

**Science of the Sea: Course Syllabus  
Windward Community College – Fall 2016**

**Course Number:** OCN 201 (CRN 63439; 3 credits)

**Class Meeting Days and Times:** MW 4:00 - 5:15 pm ('Imiloa 117)

**Instructor:** Dr. Christopher Guay

**Email:** [cguay@hawaii.edu](mailto:cguay@hawaii.edu)

**Course website:** <http://lailima.hawaii.edu> (use UH email account login and password)

**Office Hours:** MW 11:30 am-12:30 pm; TR 1:00-1:55 pm ('Imiloa 136)

**WINDWARD COMMUNITY COLLEGE MISSION STATEMENT**

*Windward Community College offers innovative programs in the arts and sciences and opportunities to gain knowledge and understanding of Hawai'i and its unique heritage. With a special commitment to support the access and educational needs of Native Hawaiians, we provide O'ahu's Ko'olau region and beyond with liberal arts, career and lifelong learning in a supportive and challenging environment – inspiring students to excellence.*

**CATALOG DESCRIPTION OF THE COURSE**

An introductory course to oceanography covering the dimensions of the science of oceanography, the physical and chemical properties of sea water, waves, tides, currents, life in the ocean, and the geologic structure of the ocean floor, environmental concerns, and human use of the oceans. (3 hrs. lecture)

*WCC: DP*

**STUDENT LEARNING OUTCOMES**

- Understand how the scientific method works, how it has been applied in Earth science, and how it differs from other ways of acquiring knowledge.
- Articulate how the Earth is in integrative system across many scientific disciplines.
- Understand the internal structure of the Earth and the dynamic processes of plate tectonics that shape its surface, including seafloor spreading, subduction, and continental drift.
- Understand the causes of rising sea level and its impacts on coastal areas, including erosion and beach loss.
- Identify the major pathways of chemicals to the oceans and the effect that biological processes have on redistributing and removing chemicals from the oceans.
- Describe the major processes that cause the deep and shallow circulation of water in the oceans.
- Identify the major marine habitats, the types of organisms that live in those habitats, and give examples of how organisms are adapted to their habitat.
- Describe the types of interactions that occur among organisms in the marine food web and between organisms and their environment.

**REQUIRED COURSE MATERIALS**

- Garrison, *Oceanography: An Invitation to Marine Science, 9<sup>th</sup> edition*.  
Note: The 9<sup>th</sup> edition is the current edition of the textbook, but you can use an older edition if you can find one. The older editions will usually be a lot less expensive, and there should be a lot of used copies available since this is the same text that is used for OCN 201 at UH Manoa.
- You will also need a scientific calculator and Internet access.

## **GRADING**

1. Grades will be based on the following categories:

I. Class Participation	25 pts
II. Midterm Exam 1	75 pts
III. Midterm Exam 2	75 pts
IV. Midterm Exam 3	75 pts
V. <u>Field Trip</u>	25 pts
<b>TOTAL</b>	<b>275 pts</b>

Your course grade will be assigned based on the your percentage score for total points earned, according to the following scale:

- A: 100 - 90.0 %
- B: 89.9 - 80.0 %
- C: 79.9 – 70.0 %
- D: 69.0 – 60.0 %
- F: below 60 %

Curving might be employed if deemed necessary.

Grades of I, W, CR, NC are described in the current college catalog. Changing from letter grading (A-F) to CR/NC option must be done by the deadline for the current term – this must be discussed previously with the instructor.

2. **Attendance** will be checked during every class period. Point for **class participation** will be assigned based on your answers to **in-class quiz questions** (we will probably use iClickers for this). You are **required to attend every class** – you will lose points for missing class.

3. There will be **three midterm exams**, each of which will cover approximately one-third of the course. Each exam will last for 75 minutes. All exams will be closed book. The midterm exams will be given on the following dates:

Midterm 1	Sep 28
Midterm 2	Nov 2
Midterm 3	Dec 12 (during finals week)

Note: Midterm 3 will be taken during finals week, but it will just be a regular midterm (covering material from the last third of the course). There will not be a cumulative final exam for this course.

4. You will be required to do one of the **self-guided field trips** for the course on your own time outside of class hours. Information about each of the self-guided field trips will be posted on the course website on Lulima. Each field trip has a worksheet that must be filled out during the field trip. You will need to follow any specific instructions on the worksheet (*e.g.*, attaching a receipt, getting the worksheet stamped, taking pictures of yourself during the field trip activities, etc.).

Students may go on the field trips together in groups if they would like, but **each student must attend the field trip and participate in the associated activities** – *i.e.*, do not try to just fill in the worksheet if you do not actually go on the field trip (it's *painfully obvious* when students try to do this – I've busted students for this in the past, but thankfully I haven't had to do it very often). In order to receive credit for the field trip, **the field trip worksheet must be submitted by the start of the last lecture period on December 7<sup>th</sup>**.

## **HOW TO STUDY FOR THIS COURSE**

Nothing is more important to your academic success than strong study skills. On average, you should spend at least **five hours per week** outside the classroom to study for this course.

1. Prepare for each class by reading the assigned material in the text before coming to class and familiarizing yourself with the **lecture slides**, which will be posted beforehand on the course website.

