BI 101 General Biology I – Spring 2011 Tripler Army Medical Center Mon/Wed 1730-2140 4/4/2011 - 6/13/2011 Zachary L. Bergeron M.S. zacharyb@hawaii.edu (cell) 607-226-1535

#### LECTURE COURSE OUTLINE AND SYLLABUS

# **REQUIRED TEXT:**

Audesirk, Audesirk and Byers. <u>BIOLOGY – LIFE ON EARTH</u>. 9th Edition (2011). Pearson Education (Benjamin Cummings Publishing).

## **COURSE DESCRIPTION:**

Overview of basic biological principals, human concerns of overpopulation, environmental pollution, and genetic engineering. Concurrent registration in BI 101L required.

**COURSE OBJECTIVES:** Upon completion of this course, each student should...

- 1.) Understand the basic biology of life, including fundamental cell biology and evolution on both the macro- and micro- scale.
- 2.) Recognize the importance of the scientific method and its role in the quest for knowledge.
- 3.) Become familiar with the fundamental biomolecules and processes of life.
- 4.) To promote an appreciation for the complexity of the living systems surrounding us.

# **LECTURES:**

Lecture topics as well as reading assignments and exams are listed in the course outline (below). Great care has gone into preparing this course and the accompanying lecture schedule. However, the timeline is subject to change if deemed necessary by the instructor.

## **ACADEMIC HONESTY:**

All university policies regarding academic integrity are in effect and are strictly enforced. These can be viewed at (http://www.chaminade.edu/student\_life/documents/student\_handbook.pdf).

#### **GRADE DETERMINATIONS:**

There are separate grades and grading criteria for BI 101 (3 credits) and BI 101L (1 credit).

Categroy	Amount (#)	Points/assignment	Total Points	% of Final Grade
Homework	9	10	90	26%
Midterm Exam	3	50	150	43%
Final Exam	1	100	100	29%
Participation	1	10	10	2%

All assignments are due at the beginning of class on the indicated day. Exams, including the final must be taken during the scheduled time. Only absences with proper support documentation will be considered.

No make-up homework or exams will be administered. A missed assignment/exam will result in a score of zero. The lowest of the nine homework scores as well the lowest of the three mid-term exam scores will be excluded from the final grade determination (the final exam cannot be dropped). No extra credit is available. Although BI 101L is a separate grade it is a co-requisite of BI 101. A failing grade in lab will result in an Incomplete/Fail in BI 101 lecture. More than two (2) unexcused laboratory absences will count as a fail (see lab syllabus).

Final Grades will be (tentatively) assigned as follows:

A: 90-100%

B: 80-89%

C: 70-79%

D: 60-69%

F: 0-59%

#### **ATTENDANCE:**

Attendance is compulsory. You must be in class to receive the homework assignment. Homework assignments will only be accepted at the beginning of class 1 week after they are assigned. Late assignments will not be accepted. A missed exam will result in a score of zero, no makeup exams will be administered (see grade determination).

## **OFFICE HOURS:**

Office hours are by appointment only. Time/place arrangements are best made via email. I have provided my cell phone for emergencies, please **do not** call outside business hours (9:00am-6:00pm).

# General Biology I – BI 101 Spring 2011 - Tentative Course Schedule

<u>Date</u>		<u>Topic</u>	Reading
Week	<u>1</u> M-April 4	Introduction to Life Atom, Molecule & Life	Chapter 1 Chapter 2
	W-April 6	Lab #1- Scientific Method and Writing	
Week	<u>2</u> M-April 11	Biological Molecules Energy Flow in Cells	Chapter 3 Chapter 4
	W-April 13	EXAM I	<u>Ch. 1-4</u>
	Su- April 17	Lab #2 – Field Trip (Honolulu Zoo)	1:00pm
Week	3 M-April 18	Cell Membranes Cell Structure and Function	Chapter 5 Chapter 6
	W-April 20	Lab #3- Photosynthesis (On Campus)	(Cham. Uni.)
Week	4 M-April 25	Photosynthesis Glycolysis & Cellular Respiration	Chapter 7 Chapter 8
	W-April 27	EXAM II	<u>Ch. 5-8</u>
	Su- May 1	Lab #4 – Field Trip (Foster Botanical Garden)	1:00pm
Week	<u>5</u> M-May 2	DNA Gene Expression & Regulation	Chapter 9 Chapter 10

Week	11 M-June 13	Final Exam	<b>Cumulative</b>
	W-June 8	Lab #10- TBA	
Week	10 M-June 6	Origin of Species The History of Life	Chapter 16 Chapter 17
	W-June 1	Lab #9- Charles Darwin	
Week	<b>9</b> M-May 30	Memorial Day	(No Class)
	W- May 25	Lab #8 – Evolution and Population Genetics	
Week	<b>8</b> M-May 23	Principals of Evolution How Populations Evolve	Chapter 14 Chapter 15
	W-May 18	Lab #7- Chemical Analysis of Food	
Week	<u>7</u> M-May 16	Biotechnology	Chapter 13
	Su- May 15	Lab #6 – Field Trip (Waikiki Aquarium)	1:00pm
	W-May 11	EXAM III	<u>Ch. 9-12</u>
Week	<u><b>6</b></u> M-May 9	Cellular Reproduction Patterns of Inheritance	Chapter 11 Chapter 12
	W-May 4	Lab #5- DNA (On Campus)	(Cham. Uni.)

<sup>\*</sup>Last day to drop a class is April 11<sup>th</sup>, 2011 \*\*Last day to withdrawl (W) from a class is May 23<sup>rd</sup>, 2011.