BI 101 General Biology I
Spring 2002 MW 10-10:50 AM
Henry Hall 17

Dr. **Joan Kuh**
Office: **Henry Hall 16, 735-4807**
jkuh@chaminade.edu

LECTURE COURSE OUTLINE AND SYLLABUS

TEXT:
Audesirk, Teresa, Gerald Audesirk and Bruce Byers. 2002. Biology, Life on Earth. 6th edition, Prentice Hall.

COURSE DESCRIPTION:
General Biology I is a biology course for non-science majors at Chaminade University of Honolulu. A survey of living organisms at the biochemical, cellular and molecular levels is the subject of this course.

GOALS OF THE COURSE: Each **student is expected to**
1. **Understand the scientific method;**
1. **Know and understand the biochemical, molecular and cellular basis of life;**
2. **Know and understand basic Mendelian and molecular genetics;**
3. **Know and understand the scientific method and how it applies to research analysis and evaluation.**

OBJECTIVES FOR STUDENTS: At the completion of the course the student will be able to:
1. **Understand the scientific method and its representation in scientific publications and writing;**
2. **Use scientific terminology, specifically in the life sciences;**
3. **Demonstrate a working knowledge of the chemistry of life;**
4. **Understand basic biochemical processes of a living cell including energy processes and enzymes;**
5. **Understand cell structure and function including cell membrane transport;**
6. **Understand Mendelian modes of inheritance and analyze genetic crosses;**
7. **Understand how cells replicate and faithfully transmit the genetic material;**
8. **Understand evolutionary theory and concepts.**

GRADE DETERMINATIONS:
1. **Since lecture and laboratory are two distinct classes, separate grades will be given for each course.**
2. **Grades will be derived from four of five components: three midterm exams (100 points each), quizzes (100 points total) and a FINAL lecture exam (150 points). The lowest grade from the three midterms or cumulative quizzes will be dropped.**
3. **No makeup exams will be administered. If you miss an exam, that will be the grade (e.g., zero) that is dropped from the accumulative exam/quiz portion of your grade.**
   The final exam grade cannot be dropped. Any quiz or *exam the student fails to take at the appointed time cannot be made up.*
5. **Tentatively, grades will be assigned as A>or= 90%, B>or= 80%, C >or= 70% and D >or=60% of the possible points. Before the April 8 deadline to drop classes, students currently receiving a D or F will be notified with deficiency reports. Students who receive one of these reports should come see the instructor.**

QUIZZES:
There will be a **quiz every Friday (however, not when there is an exam; also last quiz is on a Monday) in the first ten minutes of class. Individuals late to class will not be allowed to take the quiz. Key terms, multiple choice and review questions at the end of each chapter should** be used as a study guide_

ATTENDANCE:

Attendance to class and course grade, with few exceptions, appear to be directly correlated. That is, the more a student comes to class the better he or she does in the course. From my own experience as an undergraduate student sometime in the Triassic Period, I discovered after three years of experimentation that if I read the material before going to class, then went to class and took notes, then exams were quite easy to study for and take.

Chaminade University is also aware of this correlation and encourages all students to attend all classes. While I do not want to penalize students for missing class, what I will do is this: I will note attendance at each class meeting and allow three unexcused absences (EXCEPT on exam dates---no missing exams!!!!!!!). After that I will deduct 5 points for each unexcused absence from a pool of 15 EXTRA CREDIT points. Any remainder will be applied to Your grade at the end of the semester. This may come in handy particularly if you are 5, 10 or 15 points away from a grade.

Tentative Course Schedule for 131102 General Biology II (Spring 2002)

Date	Topic	Readin	
M-Jan 14	Introduction	Chapter 1	
W-Jan 16	Living Things	Chapter 1	
F-Jan 18	Science and Humans	Chapter 1	
M-Jan 21	Fr. Chaminade/MLK Remembrance		
W-Jan 23	Chemistry of Life	Chapter 2	
F-Jan 25	Water and Life	Chapter 2	
M-Jan 28	Biological Molecules	Chapter 3	
W-Jan 30	Biological Molecules	Chapter 3	
F-Feb 01	Proteins Are Us	Chapter 3	
M-Feb 04	Cell Membranes	Chapter 4	*Death by Design*
W-Feb 06	Getting Across Membranes	Chapter 4	
F-Feb 08	Cells Are Us	Chapter 5	
M-Feb 11	Prokaryotes/Eukaryotes	Chapter 5	
W-Feb 13	**Midterm I**	Chapters 1-4	
F-Feb 15	Cell Structure & Function	Chapter 5	
M-Feb 18	President's Day		
W-Feb 20	Energy and Metabolism	Chapter 6	
F-Feb 22	Enzymes	Chapter 6	
M-Feb 25	Energy and Photosynthesis	Chapter 7	
W-Feb 27	Energy and Glycolysis	Chapter 8	
F-Mar 01	Energy and Cellular Respiration	Chapter 8	
M-Mar 04	Energy Wrap-Up		
W-Mar 06	Deoxyribonucleic Acid	Chapter 9	
F-Mar 08	More on deoxyribonucleic acid	Chapter 9	
M-Mar 11	Replicating deoxyribonucleic acid	Chapter 9	
W-Mar 13	From DNA (genes) to protein	Chapter 10	
F-Mar 15	Midterm II	Chapters 5-9	
M-Mar 18	Central Dogma	Chapter 10	
W-Mar 20	Transcription & Translation	Chapter 10	
F-Mar 23	Mutations	Chapter 10	
	Spring Break		
M-Apr 01	Cell Division & Reproduction	Chapter 11	
W-Apr 03	Sexual Reproduction & Meiosis	Chapter 11	
F-Apr 05	Meiosis & Mitosis	Chapter 11	
M-Apr 08	Making Dollies and other clones	Chapter 11 Last *day to drop a class.*	
W-Apr 10	Gregor Mendel & Genetics	Chapter 12	
F-Apr 12	Genes, Alleles & Heredity	Chapter 12	
M-Apr 15	Inheritance of Multiple Traits	Chapter 12	
W-Apr 17	Sex Determination	Chapter 12	
F-Apr 19	Non-Mendelian Genetics	Chapter 12	
M-Apr 22	Midterm III	Chapters 10-12.5	
W-Apr 24	Biotechnology	Chapter 13	
F-Apr 26	Biotechnology & New Tide	Chapter 13	
M-Apr 29	Human Biotech	Chapter 13	
W-May 01	Darwinian Evolution	**Chapter 14**	
F-May 03	Microevolution	Chapter 15	
Th-May 09	Final Exam 10:30-12:30	*Cumulative*	