BI 102 General Biology II Spring 2003 MWF 10:00 – 10:50 am Henry Hall 17 Chaminade University of Honolulu

Michael Walter, MD, MPH

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848-1438 (Kalihi-Palama Health Center) – Please don't leave a voicemail if you need to contact me the same day. I may not check it for a while.

I will be available to meet with students immediately following most lectures. Please let me know if you would like to schedule a meeting after lecture of at another time.

Text: Audesirk, Teresa, Gerald Audesirk and Bruce E. Byers. 2002. <u>Biology: Life on</u> Earth. 6th edition. Prentice Hall

Course Description: This is a second semester freshman level biology course for non-science majors. This class will provide a general review of cell biology, inheritance, history and diversity of life on earth (microbes, fungi, plants and animals) and population interactions with each other and the environment, but will focus primarily on animal anatomy and physiology and functions of various body organs and systems. Lectures will review normal and abnormal physiology to facilitate understanding of anatomy and organ function though a context of health and well-being. BI 101 is not a pre-requisite for this class. This course is designed to give students a functional knowledge of the living world around them and of their own health and physical development.

Objectives for Students: At the end of this course, each student will be able to:

- 1. Have a basic understanding of cellular function, how cells acquire and utilize energy, genetics, evolution, how organisms are classified, and of various major groups of organisms.
 - 2. Recognize and understand the basic anatomy, basic physiology and at least one common pathologic conditions (in parentheses) associated with major organ systems of animals, including;
 - a. Circulatory (heart defects)
 - b. Respiratory (asthma)
 - c. Gastrointestinal / nutrition (diarrhea/obesity)
 - d. Renal/urinary (urinary tract infections)
 - e. Immunologic (HIV)
 - f. Nervous (seizures)
 - g. Musculoskeletal (arthritis)
 - h. Reproductive (sexually transmitted diseases)
 - 3. Understand basic human development through all major life stages (prenatal, infancy, childhood, adolescence, adulthood and geriatrics).
 - 4. Understand basic human behavior and common pathologic conditions of behavior
 - 5. Understand basic concepts of ecology and the interaction of living organisms with each other and their environment.

Expectations of students: Students are expected to attend lectures and lab, keep up with reading assignments, be proactive in acquiring information missed in lecture and be aware of deadlines and due dates. It is the student's responsibility to ask for necessary help in a timely manner, well in advance of due dates or exams. You will find your comprehension and retention of material much easier and the class more interesting if you read in advance of lectures. Students should be respectful of other students and the classroom environment. Disruption of the class, including but not limited to; being noisy, sleeping, having private conversations, excessive tardiness, doing work for other classes and dominating class discussions will not be tolerated.

Lectures: Lecture topics and corresponding reading assignments are listed in the lecture outline. Supplemental reading may be assigned or encouraged during the semester. Changes in the lecture schedule or assigned reading or exams may be necessary during the course of the semester. It is the responsibility of the student to be aware of changes made by the instructor. Lectures will not be based solely on the text. Students will be provided with key concepts to be understood from the lecture and the text, on which exams will be based. Pertinent questions during lecture are encouraged. Before each exam (but not for quizzes), a review session will be held.

Grading:

1. Lecture and lab are separate courses and the grades will not be combined.

2. Your final grade will be determined by 6 components as follows;

a. Exam 1: 20 points

b. Exam 2: 20 pointsc. Final exam: 30 points

d. Quizzes: total of 10 points

e. Attendance: 10 points

f. Term paper: 10 points

- 3. Make-up exams will be provided only if I am contacted no later than the day of the exam (e-mail or call my cell phone). Exams may not be taken early. Exams not taken on the scheduled day of the test will be different from those taken by the rest of the class. Make-up exams must be taken no later than the next available class meeting time. Make-up exams for planned absences must be discussed with the instructor beforehand. There will be three brief quizzes given during the semester. Quizzes cannot be made up if missed. Students more than 15 minutes late for exams or quizzes will not be allowed to take the test that day.
- 4. The specific content of the term paper will be discussed in class. It will encompass a current event relating to topics presented in lecture and will be evaluated on grammar, organization, structure, referencing and evidence of critical thinking. It is the policy of the biology department to reduce grades by one grade level for assignments turned in late within 24 hours of the due date and reduced to an F if turned in more than 24 hours late.
- 5. Tentatively, grades will be assigned as $A \ge 90\%$, $B \ge 80\%$, $C \ge 70\%$, $D \ge 60\%$. F < 60% of the highest possible score. Be aware of the deadline to drop or apply for

credit/no credit grading. Students with cumulative grades below C after each quiz or exam will receive deficiency reports. Students receiving deficiency reports are encouraged to and may be required to meet with the instructor.

