

OCN 120: GLOBAL ENVIRONMENTAL CHALLENGES

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Office Hours: Class Meeting Time: Class Location:

Description:

Oceanography 120: Global Environmental Challenges, 3 credits

This course focuses on scientific approaches to evaluating human-caused environmental challenges and their potential solutions.

Prerequisites:

Students should be qualified for ENG 22 and MATH 24 or 26.

Student Learning Outcomes:

1. Apply scientific principles and methods to describe natural Earth systems and human impacts on the environment
2. Solve very basic problems involving physics and chemistry of Earth systems
3. Compare impacts of potential solutions
4. Apply scientific principles and reasoning to critically evaluate proposed explanations for global environmental challenges
5. Identify value judgments inherent in different choices in addressing or failing to address global environmental challenges

Materials:

Required Books (2):

- Brown, L., Plan B 4.0: Mobilizing to Save Civilization, Earth Policy Institute, 2009: <http://www.earth-policy.org/index.php?/books/pb4>
- Archer, D., Global Warming: Understanding the Forecast, 2nd Edition, Wiley, 2011.

Required Supplies: Three-ring binder, paper, pencils, and eraser.

Tentative Course Schedule:

<u>Weeks</u>	<u>Topic</u>
1-2	Science: Principles and Methods
3-4	Natural Systems
5	Exam 1
5-6	Sustainability Concepts and History
6-7	Population Dynamics
7-9	Climate Change
9	Exam 2
10	Energy Resources
11	Food Production and Resources
12	Water Resources
12	Exam 3
13-15	Potential Solutions and Other Responses
16	Final Projects
Final Exam	TBA

Attendance Policy/ Adding and Dropping:

You will not pass if you do not come to class. Class attendance is the easiest way you can ensure some success in the class. Class participation comprises a portion of your grade and you will automatically lose those points by being absent. If you must miss class, notify the instructor and make arrangements with a classmate to keep informed on lecture topics, handouts, and assignments. This course requires a major time commitment. If you are not willing or able to make the time commitment to this course, then you should not enroll. Do not expect the instructor to “cut you any slack.”

It is the student’s responsibility to drop all classes in which he/she is no longer attending. And, it is especially important to drop before the appropriate deadline. The withdrawal deadline is published in the student schedule and listed online. Be sure to check with the registrar, in case the date changes. Students remaining in class beyond the withdrawal deadline will receive an evaluative letter grade in this class (i.e. an “F” if you stop coming to class but forget to drop).

Student Responsibility for Learning:

Studies indicate students learn more effectively by doing, rather than sitting and listening. Your individual efforts are more important for your learning than anything the instructor does or says. Students are responsible for their own learning. Students can increase their chance of success by active participation in course discussion and activities, genuine effort to complete all assignments. The effort you put into the class is the number one factor in determining what you get out of it. You should schedule about **6 hours per week outside of class to complete your assigned reading and homework.**

Assignments and Grading Policy:

All students will receive a letter grade unless prior arrangements for credit/no credit have been made. There will be no "incompletes." Grading will be based on a point system as described below:

- 40% - Papers (15%, 25%)
- 30% - Exams (2)
- 30% - Homework, In-class Exercises, Quizzes, Participation

Assigned papers

Each paper will require you to research and write about some aspect of a global environmental challenge.

- Paper 1 will be assigned on Monday February 25, and the final version will be due on Thursday March 21st at 9:30 am (with a hard copy brought to class that week).
- Paper 2 will be assigned on Monday April 1st and will be due in final form during at the end of the final exam session scheduled for OCN 120 (with a hardcopy brought to class that day).

You may discuss the term paper assignments with each other. Discussion is an important part of the learning process. But, the work that you submit must be your own. Each of you must individually submit the assignment. It is very important that you actually do the work yourself. Any direct evidence of plagiarism will be grounds for receiving an F in the entire course.

