About this class: It may seem odd to study oceanography at Utah State University, which has no oceans within 500 miles, but the study of our oceans is actually quite relevant to all of us. This class will cover the roles our oceans play in fundamental global processes, in the ongoing evolution of life on earth, and in the continuing survival of humans on this planet. We will also discuss how the oceans have changed since the origins of the planet and how human activities are now directly affecting our oceans.

Course Objectives:

1. To gain factual knowledge about the physical, biological and chemical properties of the oceans.

2. To learn fundamental principles, generalizations and theories that aid in our understanding of oceanography.

3. To understand the application of the material in this class to real world problems and situations.

Depth course objectives:

Depth courses are required at USU to help produce well rounded citizen scholars who are life-long learners.

In support of USU’s depth course objectives, this course helps students better understand the process of science through the specific lens of oceanography.
Class structure:

Lecture: The class is primarily lecture format, with video clips, animations, and demonstrations interspersed to enhance learning.

Attendance is not mandatory, but students who do attend typically do better in the class. To encourage attendance, I offer up to 3% extra credit based on student participation in iClicker surveys, which are unscheduled but occur 1 or 2 times a week.

Review sessions: (Optional) Review sessions each week on Tuesdays from 5:00 – 6:00 pm offer students a chance to clarify concepts. The reviews are not structured; rather, they provide an opportunity for students to ask questions or just listen in on other questions and answers.

- On weeks without exams, the review sessions will be conducted by the class UTF at the study center in the Janet Quinney Lawson Natural Resources Library.
- On weeks with exams, the review will be conducted in ENGR 108.

USU Canvas site contains all course information. The site is organized around weekly modules that contain class handouts, pdfs of class lectures, weekly assignments and other information. The home page of the site has general course information, and links to the syllabus and course schedule. Any scheduling updates or other course changes will be noted on the home page and also sent out as Canvas announcements.

Class Field trip to Living Planet Aquarium – Saturday, March 19. Buses provided. More details available as we get closer, but please arrange to attend.

Course Materials:

Text: Investigating Oceanography (1st Edition)
By Keith Sverdrup and Raphael Kudela

This is a very readable, well organized and accurate textbook. I have placed a copy in the library Course Reserves. Several similar (older) textbooks also available Course Reserves.

iClicker (1 or 2) – To assure that you get credit for class attendance your clicker through the link on the class Canvas page or at iclicker.com. Additional assistance is available at the Student IT Help Desk – thru N door of the JQL building.

Your grade will be based on the following:

<table>
<thead>
<tr>
<th>Percentage</th>
<th>Component</th>
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<tbody>
<tr>
<td>75%</td>
<td>3 exams at 25% each.</td>
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<tr>
<td>15%</td>
<td>11 Canvas Quizzes.</td>
</tr>
<tr>
<td>10%</td>
<td>2 Current events assignments</td>
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Clicker surveys - up to 3% extra credit. There are no other options for extra credit.
In-class exams. 4 total (3 during semester, 1 during finals week). **Your lowest exam score will be dropped.** The exams are closed book / closed notes and cover the material since the previous exam. Exams are a combination of true/false, multiple choice, graph and map interpretation, and occasional short answers. You will need a large LARGE Scantron form and pencil. You will NOT need a calculator.

Weekly quizzes in Canvas. 12 total (given during weeks with no exams.) **Your lowest quiz score will be dropped.** Quizzes are open book and open note and are designed to encourage students to keep up with the class material. The quizzes open in Canvas at 6:00 am on Thursday and close at midnight on Friday. Once you start a quiz, you will have 2 hours to complete it.

Current events assignments. Two graded discussions (1 due mid-semester, 1 due at the end of the semester) are intended to help students connect the class material with the “real world”. To get full credit for each of the assignments, students must enter one unique post about a current events and enter 5 comments on other students’ posts. Each assignment consists of:

- 1 Current Event Posts: Identify the source of the news story, summarize the story or event (200 words or more), and describe how the event or story relates to Oceanography (100 words or more).
- 5 comments / responses concerning other student posts.

*All posts must be in your own words. Complete instructions are provided in Canvas.*

The first current events assignment is due on 2/20/2015. The second is due on 4/17/2015.

iClicker polls Given 1-2 times / week, these will count as extra credit.

Letter grades: Grades will be assigned based on the standard percent distribution:
( A: 93-100; A-: 90-92; B+: 87-89; B: 83 – 86; B-: 80-82, etc)

Individual exam grades may be curved upward, never downward.

Make-up Policy:

Missed exams and quizzes can only be made up for emergencies or excused absences. Please let me know ahead of time about approved, scheduled absences. Students must produce documentation for any absence during an exam or quiz (e.g. doctor’s note, court date notice, letter from coach for athletes, etc). Make up exams or quizzes must be taken within 2 days of the student’s return.

The current events assignments and clicker surveys cannot be made up.
Academic Integrity:

All exams, quizzes and the current events assignments are to be completed individually. Students are expected to adhere to USU’s standards of academic honesty. Cheating or falsifying information are grounds for a failing grade in this course.

According to USU Student Code of Conduct, Article 5, cheating includes intentionally:

- using or attempting to use or providing others with any unauthorized assistance in taking quizzes, tests, examinations, or in any other academic exercise or activity;
- substituting for another student, or permitting another student to substitute for oneself, in taking an examination or preparing academic work;
- acquiring tests or other academic material belonging to a faculty member, staff member, or another student without express permission;
- or engaging in any form of academic fraud.

Accommodations for Students with Disabilities:

Students with ADA-documented physical, sensory, emotional or medical impairments may be eligible for reasonable accommodations. Veterans may also be eligible for services.

All accommodations are coordinated through the Disability Resource Center (DRC) in Room 101 of the University Inn (435-797-2444). Please contact the DRC as early in the semester as possible for assistance. Alternate format materials (Braille, large print, digital, or audio) are available with advance notice. I have arranged for all videos (usually just short clips) to be closed captioned.

Equal opportunity and non-discrimination:

The Affirmative Action/Equal Opportunity Office at Utah State University is responsible for overseeing compliance of a wide variety of federal/state laws executive orders and University policies that address equal opportunity in employment and education.

Utah State University ensures equal opportunity in all aspects of employment, programs and activities and prohibits discrimination based on race; color; religion; sex (including sexual harassment, pregnancy, childbirth, or pregnancy-related conditions); national origin; age; genetic information; sexual orientation or gender identity/expression; disability; status as a protected veteran; or any other status protected by University policy or local, state, or federal law. In addition, USU policy number 339 and Title IX specifically prohibit sexual harassment.
Tips for succeeding in this class:

- Before class, skim the assigned reading.
- Attend class lectures. Use whatever method works for you to be an active listener (take your own notes, record the lecture, or take notes on the study guides and/or posted pre-class handouts.)
- After lecture, reread text more closely and review notes, study guides and posted powerpoints.
  - Pay close attention to figures and tables. Being able to explain to someone else is a good indicator that you understand them.
  - Make connections, attempt to understand underlying processes and how/why these explain the phenomena and patterns discussed in class.
  - Use study guides as an indication of most important material.
- Ask questions if you don’t understand anything –
  - Ask during class;
  - Email me with questions,
  - Find me during my office hours or make an appointment for another time
  - Drop by the weekly Thursday reviews.

Unsuccessful approaches:

- Try to learn material at the last minute.
- All night study sessions the night before a test.
- Wait until late in the semester to seek help.
- Miss current events deadlines.
- Unexcused exams or quizzes.
- Expect to get any other extra credit EXCEPT the iclicker surveys.