- 6. Attendance is required and a sign-in sheet will be circulated at each lecture. It is the student's responsibility to ensure that they sign the sheet at each lecture. Students more than 15 minutes late to lecture will be counted as absent. Students with no more than 3 unexcused absences will receive the full 10 points toward their final grade. 4 to 8 unexcused absences will result in a 2 point reduction of the possible 10 points for each absence. 9-11 unexcused absences will result in a full grade reduction from their final grade for each absence. Students with 12 or more unexcused absences will not receive a passing grade or credit for the class. Excessive excused absences may result in required remedial work, this will be determined on a case-by-case basis. Excused absences include illness (with a doctor's note), family emergencies or school-related planned absences, other absences may be excused at the discretion of the instructor. Absence issues or questions should be discussed as early as possible with the instructor.
- 7. Extra credit assignments may be offered during the semester, but should not be expected.

Lecture schedule (17 weeks)

Week 1: 3 lectures: 1/13/03: Introductions

1/15/03: Reviews of Cells (chapter 5) 1/17/03: Cellular energy (chapter 6)

Week 2: 3 lectures: 1/20/03: Reviews of DNA (chapter 9)

1/22/03: Inheritance(chapter 12) 1/24/03: Evolution(chapter 14)

Week 3: 3 lectures: 1/27/03: Review of Life on Earth (chapter 17)

1/29/03: Life on Earth (chapter 17)/**Quiz 1** 1/31/03: Quiz review/Systematics (chapter 18)

Week 4: 3 lectures: 2/3/03: Microbes (chapter 19)

2/5/03: Fungi (chapter 20)

2/7/03: Plant Kingdom (chapter 21)

Week 5: 2 lectures: 2/10/03: Animal Kingdom (chapter 22)

2/12/03: Review for exam 2/14/03: **Exam #1 Friday**

Week 6: 2 lectures: 2/17/03: Holiday – Presidents day

2/19/03: Post exam review

2/21/03: Circulatory system (chapter 27)

Week 7: 3 lectures: 2/24/03: Circulatory system (chapter27)

2/26/03: Respiratory system (chapter 28)

2/28/03: Respiratory system (chapter 28)

Week 8: 2 lectures: 3/3/03: Gastrointestinal system (chapter 29)

3/5/03: Nutrition (chapter 29) 3/7/03: Urinary system (chapter 30)

Week 9: 3 lectures: 3/10/03: Quiz 2/Immunologic system (chapter 31)

3/12/03: Quiz review/Immunologic system (chapter 31)

3/14/03: Nervous system (chapter 33)

Week 10: 2 lectures: 3/17/03: Nervous system (chapter 33)

3/19/03: Review for exam

3/21/03: Exam #2

Week 11: Spring recess

Week 12: 3 lectures: 3/31/03: Post exam review

4/2/03: Musculoskeletal (chapter 34) 4/4/03: Musculoskeletal (chapter 34)

Week 13: 3 lectures: 4/7/03: Reproduction (chapter35)

4/9/03: Reproduction (chapter 35)/Quiz 3 4/11/03: Quiz review/Development (chapter 36)

Week 14: 2 lectures: 4/14/03: Development (chapter 36)

4/16/03: Behavior (chapter 37) 4/18/03: No classes – Good Friday

Week 15: 3 lectures: 4/21/03: Behavior (chapter 37): Term papers due

4/23/03: Populations (chapter 38) 4/25/03: Populations (chapter 39)

Week 16: 3 lectures: 4/28/03: Ecosystems (chapter 41)

4/30/03: Review of term papers

5/2/03: Review for final

Week 17: Final exam