



UNIVERSITY of HAWAII®  
**WINDWARD**  
COMMUNITY COLLEGE

## **OCN 201, SCIENCE OF THE SEA**

3 credits, CRN: 63102

Tuesdays 11:30 am – 12:45 pm (WWW)

**INSTRUCTOR:** Pavica Srsen  
**OFFICE:** Hale 'Imiloa 119  
**OFFICE HOURS:** By appointment (via Zoom)  
**TELEPHONE:** (808) 236-9257      **EMAIL:** [pavica@hawaii.edu](mailto:pavica@hawaii.edu)  
**EFFECTIVE DATE:** Fall/2022

### **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 the Ko'olau region of O'ahu and beyond with liberal arts, career and lifelong learning in a supportive and challenging environment — inspiring students to excellence.*

### **CATALOG DESCRIPTION**

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 hours lecture) WCC DP

### **Activities Required at Scheduled Times Other than Class Times**

About half of the classwork will take place asynchronously (unscheduled) online. We will be meeting live via Zoom every Tuesday; in addition to that, the students will be provided learning resources and/or assignments to work on asynchronously (on their own time) for the rest of the week.

### **PREREQUISITES**

No prerequisites nor co-requisites. The student is recommended to take the companion laboratory course OCN 201L concurrently with OCN 201 when it is available.

### **STUDENT LEARNING OUTCOMES**

As a result of taking this course, students can expect to attain the following outcomes:

1. Understand how the scientific method works, how it has been applied in Earth science, and how it differs from other ways of acquiring knowledge.
2. Articulate how the Earth is in integrative system across many scientific disciplines.
3. Understand the internal structure of the Earth and the dynamic processes of plate tectonics that shape its surface, including sea floor spreading, subduction, and continental drift.

4. Understand the causes of rising sea level and its impacts on coastal areas, including erosion and beach loss.
5. Identify the major pathways of chemicals to the oceans and the effect that biological processes have on redistributing and removing chemicals from the oceans.
6. Describe the major processes that cause the deep and shallow circulation of water in the oceans.
7. 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.
8. Describe the types of interactions that occur among organisms in the marine food web and between organisms and their environment.

### REQUIREMENTS THIS COURSE SATISFIES

- This class may satisfy the Windward Community College Associate in Arts Degree diversification requirement for a Natural Sciences physical science class (DP).
- This class may partially satisfy requirements for the Windward Community College Academic Subject Certificate in Bio-Resources and Technology, Bio-Resources Development and Management Track (Elective Set II: Environment and Ecology).
- This class may partially satisfy requirements for the University of Hawai‘i Marine Option Program Certificate as a marine survey course.

### COURSE TASKS and ASSESSMENTS

**Readings:** Before attending class, you are expected to have read that week's assigned reading, if applicable. Reading assignments (chapters from the text book) will be posted on class Lulima site.

**Attendance:** Attendance to all live (synchronous) Zoom sessions is mandatory and it will be a part of your final grade. No alternative arrangements will be made for undocumented emergencies. If you anticipate missing a class due to prior arrangements, please reach out to the instructor immediately and before the anticipated absence.

**Quizzes:** The timed quizzes will be administered through the Internet (Lulima) and will be available during specified time periods (normally for about a week). These quizzes will address the detailed content and major concepts presented in the assigned readings. These quizzes may be taken using home computers connected to the Internet; students may refer to instructional resources (text book, notes, etc.) while taking the quizzes. The student will receive a zero score for a missed quiz. *No make-up quizzes for missed quizzes will be administered for undocumented illness or emergency. Quizzes missed or receiving zeros or low scores because of computer and/or Internet problems may not be made up. The student should also note that quizzes are only reviewable from the course Lulima site if the student has taken them. The student should not expect to be able to review quizzes that the student has not accessed from the course Lulima site during the quiz availability period.*

**Homework Assignments:** Generally, homework assignments will be distributed and submitted via Lulima. These are usually not timed and a student is allowed to save their work and return to the assignment multiple times until the submission deadline (usually a week after it is made available). The student will receive a zero score for turning in the assignments after the due date unless prior arrangements were made. The general rules described in the Quizzes section apply to the HW assignments as well.

**Examinations:** There will be **two examinations** (1 midterm exam and 1 final exam). The timed exams will be administered through the Internet (Laulima) and will be available during specified time periods (normally for a few days) and are to be completed in one seating. The exams will be non-cumulative.

