

**COURSE:** BI 110 - People and Nature (Lecture)

**TIME:** 09:40-12:50 MWF (July 01 – Aug. 09, 2002)

**INSTRUCTOR:** Dr. Alan Ohta

**email:** alohta@hotmail.com

**OFFICE HOURS:** MWF 08:30 - 09:40 a.m.

**TEXT:** *Environmental Science*, 8<sup>th</sup> 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 "Why?" or "How?" question attached.
2. Quizzes will be unannounced & if missed cannot be made up w/o a valid excuse.
3. 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:**

- 07/01/02 Course/Subject Introduction (Chap. 3)
- 07/03 Environmental Problems: An Overview (Chap. 1)
- 07/05 Earth History
- 07/08 Evolution (Chap. 5)
- 07/10 Climate & Weather (Chap. 6)
- 07/12 Ecosystems (Chap. 4 & 5)
- 07/15 Ecosystems (con't)
- 07/17 Water Resources & Pollution(Chap. 12)
- 07/19 Air & Air Pollution (Chap. 10 & 11)
- 07/22 Midterm Exam
- 07/24 Soil & Agriculture (Chap. 13, 15, & 16)
- 07/26 Toxins, Wastes & Health (Chap. 8 & 14)
- 07/29 Non-renewable Resources (Chap. 19)
- 07/31 Renewable Resources (Chap. 20)
- 08/02 The Ultimate Problem: Human Population Growth (Chap. 7 & 9)
- 08/05 Economics & Politics vs Environment (Chap. 2)
- 08/07 Solutions (?): Sustaining Systems (Chap. 17 & 18)
- 08/09 Final Exam

**COURSE:** BI 110L - People and Nature (Lab)

**TIME:** 09:40-12:50 TTh (July 02 – Aug. 08, 2002)

**INSTRUCTOR:** Dr. Alan Ohta

**email:** alohta@hotmail.com

**OFFICE HOURS:** MWF 08:30 – 09:30 a.m.

**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 as announced by the instructor.

**LABS:**

1. Laboratory topics and assignments are listed in the course outline.
2. Due dates for labs will be strictly adhered to. Thus, no LATE labs will be accepted unless a valid excuse is provided.
3. Examination dates are also listed in the course outline.
4. 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 "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:**

07/02/02	Introduction/Hawaii's Natural History
07/04	Holiday: Independence Day
07/09	Scientific Method
07/11	Field Trip: Manoa Stream (Water Quality)
07/16	Field Trip: Board of Water Supply's Honouliuli Water Recycling Plant
07/18	Water Usage & Conservation Lab
07/23	Field Trip: H-power
07/25	Opala Collection & analysis
07/30	Field Trip: Waikiki Aquarium
08/01	Hawaii's energy problems & solutions
08/06	Field Trip Pali: Man's Effect on Nature
08/08	Final Exam

All lab writeups are due on the next lab period. No late labs will be accepted. If you are not attending lab for any reason e-mail your previous assignment to me by the date & time announced or the lab will be considered late. Missed labs cannot be made up unless a valid excuse is provided for your absence.