

GG 211 BIG ISLAND FIELD GEOLOGY

1 Credit (CRN 64456)

Nov. 23-26, 2018

INSTRUCTOR: Prof. Floyd W. McCoy
OFFICE: Hale Imiloa 115
OFFICE HOURS: Tues. – Thurs. 12:45-1:45; Thurs. 4:00-5:30
TELEPHONE/E-MAIL: 236-9115/fmccoy@hawaii.edu
EFFECTIVE DATE: Nov. 23-26, 2018

WINDWARD COMMUNITY COLLEGE MISSION STATEMENT

Windward Community College is committed to excellence in the liberal arts and career development; we support and challenge individuals to develop skills, fulfill their potential, enrich their lives, and become contributing, culturally aware members of our community.

CATALOG DESCRIPTION

A four-day field course on the island of Hawaii. A survey of Hawaiian volcanic processes as illustrated by on-site study of Kilauea, Mauna Kea, Mauna Loa, Hualalai, and Kohala subaerial volcanoes, and discussion of Mahukona and Loihi submarine volcanoes. Students are responsible for air and ground transportation, meals, and lodging. (3 hours laboratory)

Activities Required at Times Other Than Class Times

Review of pertinent articles, notes, and other sources of information on the geology and geophysics of the Big Island preparatory to submitting final reports and/or field laboratory exercises. Submission of completed and signed permission/waiver/medical forms are required (if you have submitted these forms for other WCC field courses then new forms need not be submitted).

STUDENT LEARNING OUTCOMES

The student learning outcomes for the course are:

- Understand through field observation, with field and laboratory exercises, geological processes that construct, modify, and destroy the Hawaiian landscape.
- Realize the hazards, mitigation of these hazards and benefits of Hawaiian volcanism, and its relationship to island culture(s).
- Appreciate current research and studies of Hawaiian volcanism through visits to appropriate museums and research laboratories.
- Understand the vastness of geological time applied to Hawaii, and how time is measured thus the time-scale known.

COURSE CONTENT

Concepts or Topics

- Identification of common rocks and minerals with focus on those found in Hawaii.
- Recognition in the field of the common rock and sediment types found in Hawaii, with an understanding of their origin.
- Recognition of landscape features, with an understanding of their origin.
- Geologic time, hazards, and hazard mitigation.
- Stratigraphic relationships.
- Interpretation of geological features in terms of their origin/preservation, and connections to the Hawaiian culture.
- Application of concepts noted above to the geologic history of the Big Island.
- Use of various types of instruments in the field for mapping and acquiring information on geological structures.

Skills or Competencies

1. Understand the scientific method, and how it is used and applied.
2. Observe and interpret geologic and landscape features.
3. Apply descriptive and interpretive observations into a coherent and understandable report.
4. Appreciate geologic time, and its recognition in Hawaii's geology.
5. Appreciate the geologic and cultural past with the capability to predict a geologic and sustainable future.

COURSE TASKS, ASSESSMENT AND GRADING

- Examinations:** A final examinations may be given. Two or more field exercises, and a written paper also will be assigned.
- Grading Scheme:** Participation at and during all field sites is required and will represent 50 points of a final grade. An additional sum of 50 points shall come from a final written examination (if one is given), and/or from grades assigned to completed and submitted field laboratory report(s) plus the written paper. Total possible points = 100.
An alphabetic grade will then be assigned with:
- | | |
|---------------------|-------------------------|
| A = 100 - 90 points | D = 69 - 60 points |
| B = 89 - 80 points | F < 59 points |
| C = 79 - 70 points | C/NC = credit/no credit |
- N = course not completed due to unforeseen difficulties, this grade rarely given
I = incomplete; assigned only after discussion with instructor; must be changed to an A - D letter grade the following semester, or the I becomes a permanent F grade (unless otherwise noted by the instructor).

Extra/Special Credit: None can be provided.

