

## BIO124 ENVIRONMENT AND ECOLOGY

03 Credit (CRN 64496)

NALU Studies (M-F 03/11 to 03/27/2023)

**INSTRUCTOR:** Derek Esibill MS, Manning Taite, Jayten Galario  
**OFFICE:** Hale Uluwehi B104  
**TELEPHONE:** (808)284-6388  
**EMAIL:** esibill@hawaii.edu  
**EFFECTIVE DATE:** Spring 2023

### 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.*

### COURSE DESCRIPTION

BIO 124 offers a research experience in science, technology, engineering, and/or mathematics, emphasizing the application of the scientific method to a specific project. The Experiential Learning in Environmental Sciences course for youth in Hawai'i at University of Hawai'i Maui College Community College and the communities of Maui County, will focus on utilizing a hands-on educational approach in an effort to provide Hawai'i's high school students with a depth of knowledge and understanding that will support them in making relevant and informed decisions with respect to the environment. This course will consist of a clearly defined focus on stewardship through discussions on concepts and information led by scientists and professionals in the areas of environmental science, marine science, meteorology, biology, chemistry, creative writing, scientific writing, art, technology, and Hawaiian culture, focusing these disciplines as they pertain to sustainable agriculture. These participating scientists, professionals, and staff will provide the students with hands-on training on techniques and equipment use in an effort to establish a solid knowledgebase and skill set in environmental science. Students will engage in ridge to reef expeditions that quantify ecosystem functionality along with stewardship activities that aid in the restoration of ecosystem functionality and human well being.

### STUDENT LEARNING OUTCOMES

*The student learning outcomes are:*

1. Explain the process and philosophical basis of scientific inquiry.
2. Describe the basic principles of ecology, including population ecology, community ecology, and ecosystem function.
3. Describe the characteristics of the major biomes and ecosystems of the Earth.
4. Describe the interrelationships between land, sea, the atmosphere and the living things that occupy these environments.
5. Discuss the role that humans play in affecting the characteristics of the environment.

*Windward Community College is an equal opportunity, affirmative action institution.*

6. Evaluate current environmental issues and problems including the solutions and management practices that have been used or offered to address these issues and problems.

## COURSE TASKS AND EVALUATION

The Experiential Learning in Environmental Sciences course at Windward Community College focuses on utilizing hands-on, experiential education approaches and discussions by Hawaii's scientists and professionals in an effort to support and provide Hawaii high school students with a depth of knowledge and understanding that will allow them to make relevant and informed decisions regarding environmental stewardship and career choices. Students enrolled in this course will be evaluated through attendance and active participation, written exercises, quizzes that review scientific concepts and applications, laboratory/field reports, a formal scientific paper, a final examination, and a symposium presentation.

The assignment of points will be according to the following protocol:

Active Participation & Attendance	200	points
Daily Written Exercises	50	points
Laboratory/Field Reports	150	points
Formal Scientific Paper	200	points
Final Examination	200	points
Symposium Presentation	200	points
<b>TOTAL</b>	<b>1000</b>	<b>points</b>

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>	70-79.9% of total points.
<b>D</b>	60-69.9% of total points.
<b>F</b>	Below 60% of total points or informal or incomplete official withdrawal from course or unacceptable attendance (<85% of scheduled days and activities).
<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>	70% 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 70% 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 BY THIS INSTRUCTOR EXCEPT UNDER EXTREMELY RARE CIRCUMSTANCES</b> (e.g., documented serious illness or emergency that prevents the student from officially withdrawing from the course); not used as an alternative for an “F” grade.
<b>W</b>	Official withdrawal from the course (see catalog).

Waiver of minimum requirements for specific grades may be given only in unique situations at the instructor's discretion.

### **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. Roy Inouye can be reached at (808) 235-7448, [royinouy@hawaii.edu](mailto:royinouy@hawaii.edu), or you may stop by Hale Kāko‘o 106 for more information.

### **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

*Windward Community College is an equal opportunity, affirmative action institution.*

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/](https://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. The use of artificial intelligence (AI), such as Chat GPT is not the student's own work and is considered academic dishonesty. 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.

## **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: Alaka'i 121
- Phone: (808) 235-7422