## ASSESSMENT TASKS AND GRADING

In summary, as described above, grading will be based upon:

**Attendance**

**Quizzes**

**Homework assignments**

**Exams**

### Assessment scores and feedback:

- Assessment scores will generally be available via Laulima's Gradebook tool within two weeks of the assignment due date.
- Assessment feedback will generally be provided within two weeks of the assignment due date via Laulima. Students are welcome to ask follow-up questions and discuss the feedback/scores with the instructor using any currently available ways of communication with the instructor (in class, via email, individual or group video meetings, or phone call).

### Letter grades will be assigned as follows:

<b>A</b>	90% or above in total points.
<b>B</b>	80-89.9% of total points.
<b>C</b>	65-79.9% of total points.
<b>D</b>	55-64.9% of total points.
<b>F</b>	Below 55% of total points or informal or incomplete official withdrawal from course.
<b>I</b>	Incomplete; given at the <b>INSTRUCTOR'S OPTION</b> when student is unable to complete a small part of the course because of circumstances beyond his or her control. It is the <b>STUDENT'S</b> responsibility to make up incomplete work. Failure to satisfactorily make up incomplete work within the appropriate time period will result in a grade change for "I" to the contingency grade identified by the instructor (see catalog).
<b>CR</b>	65% or above in total points; the student must indicate the intent to take the course as <b>CR/NC</b> in writing by the end of the 10th week of classes (see catalog).
<b>NC</b>	Below 65% of total points; this grade only available under the <b>CR/NC</b> option (see above and see catalog).
<b>N</b>	<b>NOT GIVEN EXCEPT UNDER EXTREMELY RARE CIRCUMSTANCES</b> (e.g., documented serious illness or emergency that prevents the student from officially withdrawing from the course); never used as an alternative for an "F" grade.

<b>W</b>	Official withdrawal from the course after the third week and prior to the end of the 10th week of classes (see catalog).
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Waiver of minimum requirements for specific grades may be given only in unique situations at the instructor's discretion. |

## LEARNING RESOURCES

- Required text book:
  - *Science of the Sea, A Hawai'i-Based Perspective of Oceanography* by M. Smith, M. Burgos and F. McCoy, 1st Ed. (2019)
  - This course is participating in the Bookstore's Interactive Digital Access Program (IDAP). Through this program, you will access your course material digitally, and it will be available to you by the first day of class. A charge for the digital course material through IDAP will be added to your MyUH account. You have the option to opt-out of receiving your course material through IDAP. By opting-out, you will lose access to the course material and the charge will be refunded on your MyUH account. If you do not opt-out, the charge will stay on your MyUH account. Any unpaid charges on your MyUH account will turn into a hold. Holds on your account will prevent you from accessing various services within the University. You may opt-out by visiting your unique Inclusive Access Student Portal, which can be found in your IDAP welcome email (Subject Line: "IMPORTANT: You have enrolled in an IDAP Course"). For more information regarding IDAP, please contact your campus bookstore.
- Other useful text books (not required):
  - *Essentials of Oceanography* by T. Garrison (any edition)

## ABOUT THE INSTRUCTOR

Pavica Srsen is an oceanography instructor at Windward Community College. She holds a MSc. in Oceanography from School for Ocean and Earth Science and Technology ([SOEST](#)) at UH Mānoa and have various research interests in the field of benthic ecology (i.e. organisms inhabiting the sea floor). At WCC, she teaches environmental science and ocean-related courses and mentors students interested in completing a semester-long research study (usually as a part of SCI 295V course).

## COMMUNICATION EXPECTATIONS

Students are expected to behave politely, respectfully and professionally while communicating with the peers and the instructor via online discussions, email, video conferencing and other forms of interactions. The UH Internet Etiquette (i.e. "Netiquette") is available for students to review in Laulima's *Resources* tool.

The instructor can be reached via:

- Email: [pavica@hawaii.edu](mailto:pavica@hawaii.edu); expect a response within 24 hours Monday-Friday, 48 hours during the weekend and holidays.
- Phone: 808-236-9257, generally Monday-Friday 8:30 am – 4 pm.

- By appointment via Zoom video conference

## COURSE TECHNOLOGY

### Course Technology

Learning Management System utilized by this course is [Laulima](#), accessible from the [WCC main web site](#), under “Services for Students” tab. To log in, please use your University of Hawaii login information, the same one used to log into your UH email and MyUH/STAR systems. To access Laulima (Sakai) Accessibility information follow this link: [Laulima Accessibility](#).