Term Paper Evaluation:

- Papers will be submitted through turnitin.com, which time-stamps the submissions and checks for plagiarism.
- No late homework without prior arrangements for an extension.
- Papers must be typed and submitted electronically.
- Brevity and clarity are critical attributes of good reports.
- We will be interested in:
 - ✓ Clarity of argument;
 - ✓ Quality of discussion;
 - ✓ Evidence of research and reading;
 - ✓ Synthesis of diverse sources;
 - ✓ Independence of thought.
- Marks will be lost for:
 - ✓ Poor grammar;
 - ✓ Poor spelling;
 - ✓ Unnecessary length.

Examinations

Exams will emphasize understanding and synthesis rather than regurgitation of material. There will be two examinations comprised of short answer and essay questions, with some calculation and problems solving. Exam questions may be drawn from readings in the textbook, lecture materials (including handouts or other supplements), homework assignments, slides, and in-class activities.

Homework Assignments

Assignments will be announced in class. This is a writing intensive class. In addition to the research papers, a number of assignments will involve writing an defending different positions on controversial issues. Late homework may not be accepted.

ASSIGNMENTS CANNOT BE ACCEPTED AFTER THE ANSWERS HAVE BEEN DISCUSSED. Any late homework that is accepted will receive a 50% deduction.

In-Class Exercises:

Several will be completed in class throughout the semester. These assignments are generally due at the end of the same class period in which they are assigned and cannot be made up.

Quizzes:

Quizzes on assigned reading or in-class discussion will frequently be given at the beginning of class. Quizzes cannot be made up.

Participation:

Collective participation has been shown to improve the learning outcomes of the individuals who participate as well as the whole class. Participation is mandatory for your benefit! A portion of your grade depends on your active participation during class discussions and activities. Of course, you must attend class in order to participate.

Reading Assignments:

Textbook and additional reading is required.

Overall Grading Evaluation:

Grading is a crucial part of the course, of course! There are no preconceived notions of the correct number of As, Bs and Cs that will be awarded. Good performance will obtain a good mark irrespective of the performance of the rest of the class.

Final letter grades will (approximately) follow the standard grading model.

<u>Grade</u>	<u>Award Criterion</u>	<u>GPA pts</u>	<u>Approximate Total</u>
A	Excellent Achievement	4.0	>=90%
B	Above Ave. Achievement	3.0	80-89%
C	Average Achievement	2.0	70-79%
D	Minimal Passing Achievement	1.0	60-69%
F	Failure	0	<60%
I	Incomplete	0	
W	Withdrawal (see catalogue for date)	0	
N	No Grade Assigned	0	

Cheating/Plagiarism:

Think again! Cheating or plagiarism will not be tolerated. Any direct evidence of plagiarism in the homework will be grounds for receiving an F in the entire course. We will also report you to your college for administrative penalties. Furthermore, any evidence of cheating on either the final or the midterm will be grounds for receiving an F in the entire course. Specifically, the following behaviors are examples of cheating/plagiarism (this list is not extensive, believe it or not):

- Using unauthorized notes while taking an exam.
- Copying another student's work inside or outside of class.
- Turning in homework that is identical to another student's (both parties will receive a score of zero)
- Copying from any source (including the Internet) without citing the source.
- Turning in work completed for another class (unless pre-authorized by the instructor).
- Passing off any work as your own that is not.
- Looking at another student's work or communicating with other students during an independent assignment or examination, including the use cell phones.

"Academic dishonesty cannot be condoned by the University. Such dishonesty includes cheating and plagiarism which violate the Student Conduct Code and may result in expulsion from the College." (Kauai Community College Catalog).

Student Conduct:

Student behavior in class is expected to be in accordance with UH System Policy as expressed in the college catalog. Disruption of the class by cell phones, pagers, or beepers will NOT be tolerated and the offender will be asked to leave the class for the remainder of that session. Do everything in your power to contribute to a professional, enjoyable classroom environment. Recording of any lecture must first receive prior approval of the instructor. Copies of the Student Conduct Code are available at the Office of the Vice Chancellor of Student Affairs.

Accommodation:

Students with physical or learning disabilities will be accommodated with lecture/test materials by mutual agreement between individual students and the instructor. Please present any relevant paperwork at the beginning of the course. If you have a disability and have not voluntarily disclosed the nature of your disability and the support that you need, you are invited to contact the Counseling and Advising Office at 245-8212.