WE'U

Chaminade University Winter 2001

LECTURE AND LAB SYLLABUS Biology 11060 and 11060L **People and Nature**

Instructor

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Meeting Dates/Times Jan 8 - Mar 21; T, Th, Lecture 16451850, Lab 1905-2110 Chaminade University requires that at least two labs be held on the main campus. One of these will include a Saturday morning field trip, held in lieu of a Thursday evening session (see course schedule).

Course Description

People and Nature is a 3-credit course which surveys environmental science. We will investigate how living things interact with their environments, and consider problems that arise when balances are not maintained, especially with regard to human activities. Topics include: scientific methodology, history of science, ecological terms and theories, global population growth, pollution, global warming, habitat loss, waste of resources, and extinction. The 1-credit Biology 11060L lab must be taken concurrently with lecture.

Course Objectives

At the end of this course, the student will have: 1) basic knowledge of the processes of the natural environment, including the complex relationships among living things and their environment; 2) an understanding of current environmental issues, including an historical perspective; and 3) an awareness of possible solutions to certain environmental problems.

Required Text

Environmental Science: Working With the Earth, (8th ed.), by G. Tyler Miller, Brooks/Cole, Pacific Grove, CA. 2001. There is no laboratory manual; lab handouts will be provided.

Grading

Lectures and labs are graded separately. Lecture grades will be based on four exams, four article summaries, several written assignments, and class participation and attendance (P/A). Lab grades will be based on lab assignments, and participation and attendance.

| LECTURE | | LAB | |
|---------------------|---------------|--------------|---------------|
| Exams | 200 pts | Lab notebook | 150 pts |
| Summaries | 80 pts | P/A | <u>50 pts</u> |
| Written Assignments | 40 pts | TOTAL | 200 pts |
| Final exam | 100 pts | | |
| P/A | 30 <u>pts</u> | | |
| TOTAL | 450 pts | | |

Grading scale: 90%=A; 80%=B; 70%=C; 60%=D

Attendance

Attendance is expected for each lecture and lab. Attendance for labs is especially important, as labs cannot be made up. Unexcused absences for lectures or labs will result in grade penalties to be determined by the instructor. Exams missed because of unexcused absences cannot be made up. Excused absences should be documented, e.g. physician's note. Early exams will not be given.

Article Summaries

Four summaries of articles related to current environmental topics will be required at times indicated on the course schedule. Two articles must be on local issues, two on national or global issues. Each summary is worth 20 points, included in the lecture grade. Summaries must be from a newspaper, journal, magazine, or electronic source not more than two years old. Each summary should be one to two pages long, word processed or typed, and double spaced. The summary must include author, title of article, source, date of publication, and page numbers. For web site publications, include author (if known), title, last date updated, URL, and date accessed. You must include a xerox copy of the article with your summary, or a print-out of a web site source.

Lab Notebook

You should have separate notebooks for lecture and lab. The lab notebook should be bound (spiral is acceptable), and will be used for observations, drawings, notes, data, and answers 14 questions on lab handouts. The notebook will be graded once at the end of the course, but will be collected from time to time for examination.

Academic Honesty

Students are expected to comply with the rules governing academic honesty as published by Chaminade University. Students involved in cheating or plagiarism will be issued failing grades for the exam or assignment in question.

TENTATIVE COURSE SCHEDULE

| Jan | 9 11 | T Th | Intro to course; environmental problems Scientific principles; intro to lab | Chap. 1 |
|-----|---------------|----------|---|-------------|
| | 16 18 | T Th* | Ecosystems Biodiversity | 4 5 |
| | 23 25 | T Th | Exam 1; effect of climate and weather Population dynamics, human health | 6 7,8 |
| Feb | 30 3 | T Sa* | Human population growth Field trip - Nuuanu stream (meet at campus 0800) | 9 |
| | 6 8 | T Th | Exam 2; atmospheric concerns Water resources and pollution | 10,11 12 |
| | 13 15 | T Th* | Field trip - H-Power (meet at Nimitz Gate 1430) Solid and hazardous waste | 14 |
| | 20 22 | T Th | Exam 3; shallow reef and tidepool ecosystems Field trip - Makapuu tidepools (meet at campus 1700 |) |
| Mar | 27 1 | T Th* | Food resources Sustaining terrestrial ecosystems | 15,16 17 |
| | 6 8 | T Th | Exam 4; sustaining wild species Energy resources | 18 19,20 |
| | 13 15 | T Th | Review for exam Final exam | |
| | 20 | T | Reserve day | |

^{*} Article summaries due