

General Education Biology

BSC 1005

Spring Term 2008

Professor:.....Mario A. Alvarado

Schedule:.....Tue. & Thr. 5:40 PM to 6:55 PM (room G-304)

Office Hours:.....Wed. 6:00 PM to 7:00 PM (room B-130)

E-mail:..... Mario.Alvarado@mdc.edu

Prerequisite:..... None

Required Textbook:

Campbell N.A, Reece J.B. & Simon E.J. (2004) **Essential Biology**. (3rd ed.)
Pearson Publishing. San Francisco, CA. 462 p.

Other Resources:

Essential Biology CD-ROM.....included with the textbook
Essential Biology Website
http://wps.aw.com/wps/media/access/Pearson_Default/3034/3107663/login.html
Addison Wesley Tutor Center.....<http://www.aw.com/tutorcenter>

COURSE DESCRIPTION:

This course will review selected principles in biological science, including the cell concepts, the organization of multi-cellular systems, plants and animals as organized systems, and man in relation to his environment.

OBJECTIVES:

The students will learn basic concepts in general biology, chemistry, physical science, genetics, cell and molecular biology, evolution and ecology.

ATTENDANCE:

Attendance plays an important role in your final grade (see Evaluation and Grades) and will be recorded for each lecture. Students are required to arrive on time for the lectures and to leave when the class is dismissed; otherwise they will be considered as absent. Late arrivals or early departures will be allowed only during **extreme** circumstances;

proper justification and/or documentation will be requested. An optional assignment will be available for students with perfect attendance that want to increase their grades.

MAKE-UP EXAMS:

Students will be allowed to make up exams only when the instructor determines that it was a legitimate reason. Under such circumstances, the student should expect a completely different set of questions with higher degree of difficulty than those taken for the rest of the class. This because students making-up tests have more time to prepare for the evaluation than those students taking the test on time.

EVALUATION AND GRADES

Task	Number	Points/task	Total Points
Exams	7	50	350
Attendance	32	5	160
Final Exam	1	100	100
Total points*			610

* Optional assignment for students with perfect attendance, will add a maximum of 25 points to the student's total number of points.

Any student caught cheating during a test, will automatically lose all the points assigned for that particular test. If such situation repeats, the student will receive and F for the final grade. Signing the attendance sheet for a person other than you will be considered as a cheating act.

Grading:

- A = 90-100%
- B = 78-89.9%
- C = 65-77.9 %
- D = 55-64.9%
- F = 0-54.9%

COURSE CONTENT

Date	Topic	Required Reading
Tue. Jan 8, 2008	Course Introduction	
Thr. Jan 10, 2008	Introduction: Biology Today	Chp.1
Tue. Jan 15, 2008	Essential Chemistry for Biology	Chp.2
Thr. Jan 17, 2008	The Molecules of Life	Chp.3
Tue. Jan 22, 2008	First Test	Chps. 1, 2 & 3
Thr. Jan 24, 2008	A Tour of the Cell	Chp.4
Tue. Jan 29, 2008	The Working Cell	Chp.5
Thr. Jan 31, 2008	Cellular Respiration	Chp.6
Tue. Feb 5, 2008	Second Test	Chps. 4, 5 & 6
Thr. Feb 7, 2008	Photosynthesis	Chp.7
Tue. Feb 12, 2008	The Cellular Basis of Reproduction and Inheritance	Chp.8
Thr. Feb 14, 2008	Patterns of Inheritance	Chp.9
Tue. Feb 19, 2008	Third Test	Chps. 7, 8 & 9
Thr. Feb 21, 2008	Molecular Biology of the Gene	Chp.10
Tue. Feb 26, 2008	Gene Regulation	Chp.11
Thr. Feb 28, 2008	DNA Technology	Chp.12
Tue. Mar 4, 2008	Fourth Test	Chps. 10, 11 & 12
Thr. Mar 6, 2008	Professional Development Day	

Tue. Mar 11, 2008	How Populations Evolve	Chp.13
Thr. Mar 13, 2008	How Biological Diversity Evolve	Chp.14
Tue. Mar 18, 2008	Fifth Test	Chps. 13 & 14
Thr. Mar 20, 2008	The Evolution of Microbial Life	Chp.15
Tue. Mar 25, 2008	Plants, Fungi, and the Move onto Land	Chp.16
Thr. Mar 27, 2008	The Evolution of Animals	Chp.17
Tue. Apr 1, 2008	Sixth Test	Chps. 15, 16 & 17
Thr. Apr 3, 2008	The Ecology of Organisms and Populations	Chp.18
Tue. Apr 8, 2008	Communities and Ecosystems	Chp.19
Thr. Apr 10, 2008	Human Impact on the Environment	Chp.20
Tue. Apr 15, 2008	Seventh Test	Chps. 18, 19 & 20
Thr. Apr 17, 2008	Review Session	Chps. 1 to 6
Tue. Apr 22, 2008	Review Session	Chps. 7 to 12
Thr. Apr 24, 2008	Review Session	Chps. 13 to 20
Tue. Apr 29, 2008	Final Test	Chps. 1 to 20