe phenomenon of Shifting Baselines (M01)</i>
<i>Warming and Acidification</i>	<ul style="list-style-type: none"> • <i>Model general circulation of ocean-atmosphere system (M02)</i> • <i>Explain process of greenhouse effect and appraise its impact on the ocean (M03)</i> • <i>Explain process of ocean acidification and appraise its impact on the ocean (M04)</i>
<i>Overfishing and Aquaculture</i>	<ul style="list-style-type: none"> • <i>Model basic ecological principles of “pristine” ecosystems (M05)</i> • <i>Assess impact of industrialized fishing on species and ecosystems (M06)</i> • <i>Appraise the potentials and perils of aquaculture (M07)</i>
<i>Petroleum, Plastics, and Pollution</i>	<ul style="list-style-type: none"> • <i>Generalize the conditions necessary for development of oil and gas reservoirs (M08)</i> • <i>Visualize the geological context of Gulf of Mexico oil and gas reservoirs (M08)</i> • <i>Describe the myriad impacts of plastics and other pollutants on the ocean (M08)</i>

How will the course work? The Blackboard (Bb) course page for OCEAN320 will serve as the access site for all course materials (e.g., streaming video, pdf and online readings, webpages, etc.) as well as scheduled live sessions using Blackboard Collaborate, the new replacement for the Wimba Classroom. The course is divided into a sequence of modules, and the first item in each module is a Learning Guide (LG) – essentially the module’s roadmap. The LG for each module will contain the schedule for the following course components:

- **Collaborate sessions:** Collaborate is a web-conferencing tool within Bb that allows live interaction among the logged-in participants (e.g., you can ask questions via a chatbox or headset microphone). Live Collaborate sessions will typically take place on Mondays through Thursdays from 10:00-11:45 AM. You are *strongly encouraged*, but *not required*, to attend these Collaborate sessions – each will be completely captures as an archive and the archives will be viewable anytime during the course. If you cannot attend live, you are very strongly encouraged to watch the archive later that day to avoid falling behind! For some sessions, I may pre-produce the content and simply make it available directly as an archive.
- **Live Collaborate office hours:** I will typically hold two Collaborate office hours per week and these days/times will be posted on the modules’ Learning Guides. I encourage you to attend these sessions in a quiet space where you can use your computer microphone or a headset since the chatbox isn’t very effective for the one-on-one or group discussions that typically occur during office hours. Note that if you can’t make these Collaborate office hours, you can always post specific content questions to the Discussion Board.
- **Course Activities:** Activities consist of reading annotated articles, watching streaming videos, exploring web sites, etc. For each activity, any “actionable” content (e.g., directions, questions, assignments) will be included in the module’s LG. While these activities will not be formally collected or graded, they will be an integral part of our sessions and are fair-game on quizzes and exams!
- **Quiz Time-Windows:** Each module will conclude with a Bb quiz that can be completed at anytime during the stated time-window. Questions are intended to assess your mastery of the module’s learning outcomes and will be based on content presented in the module’s Collaborate sessions as well as the related module activities. Missed quizzes may not be made up, but the lowest score (including zero) will be dropped.
- **Feedback Time-Windows:** I will be soliciting your constructive feedback on each module through *anonymous* feedback surveys. To encourage completion of these feedbacks, you will be rewarded with the easiest 5% of your course grade *if* you complete *at least seven of the eight* feedbacks. Every semester, for reasons beyond my understanding, a good percentage of students don’t bother to harvest this “low-hanging fruit” . . . sigh.

How will your learning will be assessed and graded? Your course grade will be based on module quizzes (35%), module feedbacks (5%), and two exams each worth 30%. Quizzes and exams are designed to assess your mastery of the student learning outcomes for each module, not your ability to regurgitate specific facts, figures, and terms. So, while you are free to refer to any materials during quizzes and exams, you simply will not have time to start from scratch and “look up” answers to each question.

Each exam will consist of two parts: Part A will be a Bb-based “super-quiz” comprised of multiple-choice, multiple-answer, true-false, etc. questions. You must start Part A between 9:00-9:15 AM on the stated day below. The total time allowed to complete Part A will depend on the total number of questions – you schedule yourself to be available from 9:00 to 10:30 AM to be safe! Part B will consist of a set of “microessay” questions with responses typically limited to less than 400 words. The questions and directions will be posted as a downloadable pdf on the dates below and logistics will be explained in more detail prior to the first exam.

