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COURSE: BI 102-~~General~~ Biology (Lecture)
TIME: 1730-1935 T & Th (Oct. 3 - Dec. 14, 2000)
INSTRUCTOR: Dr. Alan Ohta,
[email: ohta@i-one.com](mailto:ohta@i-one.com)
OFFICE HRS: 1630 -1730 M or by appointment
TEXT: *Biology Life on Earth*, 5th [ed. by](#) Teresa & Gerald Audesirk, Prentice Hall,
1999/1996.

COURSE DESCRIPTION: ~~This course is designed~~ to **complete** your introduction to the **Biological** Sciences. Concepts **learned** in the first half of the course will be **applied** to the **organismal** level of life. Biological systems as adaptations to a multicellular **existence** will also be **investigated**.

OBJECTIVES:

1. to provide a sound background of biological systems (function & **structure**).
2. to promote an appreciation for the complexity of **living** organisms.
3. to promote critical thinking in applying concepts.
4. to promote an appreciation for the vast amount of biodiversity & **their** interrelationship in the ecosystem.

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:

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:	Grading System:
90% & above = A	Quizzes 30%
80 - 89% = B	Mid Term 30%
65 - 79% = C	Final 40%
50-64% =D	
49% & below = F	

COURSE OUTLINE:

- 10/03/2000** **Introduction to Biology**
- 10/05** **Evolution (Chap 14 & 15)**
- 10/10** **Speciation (Chap 16 & 17)**
- 10/12** **Systematics (Chap 18)**
- 10/17** **Microbes & Fungi (Chap 19 & 20)**
- 10/19** **Plants (Chap 21)**
- 10/24** **Plant Structures & Functions (Chap 23)**
- 10/26** **Plant Reproduction & Responses (Chap 24 & 25)**
- 10/31** **Animal Kingdom (Chap 22)**
- 11/02** **Homeostasis (Chap 26)**
- 11/07** **Midterm Exam**
- 11/09** **Circulatory & Respiratory Systems (Chap 27 & 28)**
- 11/14** **Digestive & Excretory Systems (Chap 29 & 30)**
- 11/16** **Endocrine & Nervous Systems (Chap 32 & 33)**
- 11/21** **Skeletal & Muscular Systems (Chap 34)**
- 11/23** **HOLIDAY: Thanksgiving**
- 11/28** **Reproductive Systems (Chap 35)**
- 11/30** **Development & Behavior (Chap 36 & 37)**
- 12/05** **Immunology (Chap 31)**
- 12/07** **Ecology (Chap 38 - 41)**
- 12/12** **Course in Retrospect**
- 12/14** **Final Exam**

COURSE: BI 102L-General Biology Lab
TIME: 1950-2155 T & Th (Oct. 03 - Dec. 14, 2000)
INSTRUCTOR: Dr. Alan Ohta
email: ohta@i-one.com
OFFICE HRS: 1630 - 1730 T or by appointment

COURSE DESCRIPTION: The lab class for this course is designed to aide in your understanding of the function and interaction of the various **systems** which, working **together**, constitute a living being. Further, we will be **investigating** how **individuals**, **populations & communities** interact to form complex ecosystems.

OBJECTIVES:

1. To **obtain practical** knowledge of **concepts and structures discussed in** the **lecture**.
2. To **promote scientific thinking and inquiry**.
3. To **enhance powers of observation** and to be more scientifically observant.
4. To **increase appreciation for the natural environment**.

ASSIGNMENTS:

All lab exercises will require a **written report** using the **form provided** by **WV 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 **grades 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:

- 10/03/2000 Introduction
- 10/05 Scientific Method
- 10/10 Experimental Design
- 10/12 Systematics
- 10/17 Canimalcules
- 10/19 Discussion of phylogenetic relationships
- 10/22 *Field trip: Aiea
- 10/26 Earthworm Dissection
- 10/31 **Earthworm** Dissection (con't)
- 11/02 Clam Dissection
- 11/07 **Squid Dissection**
- 11/09 Fetal Pig Dissection (Respiratory system)
- 11/14 Fetal Pig Dissection (**Digestive/excretory** systems)
- 11/16 Fetal Pig Dissection (Circulatory system)
- 11/21 Fetal Pig Dissection (Reproductive **system**)
- 11/23 HOLIDAY: Thanksgiving
- 11/28 Sheep brain Dissection
- 11/30 The Organism as a whole being.
- 12/03 *Field Trip: Waikiki Aquarium
- 12/07 Final **Exam**
- 12/12 Time off for Saturday field trips.
- 12/14 Time off for Saturday field trips.