

## **OCN 120 GLOBAL ENVIRONMENTAL CHALLENGES**

3 Credits

Spring, 2016

Tuesday & Thursday 11:30-1:00

Hale Imiloa Rm. 122 (Seminar/Conference Room)

**INSTRUCTOR:** Dr. Floyd W. McCoy  
**OFFICE:** Hale Imiloa 115  
**OFFICE HOURS:** Mon. 2:00-5:30; T & Th. 2:30 – 3:30  
**TELEPHONE/E-MAIL:** 236.9115 / fmccoy@hawaii.edu  
**EFFECTIVE DATE:** Spring, 2016

### **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**

Scientific approach to evaluating human-caused environmental challenges and their potential solutions, with focus on the oceans and the ocean's response/reaction to these challenges.

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

Announced in class.

### **STUDENT LEARNING OUTCOMES**

The student learning outcomes for this course are:

- Apply scientific principles and methods to describe natural Earth system interactions and human impacts on the environment.
- Solve very basic problems involving chemistry and physics, and read and create graphs of data.
- Apply scientific principles and methods to compare causes of environmental problems and impacts of potential solutions to environmental challenges.
- Apply scientific principles and reasoning to critically evaluate proposed explanations for global environmental challenges.

### **COURSE CONTENT**

This course will be taught in a seminar format. Every other week will be formatted with a guest speaker addressing a topic concerning climate change and the consequences to Hawaii, with focus on impacts to the ocean and its surrounding terrestrial margins. Preliminary to each speaker, readings on the subject to be presented by the speaker may be assigned. The following class meeting would continue a dialogue on the subject presented by the speaker, the discussion monitored and lead by a student enrolled in the class who will have investigated the subject further to guide aspects of the subject such as additional impacts, publicity and public awareness of the issue, local and regional mitigation (if any), solutions and the path to those solutions. The student leading the seminar discussion will then compose an article/paper appropriate for publication on the course website, which may be released for publication in the open press. Further information on speakers, a schedule of presentations, as well as details on the consequent publication, will be given in class.

## COURSE TASKS, ASSESSMENT AND GRADING

### Type of examinations & examination schedule:

A written, essay-type, final examination may be scheduled. No other examinations are planned or scheduled for this course.

**Grading rubric & scheme:** letter grades assigned according to attendance [20 pts., see below], quality of leadership and scholarly preparation for the seminar which that student has lead [20 pts.], completeness and innovation in composition of the article/paper written following that seminar session [20 pts.], participation in discussions during both speaker presentations and later seminar sessions [20 pts.], in addition to accomplishment on the final examination [20 pts. – if no final examination is given, points as noted above will be redistributed accordingly]:

A = 90 - 100	B = 80 – 89	NC = no credit, no grade assigned
C = 70 - 79	D = 60 – 69	N = course not completed due to unforeseen difficulties
F = < 60	I = incomplete due to unusual circumstances and assigned only with permission of the instructor; no credit given until this grade is changed to an A-D letter grade - it is your responsibility to see this change made.	

**Attendance:** This is a university course that you have selected and paid for. The presumption is that you will attend lectures. Accordingly, your absence will be noted and there is little prospect of passing this course without attending all seminars.

**Extra Credit:** Willingly and delightfully awarded after attendance or participation in any of the ancillary activities noted below. Please provide some documentation, oral or otherwise, that you did this.

## LEARNING RESOURCES

Announced and distributed in class – no textbook exists for this course.  
The course website address will be given in class.

## Additional Information

### Ancillary Activities:

- SOEST (School of Oceanography, Earth Science, and Technology) - it is here where current and significant research is being done on global climate change, especially with respect to oceanic impacts at sea and ashore. Numerous seminars, talks, symposia and exhibits occur at SOEST and throughout the university system as well as at various museums -- you are particularly encouraged and welcomed to these. Whenever possible, these will be announced in class. Research groups at SOEST involved in global climate change research and education efforts include (for details go to <http://www.soest.hawaii.edu>): Hawaii Inst. Geophysics & Planetology; Intl. Pacific Res. Center; Hawaii Inst. Marine Bio.; Joint Inst. Marine and Atmospheric Res.; Hawaii Natural Energy Inst.; Center of Microbial Oceanography; UH Sea Grant Program...
- The Marine Option Program (MOP) is a certificate program at most campuses of the university that encourages direct participation in the science, sociology, art, management, engineering and literature of the oceans. MOP participation is essential to a career in oceanography within Hawaii. MOP is an especially viable and active program at WCC; as a university-wide program, you may easily transfer MOP credits, projects, contacts and friendships to any campus following graduation from WCC. Announcements concerning MOP events and programs are made in class and/or posted on bulletin boards in the MOP office, Hale 'Imiloa, room 118.
- Bishop Museum – here the study and influence of past climates on anthropogenic cultures, especially the Polynesian culture, is the focus. It is this past that is the key to our future.
- Supplementary, non-required reading is in the library, both on reserve and on open shelves; these include magazines and books; you are encouraged to peruse this literature.

*Extra credit provided for participation at any of these – simply submit some evidence of your attendance before the last day of classes.*