### Hardware and Software Expectations:

Students should be comfortable operating a computer browser, such as Mozilla Firefox or Safari, using email, downloading and uploading files. In addition, students should be comfortable using Adobe Acrobat Reader ([download the free software here](#)) and basics programs within Microsoft Office package (Word, Excel, and PowerPoint). Microsoft Office can be obtained via University of Hawai‘i’s [Information Technology Services](#).

### **It is recommended that you:**

- Use a more recent model desktop or laptop (2014 or later), either Windows or Mac. You may loan a laptop from WCC library for the entire semester for free!
- Have access to reliable high-speed Internet connection.
- Use Mozilla Firefox as your web browser, as Laulima is designed to work best with it. Note: that we do not recommend using *Internet Explorer* for submitting work or taking tests in Laulima.
  - Depending on your browser settings, PDF files may open in a new window or tab or automatically download to your download folder

### Laulima and other technical support:

University of Hawai‘i’s [Information Technology Services Help Desk](#) is available 24 hours a day, 7 days a week (including holidays) either via email ([help@hawaii.edu](mailto:help@hawaii.edu)) or by phone (808-956-2669). Laulima support can also be accessed directly from any Laulima page by clicking on *Request Assistance* link at the bottom of the page.

### Accessibility at UH and software accessibility information:

- University of Hawai‘i’s accessibility policies and services are available at the following link: [Accessibility at UH](#).
- To access the accessibility information for each software used in the course, follow the links below:
  - [Macintosh Accessibility Info](#)
  - [Laulima Accessibility Info](#)
  - [Mozilla Firefox Accessibility Info](#)
  - [Microsoft Office Accessibility Info](#)
  - [Adobe Acrobat Reader Accessibility Info](#)

## SUPPORT SERVICES AND RESOURCES FOR STUDENTS

### Tutorial services

Tutorial services are offered free of charge and open to all WCC students currently enrolled. Tutoring may be long-term, short-term, or single visit, depending upon the needs of the student. To sign up for a tutor, refer to one of the many programs listed below:

- **Tutor.com:** The University of Hawaii Community Colleges offers free online, on-demand tutoring, through [Tutor.com](https://www.tutor.com).
- **TRiO Student Support Services (TRiO SSS):** The purpose of [TRiO SSS](#) is to provide services (everything from tutoring to filing taxes to financial aid and food) and to foster an institutional climate supportive of the success of low-income, first-generation, and/or disabled college students.
- **Ho‘onui Ike:** [Ho‘onui Ike](#) is an academic assistance program that utilizes peer-assisted study and coaching sessions.
- **Ka Piko Student Success Services:** [Ka Piko Student Success Services](#) are free to all WCC students and consist of the following resources (please follow the links below for more information):
  - [Math Lab](#)
  - [Writing Center](#)
  - [Speech Lab](#)
  - [Supplemental Instruction](#) (SI)
  - [Peer Mentoring Center](#)

### **Other student services**

- [WCC Library](#), located in Hale La‘akea, provides access to printed and digital books, periodicals, articles, and more. In addition, it provides access to video and audio resources, as well as computers (free loaner laptops), individual and group study areas and rooms.
- [WCC Bookstore](#): textbooks, computers, software, food items and more can be purchased here.
- [Testing Center](#) (located in Hale La‘akea) provides test proctoring services for placement tests, distance education online and written tests and make-up tests for campus courses.
- WCC [Counseling and Advising](#) department, located in Hale ‘Ākoakoa 212, is comprised of college counselors, faculty and support staff who work to support students’ personal and academic growth and development.
- WCC [Mental Health and Wellness](#) provides a range of counseling services and activities on campus to support students’ life goals and academic goals.
- [Disabilities Services](#), located in Hale La‘akea 232, provides information and services to students with disabilities in order to perform functions that might otherwise be difficult or impossible. Testing and academic accommodations can include the following: tape recorded material, note takers, use of adaptive equipment and more.

## **DISABILITIES ACCOMMODATIONS**

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 Accessibility Counselor to discuss reasonable accommodations that will help you succeed in this class. Jodi Asato can be reached at (808) 235-7472, [jodiaka@hawaii.edu](mailto:jodiaka@hawaii.edu), or you may stop by Hale Kāko‘o 105 for more information.

