

COURSE: BI 110 - People and Nature (Lecture)

TIME: 9:30-10:50 a.m. TTh

**INSTRUCTOR:** Dr. Alan Ohta

**email:** [alohta@hotmail.com](mailto:alohta@hotmail.com)

**OFFICE HOURS:** TTh. 8:30 a.m. - 9:30 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**.  
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. **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:

08/28	Course introduction	10/23	Resources: Soils
<del>08/30</del>	Introduction to Science (Chap. 3)	10/25	Resources: Foods (Chap. 15)
09/04	Earth History	10/30	Protecting Our Food (Chap. 16)
09/06	Evolution (Chap. 5)	11/01	Toxicology & Risk (Chap. 8)
09/11	Environmental Problems (Chap. 1)	11/06	Solid Waste (Chap. 14)
09/13	Resources & Pollution	11/08	Toxic <b>&amp; Hazardous</b> Waste
09/18	Ecosystems (Chap. 4)	11/13	Nonrenewable Energy (Chap. 19)
09/20	Chemical Cycles	11/15	Fossil Fuels
09/25	Climate & Weather (Chap. 6)	11/20	Renewable Energy (Chap. 20)
<del>09/27</del>	Biomes	11/22	Holiday: Thanksgiving
10/02	Resources: Water (Chap. 12)	11/27	Population <b>Dynamics</b> (Chap. 7)
<del>10/04</del>	Water Pollution & Solutions	11/29	Human Population (Chap. 9)
<del>10/09</del>	Air & Air Pollution (Chap. 10)	12/04	Politics & Economics (Chap. 2)
10/11	Global Warming (Chap. 11)	12/06	<b>Environmental</b> Solutions?
10/16	<del>Ozone layer</del> M.A. term	12/14	Final Exam
10/18	Resources: <b>Minerals</b> (Chap. 13)	10	

COURSE: BI I I OL - People and Nature (Lab)

TIME: 2:00-4:50 p.m.-T

INSTRUCTOR: Dr. Alan Ohta

[email: alohta@hotmail.com](mailto:alohta@hotmail.com)

OFFICE HOURS: T,Th 8:30 a.m. - 9:30 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. 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. **Grades** will be based on the **following** system & scale:

Grade Scale:

90% & above = A

**80 - 89%** = B

65-79% = C

**50 - 64%**

49% & below = F

**Grading** System:

Labs 75%

Final 25%

## **COURSE OUTLINE:**

08/28/01	Introduction
09/04	Scientific Method
<b>09/11</b>	<b>Hawaii's</b> Natural History
09/18	Field Trip: Board of Water Supply
09/25	Water <b>Usage</b> & <b>Conservation</b> Lab
10/02	Field Trip: H-power
10/09	Opala <b>Collection</b> & analysis
10/16	Field Trip: Waimanalo <b>Landfill</b>
10/23	Hawaii's energy problems & solutions
10/30	Field Trip: Sand Island Sewage Treatment Plant
11/06	Foods Lab
11/13	Field Trip: Pali Lookout (Man's Effect on the Environment)
11/20	<b>Life Expectancy</b> Lab
11/27	Field Trip: Paiko Lagoon
12/04	Lab Final