

COURSE OUTLINE

Revision: Daniel Stearn, February 2008

DEPARTMENT:	Academic Programs
CURRICULUM:	The Natural World
COURSE TITLE:	General Biology w/ Lab
COURSE NUMBER:	BIOL& 160
TYPE OF COURSE:	Academic Transfer
Special Requirement Met:	None
AREA(S) OF KNOWLEDGE:	The Living World
COURSE LENGTH:	1 quarter
CREDIT HOURS:	5
LECTURE HOURS:	33
LAB HOURS:	44
CLASS SIZE:	30
PREREQUISITES:	None

COURSE DESCRIPTION:

Basic biology concepts, with emphasis on the general cell processes, organismal diversity, phylogeny and ecology of living organisms, and exploration of molecular genetics and biotechnology.

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STUDENT LEARNING OUTCOMES ADDRESSED:

1. Communication - Read and listen actively to learn and communicate.
2. Computation - Apply quantitative skills for personal, academic and career purposes.
3. Human Relations - Use social interactive skills to work in groups effectively. Learn to work in teams with others to achieve goals in the laboratory.
4. Critical Thinking and Problem Solving - Think critically in evaluating information, solving problems and making decisions.
5. Technology - Select and use appropriate technological tools for academic and career tasks.
6. Personal Responsibility - Be motivated and able to continue learning and adapt to change. Be aware of environmental issues.
7. Information Literacy - Access and evaluate information from a variety of sources and contexts, including technology.

GENERAL COURSE OBJECTIVES:

At the end of the course the student will:

1. Understand basic chemical principles and will be familiar with basic biological molecules.
2. Be familiar with cell structure and also with division of the cell. The student should know the difference between mitosis and meiosis.
3. Understand the principles of metabolism and of energetics in respiration and photosynthesis.
4. Know the structure of DNA and have an understanding of Mendelian and non- Mendelian genetics.
5. Be able to recognize and keep up with scientific events occurring in daily life and around the world.

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TOPICAL OUTLINE:

- I. Chemistry and biological molecules
- II. Cell structure and cell cycle
- III. Metabolism and biochemistry
- IV. Genetics
- V. Evolution and Diversity
- VI. Ecology

Total hours	77
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SLO #	Included in Course Objective Number	SSCC Student Learning Outcomes
SLO 1.1	X	Communication - Read and listen actively
SLO 1.2	X	Communication - Speak and write effectively
SLO 2.1	X	Computation - Use mathematical operations
SLO 2.2	X	Computation - Apply quantitative skills
SLO 2.3	X	Computation - Identify, interpret, and utilize higher level mathematical and cognitive skills
SLO 3.1	X	Human Relations - Use social interactive skills to work in groups effectively
SLO 3.2		Human Relations - Recognize the diversity of cultural influences and values
SLO 4.1	X	Critical Thinking and Problem Solving -
SLO 5.1		Technology - Select and use appropriate technological tools
SLO 6.1		Personal Responsibility - Be motivated and able to continue learning and adapt to change
SLO 6.2		Personal Responsibility - Value one's own skills, abilities, ideas and art
SLO 6.3		Personal Responsibility - Take pride in one's work
SLO 6.4		Personal Responsibility - Manage personal health and safety
SLO 6.5	X	Personal Responsibility - Be aware of civic and environmental issues
SLO 7.1	X	Information Literacy - Access and evaluate information
SLO 7.2		Information Literacy - Use information to achieve personal, academic, and career goals, as well as to participate in a democratic society

PREPARED BY: Patience Browne
DATE: May 2008