

COURSE: BI 110-^oPeople and Nature (Lecture)
TIME: 1730-1935 M & W (Apr. 02 - June 11, 2001)
INSTRUCTOR: Dr. Alan Ohta,
[email: ohta@i-one.com](mailto:ohta@i-one.com)

OFFICE HRS: 1630 - 1730M or by appointment

TEXT: *Environmental Science*, 9th ed. (2001), G. Tyler Miller, Jr.

COURSE DESCRIPTION: This course is designed to introduce you to our relationship with the natural environment and the consequences of our actions/inaction in dealing with it. In order to do this we must look at not only the purely scientific aspects of our world but we must also incorporate man's social aspects as well. Thus we will be combining ideas and information from both the natural sciences (i.e., biology, geology, physics, chemistry, etc.) and the social sciences (i.e., economics, politics, ethics, etc.) to try to gain an understanding of man's present relationship with the environment, what historical events have brought us here and what we must accomplish to insure our survival through the next millennium.

OBJECTIVES:

1. To gain some basic knowledge of the processes of our natural environment.
2. To increase awareness of the **complex** relationships among all living things and their non-living environment.
3. To examine man's past and present relationship with his environment and the possible affects of these relationships on our future.
4. To increase awareness of the environmental problems facing us today and to present some solutions to these problems.
5. TO **enhance your knowledge** and awareness of our environmental problems to enable more informed political and economic decisions.

LECTURES:

1. Lecture topics and text assignments are listed in the **course** outline.
2. Examination dates are also **listed** in the course outline.
3. The instructor reserves the right to add, omit, or change the materials as he sees fit.

EXAMS, QUIZZES & GRADES:

1. All exams & **quizzes** are "open book & notes" & will consist of short essay **questions**. You will be graded on your ability not only to answer the question (some can be answered in several ways), but also in how effectively you can defend your answer/position using your knowledge of the subject & applying what you **learned** through the use of appropriate facts/examples. Thus all questions **asking** for your opinion or position, **whether stated or not** have an implied **My?" or "How?"** question attached.
2. Grades will be based on the following system & scale:

Grade Scale:

90% & above = A

80 - 89% = B

65-79% = C

50 - 64% = D

49% & below = F

Grading System:

Quizzes 30%

Mid Term 30%

Final 40%

COURSE OUTLINE:

04/02/2001	Introduction to Science (Chap 3)
04/04	Earth History
04/09	Evolution
04/11	Environmental Problems: An Overview (Chap 1 & 2)
04/16	Ecology & Ecosystems (Chap 4 & 5)
04/18	Ecology (con't)
04/23	Water Resources (Chap 11)
04/25	Water Pollution
04/30	Air & Air Pollution (Chap 9)
05/02	Climate & Weather (Chap 10)
05/07	Midterm Exam
05/09	Minerals & Soils (Chap 12)
05/14	Food Resources (Chap 14)
05/16	Wastes & Hazardous Materials (Chap 13 & 15)
05/21	Non-renewable Resources (Chap 19)
05/23	Renewable Resources (Chap 18)
05/28	Holiday: Memorial Day
05/30	Population Growth: The Ultimate Problem (Chap 6)
06/04	Politics & Economics vs Environment (Chap 7)
06/06	Sustaining Systems (Chap 16 & 17)
06/11	Final Exam

COURSE: BI 110L-People and Nature (Lab)
TIME: 1950-2155 M & W (Apr. 02 - June 11, 2001)
INSTRUCTOR: Dr. Alan Ohta
[email: ohata@i-one.com](mailto:ohata@i-one.com)
OFFICE HRS: 1630 - 1730 M or by appointment

COURSE DESCRIPTION: The lab class for the course People and Nature is designed *to show man's* affect on the Hawaiian environment. Thus we will be learning some natural history of the Hawaiian Islands and will also go on field trips to places which show man's impact on paradise.

OBJECTIVES:

1. To increase awareness of the uniqueness of our local environment.
2. To observe man's impact on the Hawaiian environment.
3. To increase awareness of the environmental problems facing Hawaii today.
4. To observe some of the steps taken to protect the Hawaiian environment.
5. To increase appreciation for the natural environment.

ASSIGNMENTS:

1. All field trips will have a handout as a guide for the trip. These will be provided prior to the field trip and will be turned in on the class period following the field trip.
2. All lab exercises will require a written report using the format provided by the instructor. These reports will be due on the next lab period following the exercise or as announced by the instructor.

LABS:

1. Laboratory topics, assignments, & exam dates are listed in the course outline.
2. The instructor reserves the right to add, omit, or change the materials as he sees fit.

EXAMS, QUIZZES & GEES!

1. All exams & quizzes are "open book & notes" & will consist of short essay questions. You will be graded on your ability not only to answer the question (some can be answered in several ways), but also in how effectively you can defend your answer/position using your knowledge of the subject & applying what you learned through the use of appropriate facts/examples. Thus all questions asking for your opinion or position, whether stated or not have an implied "Why?" or "How?" question attached.
2. Grades will be based on the following system & scale:

Grade Scale:

90% & above = A
80 - 89% = B
65-79% = C
50-64% = D
49% & below = F

Grading System:

Labs	75%
Final	25%

COURSE OUTLINE:

04%02/2001	Hawaiian Natural History & Evolution
04/04	Hawaii's Unique Flora & Fauna
04/09	Introduction to Scientific Method
04/11	Experimental Design
04/16	Hawaii's Energy Problems
04/18	Hawaii's Energy Solutions
04/21	*Field Trip to the Board of Water Supply
04/25	Water Usage & Conservation
04/30	Water Conservation (Discussion)
05/02	Opala Collection
05/07	Opala Analysis
05/09	Hawaii's Waste Treatment Solutions
05/14	Foods Lab
05/16	*Field Trip to Sand Island Sewage Treatment Plant
05/21	Man's Effect on the Environment (Pali)
05/23	Solutions? (Alternate Energy)
05/28	Holiday: Memorial Day
05/30	Life Expectancy
06/04	Reef Walk at Paiko Lagoon (meet at CUH)
06/06	Final Exam
06/11	Time off from Field Trips