



UNIVERSITY of HAWAII®
WINDWARD
COMMUNITY COLLEGE

ERTH 101, Dynamic Earth Laboratory

| 1 Credit

CRN 63431 (zoom <https://hawaii.zoom.us/j/8082555139>, Th 10:00-11:00 and Laulima) |

INSTRUCTOR: Dr. Arjun Aryal
OFFICE/CLASS: Hale Imiloa 113
OFFICE HOURS: | Th 10:00 AM to 11:00 AM, (in-person or zoom) |
TELEPHONE: 8084624868 **EMAIL:** aryal@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

Hands-on study of minerals, rocks, and topographic maps. Examine volcanism, hydrology, coastal processes and hazards, geologic time and earthquakes. Field trips to investigate landslides, beaches and O'ahu geology. (1 hrs. lect.) WCC:DY |

STUDENT LEARNING OUTCOMES

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

1. Students can explain the relevance of geology and geophysics to human needs, including those appropriate to Hawaii, and be able to discuss issues related to geology and its impact on society and planet Earth.
2. Students can apply technical knowledge of relevant computer applications, laboratory methods, and field methods to solve real-world problems in geology and geophysics.
3. Students use the scientific method to define, critically analyze, and solve a problem in earth science.
4. Students can reconstruct, clearly and ethically, geological knowledge in both oral presentations and written reports.

5. Students can evaluate, interpret, and summarize the basic principles of geology and geophysics, including the fundamental tenets of the sub-disciplines, and their context in relation to other core sciences, to explain complex phenomena in geology and geophysics.

LEARNING RESOURCES

Course Website: <https://laulima.hawaii.edu/portal>

Textbook / Lab Kit: Required - Introductory Physical Geology Laboratory Kit and Manual, published by Kendall Hunt, ISBN: 978-1-4652-7000-9.

Please purchase the kit from the WCC bookstore at <https://hawaii-windward.verbacompare.com/comparison?id=8649>. They will ship it to you if you like.

Please note, you need to access the Textbook/Lab Kit portal to access some of the materials but all the assignments will be in Laulima.

COURSE TASKS

Weekly study guide or ‘roadmap’: Please check Laulima portal /Resources/Week# for a weekly ‘roadmap’. This study guide will describe your course resources, assignments, and expectations for the corresponding week.

Online discussions: Class participation (in-person lab visits or/and online discussion) is required. Students are required to access Laulima frequently (at least once a week), and check emails, announcements, and discussions regularly.

Quiz and Lab Assignments: Quiz and Labs each constitute 25% each of the course grades. There will be a weekly quiz and Labs. Please check your Laulima portal for the weekly roadmap that explains your assignments. Quiz/labs are due by Saturday midnight. One of the homework might require an independent field visit in the island you are in. The weekly quiz and lab will be available in Laulima on Mondays and due Saturdays (midnight).

Midterm and Final: There will be one midterm exam and a final exam. Most of the questions will be in multiple-choice format. Exams will be in Laulima.

Grading: Grading will be based on the following points distribution

Quiz	40%
Homework	20%
Midterm exam	20%
Final exam	20%
Class participation/Online Discussion	3% (extra credit)

Letter Grade Breakdown: A = 90%+; B = 80 – 89%; C = 70 – 79%; D = 60 – 69%; F = < 60%

Please check your gradebook in Laulima regularly.

Make-Up Exams/Early Exams: Midterm and Finals will be available for a limited period of time. Please contact me in advance if you may not be able to attempt your exams at the specified date and time.

COURSE CONTENT

Concepts or Topics and Schedule (Tentative):

Week #, Week of	Topic
1, Aug 22	Introduction and setting the stage
2, Aug 29	Topographic Maps
3, Sep 5	Plate Tectonics
4, Sep 12	Rock Deformation and Mountain Building
5, Sep 19	Earthquakes and Seismology
6, Sep 26	Minerals
7, Oct 3	Igneous rocks and volcanism
8, Oct 10	Sedimentary and Metamorphic Rocks
9, Oct 17	Midterm
10, Oct 24	Geologic time
11, Oct 31	Mass Wasting
12, Nov 7	Streams and Groundwater
13, Nov 14	Oceans, Coastline and Beach process
14, Nov 21	Beach erosion/loss in Hawaii, Glaciers
15, Nov 28	Geologic Resources
16, Dec 5	Review
17, Dec 12	Final Exam

Please check the weekly 'roadmap' at /Resources/Week# folder in Laulima for more details.

ADDITIONAL INFORMATION

This is an online (synchronous or asynchronous) class. Online class participants may have an option to visit the lab when possible.

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, royinouye@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
Office: Hale Kāko‘o 110

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

Karla K. Silva-Park, Title IX Coordinator
Phone: (808) 235-7468
Email: karlas@hawaii.edu
Office: Hale Kāko‘o 128

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/

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.

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