LEARNING RESOURCES

- Textbooks (optional):** Macdonald, Abbott and Peterson; *Volcanoes in the Sea, The Geology of Hawaii*, Univ. Hawaii Press, 1983 (2nd edition)
or
Macdonald and Abbott; *Volcanoes in the Sea, The Geology of Hawaii*, Univ. Hawaii Press, 1970 (1st edition)
- Ancillary Reading and Events:** Supplementary reading will be provided. Additional reading is in libraries at all campuses, both on reserve and on open shelves; you are encouraged to peruse this literature; numerous seminars, talks, symposia and exhibits occur throughout the university system and at various museums, you are particularly encouraged and welcomed to these; announcements made in class, posted on the Marine Option Program bulletin board in Hale 'Imiloa at WCC, or listed on the website; posters depicting various aspects of geology and field trips are on bulletin boards in the Hale Imiloa foyer.

ADDITIONAL INFORMATION

- Schedule/Logistics/etc.** These will be provided separately once known and scheduled. Changes due to weather, eruptions, floods, tsunamis, etc., should be expected. Safety is of primary importance and safety briefings will be given with emergency procedures outlined. Submission of completed and signed permission/waiver/medical forms are required - access to these will be announced in various classes and on bulletin boards.
- Other Field Trips:** Not required but highly recommended, all have somewhat the same prerequisites as this field course; each requires registration at WCC; 1 credit awarded for each course; complete course descriptions are given in the WCC academic catalog.

GG 212 - Maui Field Geology: spring semester, 2019; during first four days of spring recess; may involve a difficult one-day hike through Haleakala.

GG 213 – Molokai, Lanai and Kahoolawe Field Geology: spring semester, 2020; during first five days of spring recess; involves hiking to Kalaupapa and possibly one night there in rustic accommodations, a one day hike around the Kalaupapa peninsula, flying in small aircraft to Lanai, and driving over rough roads on Lanai.

GG 214 - Kauai and Ni'ihau Field Geology: spring semester, 2021; first four days of spring recess involves short easy hikes.

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 Disability Specialist Counselor to discuss reasonable accommodations that will help you succeed in this class. Ann Lemke can be reached at 235-7448, lemke@hawaii.edu, or you may stop by Hale Ākoakoa 213 for more information. Accommodations in the field for disability access to field and laboratory locations is extremely difficult – please contact the instructor well prior to the course if such might be considered.

TITLE IX

Title IX prohibits discrimination on the basis of sex in education programs and activities that receive federal financial assistance. Specifically, Title IX prohibits sex discrimination; sexual harassment and gender-based harassment, including harassment based on actual or perceived sex, gender, sexual orientation, gender identity, or gender expression; sexual assault; sexual exploitation; domestic violence; dating violence; and stalking. For more information regarding your rights under Title IX, please visit: https://windward.hawaii.edu/Title_IX/.

Windward Community College is committed to the pursuit of equal education. If you or someone you know has experienced sex discrimination or gender-based violence, Windward CC has resources to support you. To speak with someone confidentially, contact Karla Silva-Park, Mental Health Counselor, at 808-235- 7468 or karlas@hawaii.edu or Kaahu Alo, Designated Confidential Advocate for Students, at 808-235- 7354 or kaahualo@hawaii.edu. To make a formal report, contact the Title IX Coordinator at 808-235-7393 or wcctix@hawaii.edu.

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 not receive passing grades. 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: Alakai 121
Phone: 808-235-7422
Email: wccaa@hawaii.edu

IMPORTANT:

FIELD COURSE STARTS : Hilo (Sand and Seaside Hotel, lobby), Friday, 0900 Nov. 23, 2018.

FIELD COURSE ENDS : Kona Airport, 7:00pm Nov. 26, 2018.

Submission of completed and signed permission/waiver/medical forms is required (if you have submitted these forms for other outer-island WCC field courses then new forms need not be submitted). Forms may be obtained in the Hale Imiloa hallway outside of room 115.

