

SS 01

COURSE: BI 101 L-General Biology Lab

TIME: 9:40 a.m.-12:50 p.m.-T, Th. (May 21, -June 29, 2001)

INSTRUCTOR: Dr. Alan Ohta

email: ohta@i-one.com

OFFICE HRS: 8:40 -9:40 a.m. M, W 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 cell and its components. The way in which cells pass their information to other cells as well as to the next generation of cells will be investigated. Finally how organisms change from one generation to the next will be addressed.

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 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 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:

05/22/2001	Introduction/Scientific Method
05/24	Metrics/Microscope Use
05/29	Biological Molecules
05/31	Enzymes
06/05	Osmosis/Photosynthesis
06/07	Cell Structure & Function
06/12	Cell Division
06/14	Field Trip: Aiea?
06/19	DNA
461;1	Mendelian Genetics & Evolution
06/26	Human Genetics
06/28	Final Exam

COURSE: BI 101-General Biology (Lecture)

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INSTRUCTOR: Dr. Alan Ohta

[email: ohta@i-one.com](mailto:ohta@i-one.com)

OFFICE HRS: 8:40 -9:40 a.m. M, W 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 introduce the Biological Sciences. Thus we will begin with the structure and function of the cell, the basic unit of all life. To be followed by the basis of heredity also common to all life forms. Finally we will investigate how all organisms change & adapt in order to survive.

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 all organisms & their common bonds to one another.

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:

05/21/2001	Introduction to Life (Chap. 1)
05/23	Atom, Molecules, & Life (Chap. 2)
05/25	Biological Molecules (Chap. 3)
05/28	Holiday: Memorial Day
05/30	Energy Flow in Cells (Chap. 4)
06/01	Cell Membrane Structure & Function (Chap. 5)
06/04	Cell Structure & Function (Chap. 6)
06/06	Photosynthesis (Chap. 7)
06/08	Glycolysis & Cellular Respiration (Chap. 8)
06/11	Midterm Exam
06/13	DNA (Chap. 9)
06/11	CAN Expression & Regulation (Chap. 10)
06/18	Cellular Reproduction (Chap. 11)
06/20	Patterns of Inheritance (Chap. 12)
06/22	Biotechnology (Chap. 13)
06/25	Principles of Evolution (Chap. 14 & IS)
06/27	Origin of Species (Chap. 16 & 17)
06/29	Final Exam