UNIVERSITY of HAWAI'I®
WINDWARD
COMMUNITY COLLEGE

BIOL 200 Coral Reefs - S Focused

3 Credits (CRN 62331)

Online, Asynchronous

INSTRUCTOR: Kirby Parnell

OFFICE HOURS: By appt. Zoom Office

EMAIL: keparnel@hawaii.edu

EFFECTIVE DATE: Fall 2026

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

BIOL 200 provides an overview of the biology and ecology of stony corals and their role as foundation species for coral reef ecosystems, with specific emphasis on species found in and around the Hawaiian Islands, and their relevance to Hawaiian culture. The biology and ecological roles of algae, invertebrates and fishes found in coral reef ecosystems will be surveyed. Connectivity with associated tropical nearshore habitats, reef restoration efforts, conservation, and human impacts including climate change will also be highlighted, with emphasis on local efforts and impacts.

STUDENT LEARNING OUTCOMES

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

1. Apply the process of science to understand current research on coral reef ecosystems.
2. Evaluate the significance of coral reefs through Western and Hawaiian ways of knowing about the natural world.
3. Describe the biology, morphology, growth, reproduction, and ecology of stony corals.
4. Describe the ecological relationships among the living components of coral reef ecosystems.
5. Identify different types of reef formations, the processes that create and shape them and the physical and chemical parameters that define their distribution patterns around the world.
6. Describe coral reef ecosystem resources, human impacts and conservation efforts, with emphasis on Hawai'i and Pacific Island Nations.

COURSE TASKS

BIOL 200 is a 15-week, fully online course. This course will be taught as an asynchronous course delivered through the Lamakū Learning Management System (LMS). Each week will consist of watching recorded lectures and/or videos, reading selected materials, posting written reflections, creating video posts, and completing assignments. Please refer to the tentative schedule below for detailed information on the schedule of content and due dates.

ASSESSMENT TASKS AND GRADING

Each week there will be a variety of assignments, forums and quizzes to help you learn about coral reefs.

All quizzes are open notes. My intention with this course is to foster curiosity about coral reefs. I'm here to support your desire to learn and gain knowledge about these amazing and threatened ecosystems.

We will use ChatGPT in some assignments this semester but when it comes to quizzes…

Please DO NOT copy and paste answers from chat GPT. If I discover that you have done this for any question on a quiz, you will receive a ZERO for that quiz.

Assignments, forums and quizzes will be due on Tuesday at 11:55PM HST.

A final project will be assigned in lieu of a final exam and will be due the last day of regular classes.

Letter grades will be assigned as follows:

A 90% or above in total points

B 80-89.9% of total points

C 65-79.9% of total points

D 55-64.9% of total points

F Below 55% of total points or informal or incomplete official withdrawal from course.

I Given at Instructor's discretion. See catalog for detailed description.

W Official withdrawal from the course by NOVEMBER 2

LEARNING RESOURCES

There are no required texts for this course as all materials and resources will be made available through our Lamakū course site.

Recommended text: Hawaiian Coral Reef Ecology by David Gulko, 1999. Mutual Publishing.

ISBN: 987-1566472340

AI USE IN CLASS

In this course, students must be the primary and majority authors of text, code, analysis, images, graphics, and all course work products and assignments. Students are permitted to use AI to generate ideas, polish text they have drafted, or perform tasks that are not essential to completing the learning outcomes of the course. The application of this principle will vary by course or by assignment. Students are encouraged to keep drafts of assignments and logs of interactions with AI applications to demonstrate their contribution and original authorship, and to check what is permissible for each assignment.

COURSE POLICIES

Communication

I will communicate with you frequently through the Announcements and Email tools in Lamakū. Please be sure to check your UH email and the Lamakū Announcements list daily.

Participating in our Learning Community

Even though this is an online course, I encourage you to connect with your peers. We will also engage in a number of forums throughout the semester.