2. Take **notes** during the lecture, but don't focus too much energy on trying to write down every single thing (remember, you can download and print out the lecture slides). Stay engaged and participate in class, ask questions, etc. Bring your **calculator** to class so you can work through samples problems (you will also need it for the in-class questions and activities).
3. **Review** your notes soon after class. Come to my office hours regularly -- this is a good place to get tips on how to review for the exams. Also, try to get together with other students in the class to study together.
5. Work through the additional **links to online resources** posted on Lulima for each course unit.

## **OTHER POLICIES**

1. Lecture topics and exam dates are found in the **Course Schedule** at the end of this syllabus.
2. **Missed Exams:** If you miss a **midterm exam**, it will count as a **zero**. If a legitimate **emergency** comes up, you must notify me **before the exam** (in person or by email). For a **pre-excused** absence, you may be assigned a score calculated from your other exam scores or allowed to take a make-up exam, provided it is taken before the exams are returned to the other students. It will **not** be possible to make up the **final exam**.
3. You have access to your scores and grades 24/7 in the **gradebook on Lulima**.
4. **Communicating with Instructor:** The best way to reach me is by email and/or by coming to see me during my office hours. Time spent during office hours will be more efficient if you prepare ahead of time and come with specific questions ready to ask.
5. **Disruptive behavior** leads to loss of learning time. It is unfair to the other students in class as well as the instructor and it will not be tolerated. Examples include activated cell phones, checking /sending text messages, chattering/whispering during the course of the lecture, making offensive remarks, eating or drinking in the classroom, packing of books or otherwise making noise, leaving class early, sleeping in class, reading other materials not related to the course, etc. If a student engages in disruptive behavior, the instructor reserves the right to ask the student to leave class immediately and the student will be marked absent.
6. If you have any **special learning needs**, including hearing/visual impairment, please inform the instructor as soon as possible
7. **ZERO TOLERANCE for cheating or academic dishonesty.** See the note regarding academic dishonesty on the following page.
8. Any changes to the Course Schedule will be announced in class at least one week prior to the affected date(s). **You are responsible**, however, for knowing about any changes that are made -- whether or not you were in class for the announcement.

## **DISABILITIES ACCOMMODATION**

If you have a physical, sensory, health, cognitive, or mental health disability that could limit your ability to fully participate in this class, you are encouraged to contact the Disability Specialist Counselor (Ann Lemke) to discuss reasonable accommodations that will help you succeed in this class. She can be reached at 235-7448 or lemke@hawaii.edu. You can also drop by her office in 'Akoakoa 213.

## **SOME FINAL WORDS OF ADVICE...**

BE SURE TO KEEP UP WITH THE WORK IN THIS CLASS! We will be covering a lot of material at a relatively fast pace, so things will become very difficult if you fall behind. Gaining an understanding of the multidisciplinary oceanographic concepts we will encounter in this course requires practice, and you need to be actively involved in the learning process. This means being focused during the lectures, keeping up with the class readings (read the assigned material for each day before coming to lecture), going through the additional online resources posted for each unit on Lulima on your own, asking for help when you need it, etc. If you are having trouble keeping up with the class material and wait until the last minute (*i.e.*, right before the exam) before trying to cram everything in, it will be too late.

## **VERY IMPORTANT NOTE REGARDING ACADEMIC HONESTY**

Make sure that you are familiar with the sections related to “Academic Dishonesty” in the College’s policies governing student conduct (available on the WCC website). The fundamental principle governing academic integrity and academic dishonesty is that **each student is responsible for presenting his/her own work at all times.**

It is fine to discuss homework assignments with other students and help each other out – in fact, I strongly encourage you to study with your classmates outside of class time. But it is also important that you learn how to solve problems on your own, and **you must submit your own work.**

Of course it is not OK to collaborate on exams. The following rules will be enforced during exam periods:

- Absolutely no talking once the exam begins. If you have a question or if you need something during an exam, do not ask your neighbor. Raise your hand and I’ll come help you.
- Keep your eyes on your own paper. If I see you looking at someone else’s paper during the quizzes and exams, I will assume you are cheating.
- You are not allowed to bring in any notes or other outside materials to the exams. I will give you copies of the periodic table and other information -- formulas, constant values, etc. (during the lectures, I will tell you which things you need to memorize and which things will be provided for the exams).
- You can (and should) bring a calculator for the exams. But you will only be allowed to use standard scientific calculators – no cell phones, PDA’s (iPhones, Blackberrys, etc.), mini-computers, or any device that can connect to the internet, communicate with other devices, or has data storage capacity.
- No listening to any audio devices (iPods, etc.) during exams.

If you are observed cheating on any of the class assignments (homework, quizzes or exams), you will receive an F for the assignment and I will refer the matter to the Department Head and the Office of the Dean. Cheating is unfair to everyone involved: the teacher, the cheater, and especially the honest students in the class. I adhere to a **zero-tolerance** policy regarding cheating and academic dishonesty, so consider this your first and only warning – there will be no "second chances" in this area.

**Trust me – you do NOT want to test me on this!!!** I have come down hard on students in my classes for cheating before and will not hesitate to do so if necessary in the future.