Jodi A.-K. Asato  
 Counselor, Disability Student Services Office  
 Windward Community College  
 Phone: (808) 235-7472  
 Email: [jodiaka@hawaii.edu](mailto:jodiaka@hawaii.edu)

Website: [Windward CC Disability Student Services Office](#)

## **SEX DISCRIMINATION AND GENDER-BASED VIOLENCE RESOURCES (TITLE IX)**

Windward Community College is committed to providing a learning, working, and living environment that promotes personal integrity, civility, and mutual respect and is free of all forms of sex discrimination and gender-based violence, including sexual assault, sexual harassment, gender-based harassment, domestic violence, dating violence, and stalking.

If you or someone you know is experiencing any of these, WCC has staff and resources to support and assist you. To report an incident of sex discrimination or gender-based violence, as well as receive information and support, please contact one of the following:

Jojo Miller, Confidential Advocate  
 Phone: (808) 348-0663  
 Email: [advocate@hawaii.edu](mailto:advocate@hawaii.edu)  
 Office: Hale Kāko‘o 110

Desrae Kahale, Mental Health Counselor & Confidential Resource  
 Phone: (808) 235-7393  
 Email: [dkahale3@hawaii.edu](mailto:dkahale3@hawaii.edu)  
 Office: Hale Kāko‘o 101

Karen Cho, Deputy Title IX Coordinator  
 Phone: (808) 235-7404  
 Email: [kcho@hawaii.edu](mailto:kcho@hawaii.edu)  
 Office: Hale ‘Alaka’i 120

As a member of the University faculty, I am required to immediately report any incident of sex discrimination or gender-based violence to the campus Title IX Coordinator. Although the Title IX Coordinator and I cannot guarantee confidentiality, you will still have options about how your case will be handled. My goal is to make sure you are aware of the range of options available to you and have access to the resources and support you need.

For more information regarding sex discrimination and gender-based violence, the University’s Title IX resources and the University’s Policy, Interim EP 1.204, go to [manoa.hawaii.edu/titleix/](http://manoa.hawaii.edu/titleix/)

## **ACADEMIC INTEGRITY**

Work submitted by a student must be the student’s own work. The work of others should be explicitly marked, such as through use of quotes or summarizing with reference to the original author.

Students can upload papers to <http://www.TurnItIn.com> to have papers checked for authenticity, highlighting where the paper potentially fails to appropriately reference sources.

In this class, students who commit academic dishonesty, cheating or plagiarism will have the following consequence(s):

Students will receive a failing grade for plagiarized assignments.

All cases of academic dishonesty are referred to the Vice Chancellor for Student Affairs.

For more information, students are encourage to review [UH Student Conduct Code](#).

## **ALTERNATE CONTACT INFORMATION**

If you are unable to contact the instructor, have questions that your instructor cannot answer, or for any other issues, please contact the Academic Affairs Office:

- Location: Alakai 121
- Phone: 808-235-7422
- Email: [wccaa@hawaii.edu](mailto:wccaa@hawaii.edu)

## **APPENDIX**

### **Student Responsibilities and Expectations**

The student is expected to read all assigned reading materials, participate in all course activities, and complete all assignments on time.

Any changes in the course schedule, such as deadlines, etc., will be announced ahead of time on Lulima. It is the student's responsibility to be informed of these changes.

It is the student's responsibility to be informed about deadlines critical to making registration changes (e.g., last day of erase period and last day for making an official withdrawal).

Students should expect a level of difficulty comparable to other 200-level science lab classes intended for non-science majors. When difficult concepts and detailed information are presented, it is the student's responsibility to take the appropriate steps to learn and understand these concepts and information.

Science courses at WCC generally require two to three hours of independent private study time for each hour in class. However, because of the nature of the material presented in OCN 201, more study time may be required (depends upon the student's science background). It is the student's responsibility to allocate the appropriate time needed for study in an environment conducive to quality study. The student must budget time efficiently and be realistic about all personal and professional commitments that consume time.

### **How to Succeed in This Class**

Understanding any science involves understanding many difficult concepts and vocabulary, not just knowing facts. The student should know that the details to these concepts are important. In addition, the student will be introduced to hundreds of new words. In some cases, words that are familiar in a context other than ocean science will be introduced in the context of oceanography.

The student will need to understand and use these terms in an oceanographic context.

Students are expected to participate in all course activities and complete all course assignments



on time.

The student will not succeed in this class without reading all assigned readings and taking careful notes.

The student should ask the instructor to explain the things that the student does not understand.