Contacting the Instructor

If you have any questions or concerns about anything, please contact me via email: keparnel@hawaii.edu. I will respond to you as soon as I can within 24-hours. Please also feel free to drop in to my online Zoom office hours or make an appt.

TENTATIVE COURSE SCHEDULE

The following schedule is subject to change. Please consult the Academic Calendar for important dates throughout the fall term.

ALL ASSIGNMENTS, FORUMS AND QUIZZES ARE DUE TUES 11:59PM HST

Week	Topic	Video Padlet	Written Padlet/ Discussion	Quiz	Due Date
1	WCC Resources, Marine Option Program and Sustainability Cert. Info	Video Padlet 01. Introductions			Sept 1
2	Growth Mindset and Learning Styles Inventory		Written Padlet 01: Reflections on Growth Mindset and Learning Styles Inventory Results		Sept 8
3	The Nature of Science Hawaiian Perspectives on Science		Discussion 01: Hawaiian Perspectives on Science		Sept 15

4	The Importance and Hawaiian Cultural Significance of Coral Reefs		Discussion 02: Hawaiian Cultural Significance of Coral Reefs	Quiz 01: The Importance of Coral Reefs	Sept 22
5	Coral Reefs Distribution, Types, Zonation and Hawn. Island Formation			Quiz 02: Coral Reefs Distribution, Types, Zonation and Hawn. Island Formation	Sept 29
6	Coral Biology Basics, Nutrition and Growth		Written Padlet 02: Coral Colony Diagram	Quiz 03: Coral Nutrition and Growth	Oct 6
7	Coral Reproduction		Written Padlet 03: Coral Life Cycle	Quiz 04: Coral Reproduction	Oct 13
8	Ecology	Video Padlet 02: Kilo Practice		Quiz 05: Ecology	Oct 20
9	Coral Reef Ecology		Written Padlet 04: Coral Reef Food Web	Quiz 06: Coral Reef Ecology	Oct 27
10	Hawaiian corals and other invertebrates	Video Padlet 03: Most interesting invertebrate	Written Padlet 05: Hawn. Uses of Marine Inverts		Wed Nov 4
11	Biology of fishes and Hawaiian reef fishes	Video Padlet 04: Kilo the Reef			Nov 10
12	Reef Connectivity and Associated Ecosystems			Quiz 07: Reef Connectivity, Mangroves and Seagrasses	Nov 17
13	Impacts to Coral Reefs	Video Padlet 05: Local + Global Solutions	Written Padlet 06: Coral Reef News		Nov 24
14	Reef Resilience and Conservation	Video Padlet 06: Coral Reef MPAs	Written Padlet 07: Coral Reef Marine Protected Areas		Dec 1

15	Coral Reef Restoration		Written Padlet 08: Coral Reef Restoration Assignment		Dec 8
16	Final Project: Create a PSA for the Holomua Initiative				Thurs Dec 17

Regular Substantive Interaction (RSI)

Online courses at Windward Community College follow these guidelines for ensuring quality instruction: RSI Definition-WCC.

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 the use of quotes or summarizing with reference to the original author.
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.
Windward CC Student Conduct Information
UH System Student Conduct Policy EO 7.208

Student Responsibilities

- Expectations
- Additional policies (e.g., cell phones in the classroom, late work, attendance, missed work, extra credit, participation, netiquette)
- Any information you feel the student needs to know
- Students may check the Student Notifications page on the website for canceled classes

How to Seek Academic or Technical Support

Academic Support

- Windward Community College Library
- Library eResources
- Ka Piko Writing Lab
- Ka Piko Speech Lab
- Ka Piko Math Lab
- Evening and Online Learning at Windward Community College
- STAR Balance

Technical Support

- UH ITS Help Desk – email help@hawaii.edu or call 956-8883 (or 1-800-558-2669) for Lamakū and most technology support. Available 24 hours a day, 7 days a week, including holidays.

