Principles of Biology I
BSC 110
Fall 2005

Course Description and Policies

Instructor:	Dr. Jennifer C. Owen
Lecture Period:	TTH 9:30 – 10:45 Walker Science Building, Rm 120
Textbook	*Biology*, 7th Edition, by N. Campbell & J. Reece
Office:	Johnson Science Tower 1013
Office Hours:	TTH: 11:00 – 1:00 or by appointment
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Principles of Biological Sciences I (BSC 110) is a prerequisite for any student majoring in the biological sciences and medical technology. Therefore, this course will offer a more comprehensive treatment of the study of biology than what you would expect in a non-major's biology course.

It is my intention that this course not only provide you a solid foundation for your other courses in the sciences but that you also gain an appreciation for the diversity and complexity of life. It is my job to present the material in such a manner that will facilitate your understanding of the concepts in biology, and to provide an environment where students feel free to ask questions and share ideas. However, it is your choice to be here, for whatever reason. Therefore, I expect you to take an active role in your education. It is your responsibility to keep up with the assigned reading, come to lecture prepared and on time, pay attention, and be courteous to fellow classmates and myself during lecture. Most importantly, if you do not understand the material ask questions! Outside the classroom, try to integrate what you have learned with your everyday life. In doing so, I hope you too will share my enthusiasm for the study of biology.

Learning Objectives for BSC 110:

- Understanding how the scientific process answers questions about how life works
- Understanding the characteristics that unite living organisms
- Understanding the cellular basis of life
- Understanding the physical and chemical properties of organisms and processes that occur in living things.
- Understanding homeostatic control mechanisms that allow organisms to respond to changes in the internal and external environment
- Understanding the nature and function of the gene and the flow of genetic information in the cell, the organism, and the population
- Understanding the origin of life and the process of evolution
- Understanding the interdependence and interrelationships among organisms and between organisms and their environment

COURSE POLICIES

Reading: Your assigned reading will be from the *Biology* textbook by Campbell and Reece. My lectures will serve to synthesize the topics covered in your textbook as well as from other sources. While reading the textbook will not serve as a substitute for attending lectures, it will assist with your overall understanding of the topic.

Examinations: There will be four hourly exams given over the course of the semester. All of the exams will be non-comprehensive. Questions will consist of matching, multiple choice, labeling, short answer and maybe a short essay question. The majority of the exam material will come from the lectures. Each exam will be worth 100 points.

**The 4th exam will be given during finals week (see syllabus).

Grade Determination: Your grade will be based on the total points earned on the 4 non-comprehensive exams.

Letter Grades: **A =** 358 - 400 points; **B** = 318 - 357; **C** = 278 - 356; **D** = 238 - 355; **F** = < 238

Grading Policy: Makeup exams will only be given if student has (1) a medical excuse provided by a physician or (2) permission granted by professor prior to time of the examination.

Drop/Withdraw Policy: The drop date (last day to drop without academic penalty) is **October 14th**. In accordance with University policy, dropping the course after Oct 14th will be permitted only if there are extenuating circumstances (extenuating circumstances include events such as a death in the family or illness – it does not include the expectation of making a low grade in the course). If you have received permission to drop the course then you will be given a grade of W if passing and a grade of F if you are not.

Plagarism: The copying of another person's work is not tolerated. A student caught cheating will receive a grade of zero on the work in question and/or an F in the course. For more information on university policy refer to the "Academic Honesty" section in the USM Student Handbook (http://www.usm.edu/union/studenthandbook.pdf; page 49-50).

Students with Disabilities: If a student has a disability that qualifies under the American with Disabilities Act and requires accommodations, he/she should contact the Office of Support Services for Students with Disabilities (OSS) for information on appropriate policies and procedures; Box 8586; Tel: 266-5024; TTY: 266-6827; Fax: 266-6035.

Lecture Syllabus

Date	Topic	Chapter
Aug 25	None; Handout Syllabus	
Aug 30 – Sept 8	**Hurricane Katrina**	
Sept 13	Exploring Life; Science as a Way of Knowing	1
Sept 15	Atoms, Molecules, & Chemical Bonds	2
Sept 20	Atoms, Molecules, & Chemical Bonds	2
Sept 22	Water and the Fitness of the Environment	3
Sept 27	Carbon Compounds	4,5
Sept 29	Carbon Compounds	4,5
Oct 4	Carbon Compounds	4,5
Oct 6	**EXAM #1**	
Oct 11	Cell Structure & Function	6,7
Oct 13	Cell Structure & Function	6,7
Oct 18	Metabolism	8
Oct 20	Cellular Respiration	9
Oct 21	**LAST DAY TO DROP CLASS**	
Oct 25	Cellular Respiration	
Oct 27	**EXAM #2**	
Nov 1	Exam overview/Photosynthesis	10
Nov 3	Photosynthesis/Mitosis	12
Nov 8	Meiosis/Influenza	13
Nov 10	Meiosis/Patterns of Inheritance	13
Nov 15	Patterns of Inheritance	14
Nov 17	The Chromosomal Basis of Inheritance	15
Nov 22	**EXAM #3**	
Nov 24	**Thanksgiving Holiday**	
Nov 29	DNA Structure and Function	16
Dec 1	From Gene to Proteins	17
Dec 6	Descent with Modification: Darwinian View of Life	22
Dec 8	Microevolution	23
Dec 13	Speciation	24
TBA	**EXAM #4**	