Please note that you are not allowed to collaborate with other OCEAN320 students or to be assisted by any other individuals for quizzes or exams. ***Start arranging your busy life and work schedules now to accommodate the examination days and times below.*** Missed exams may not be made up without a documented medical excuse. Alternate times will only be arranged in the case of a documented class schedule conflict, and must be finalized between you and me at least three days prior to the exam. For more information on how to maximize your performance on quizzes and exams, see the pdf entitled “***OCEAN320 Procedures for Blackboard-Based Quizzes and Exams***” in the Bb “Logistics” folder.

Exam I (Covers Modules 1–4)	<ul style="list-style-type: none"> • Part A available to <u>start</u> from 10:00–10:10 AM on 18 June • Part B posted on 14 June and due by midnight on 18 June
Exam II (Covers Modules 5–8)	<ul style="list-style-type: none"> • Part A available to <u>start</u> from 10:00–10:10 AM on 3 July • Part B posted on 30 June and due by midnight on 3 July

How can you get comfortable with Blackboard and the Collaborate Classroom? Go to the Bb Student Help page by either clicking “help” at the top of any Bb page and then “Student Support” on the left of the next page. For Collaborate, go to the “Collaborate” link on the left-menu within the OCEAN320 Bb site; the first link provides a system check as well as general information about the system and the second link will bring you into the Collaborate application itself. Within Collaborate, archived sessions are listed in chronological order and labeled with the module, module section, etc. to ease of locating desired content.

How can you ask questions about course content? If you can attend the live Collaborate sessions or office hours, those are great times to ask questions on recent or current content. Otherwise, you should post your question, written as clearly and specific as possible, to the appropriate module folder in the “Discussion Board” link. This approach will allow my timely response to be read by you as well as your classmates. I will check and respond to Discussion Board posts once a day, and may modify/combine/refer-to postings as appropriate. Thus, whether you post or not, I recommend that you check out the Discussion Boards frequently. For more details on communication in the course, see the pdf entitled “*OCEAN320 Procedures for Course Communication*” in the Bb “Logistics” folder.

When should you email me? Not when you have a *content* question . . . if you do, then I’ll simply reply requesting that you post your question to the appropriate discussion board within Bb! However, if there is ever a problem with Bb content (e.g., link not working, etc.) or you have a non-content-based concern or problem, please do email me through the “Email” link in Bb. Your email should include a title that is short, but informative (e.g., *not* “ocean320”, “question”, etc.). I will respond to your email as soon as possible, but it is your responsibility to re-contact me if you do not hear back within 24 hours. If we can’t solve the issue via email, an individual Collaborate session or face-to-face office hours can be arranged. For more details on communication in the course, see the pdf entitled “*OCEAN320 Procedures for Course Communication*” in the Bb “Logistics” folder.

How can you ensure that you get course-related emails? Check and update your email address at SDSU WebPortal (<https://sunspot.sdsu.edu/portal/>) as Bb announcements will be sent to your listed email address.

Will the syllabus or course design change? I reserve the right to make minor modifications to this syllabus and LG schedules as we progress through the course. Any such changes will be widely announced via Bb and e-mail, and an updated course syllabus will be posted.

What constitutes academic misconduct? Section 41301 of Title V of the California Code of Regulations defines academic misconduct as “cheating or plagiarism in connection with an academic program at a campus.” Examples of cheating include copying others’ work during an exam, falsifying data or records for an exercise, etc. Note that while you can use your course materials (e.g., handouts, notes, etc.), you may not collaborate with other OCEAN320 students or receive assistance from other individuals during quizzes or exams. Examples of plagiarism include copying other students’ answers or, when working in collaborative groups, not stating answers in your own words based on your own understanding. More information is available from the SDSU Center for Student Rights and Responsibilities (<http://csrr.sdsu.edu/index.html>).

Can this course accommodate students with disabilities? If you have or think that you may have a disability, please immediately contact SDSU Student Disability Services (SDS) at <http://www.sa.sdsu.edu/sds/index.html>. Once you have established a formal dialog with SDS, please contact me so that we can all work together to provide effective accommodations for your specific needs.