- Student Tech Support - email winhelp@hawaii.edu, call 808-235-7437, or stop by in person at Hale La'akea 228. Available Monday–Friday from 8:00 am–4:00 pm.
- Lamakū – Click on the Lamakū Help link in the menu bar at the top of the Lamakū homepage to fill out and submit a question and get your answer via email.
- Information Security for Students

College Policies & Support Services

Disabilities Accommodations Statement

The Windward Community College's Disability Student Services Office (WCC-DSSO) is committed to providing equal access to qualified students with disabilities.
If you have a physical, sensory, health, cognitive, or mental health disability that could limit your ability to participate fully in this class, you are encouraged to contact the Disability Specialist Counselor, Roy Inouye, to discuss reasonable accommodations that will help you succeed in this class. The Disabilities Counselor can be reached at 808-235-7448, wccdsso@hawaii.edu, or stop by the office (Hale Kako'o 106) for more information.

TRIO PROGRAM

The Federal TRiO Programs are educational opportunity outreach programs designed to motivate and support students from disadvantaged backgrounds. TRiO includes six outreach and support programs targeted to serve and assist low-income, first-generation college students and students with disabilities in progressing through the academic pipeline from middle school to post-baccalaureate programs. Here is their contact info:https://windward.hawaii.edu/trio/

Basic Needs

Basic needs include food and housing, childcare, mental health, financial resources, and transportation. Student basic needs security is critical for ensuring strong academic performance, persistence and graduation, and overall student well-being. If you or someone you know is experiencing basic needs insecurity, please see the UH System Basic Needs website.

Mental Health Counseling

Mental Health and Wellness at Windward Community College counseling services and activities on campus to support students' life goals as well as their academic goals. Information about services can be found at the WCC Mental Health & Wellness website.

LGBTQ+

The University of Hawai'i system and Windward Community College are committed to building an inclusive community that supports and advocates for all Students, Staff, and Faculty. We welcome all members of our campus community to our campuses: transgender, māhū, and people of all gender identities. All members of our campus community deserve a work and educational environment free from harassment or bullying based on their sexual orientation, gender identity, or expression. University of Hawai`i Commission on LGBTQ+ Equality at their website: http://www.hawaii.edu/offices/president/lgbtq/ Windward Community College Commissioner: Scott Sutherland, scottjks@hawaii.edu

UH Alerts

The UH Alert emergency notification system alerts the university community in the event of a natural, health or civil emergency. The information you provide will only be used in the event of an emergency that impacts the health and safety of the UH community or the closure of whole

campuses. It will not be shared with others or used for routine UH communications or announcements. To sign up, visit UH Alerts website for more information.

Financial Aid

If you are receiving financial aid and are contemplating not completing the course, BEFORE you withdraw, it is highly recommended that you contact the Financial Aid Office at 808-934-2712 or email them at wccfao@hawaii.edu to discuss the impact this decision may have on your financial aid eligibility.

Student Conduct Code

Windward Community College follows the University of Hawai'i Code of Student Conduct which defines expected conduct for students and specifies those acts subject to University sanctions. Students should familiarize themselves with the Code of Student Conduct since, upon enrollment at Windward Community College, the student has placed herself/himself under the policies and regulations of the University and its duly constituted bodies. The disciplinary authority is exercised through the Office of the Vice Chancellor for Student Affairs. Copies of the Student Conduct Code are available at the Office of the Vice Chancellor for Student Affairs or online.

Title IX - Sex Discrimination And Gender-Based Violence Resources

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:

Leslie Cabingabang, UH System Confidential Advocate
Phone/Text: (808) 348-0432 or (808) 341-4952
Email: advocate@hawaii.edu
Office: Hale Kāko'o 107 (Wednesdays)

Mykie E. Menor Ozoa-Aglugub, J.D., Title IX Coordinator
Phone: (808) 235-7468
Email: mozoa@hawaii.edu
Office: Hale Kāko'o 109

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

Karen Cho, Deputy Title IX Coordinator
Phone: (808) 235-7404
Email: 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/