COURSE OUTLINE
Revision: Joan Stover, May 2008

DEPARTMENT: Academic Programs
CURRICULUM: The Natural World
COURSE TITLE: Survey of Biology
COURSE NUMBER: BIOL& 100
TYPE OF COURSE: Academic Transfer
   Special Requirement Met: Mathematics/Quantitative Reasoning
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:
Introduction to biological principles and concepts; cell biology; application of biological knowledge to problems of society; and development of an awareness of science. Lab included. For biotechnology and non-science majors.
STUDENT LEARNING OUTCOMES ADDRESSED:

1. Communication - Read and listen actively to learn and communicate. Speak and write effectively for personal, academic and career purposes.
2. Computation – Use arithmetic and other basic mathematical operations as required by program of study. Apply quantitative skills for personal, academic and career purposes.
3. Human Relations – Use social interactive skills to work in groups effectively.
5. Personal Responsibility - Be motivated and able to continue learning and adapt to change. Value one’s own skills, abilities, ideas and art. Take pride in one’s work. Manage personal health and safety. Be aware of civic and environmental issues.
6. 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. Have a clear understanding of biological concepts.
2. Develop an awareness of science and the scientific method of reasoning.
3. Apply basic concepts to applications.
4. Have a familiarization with all biology.
5. Understand the enormous diversity of life.
6. Understand the basic principles of cell division and inheritance and the role of DNA.
BIOL& 100 Survey of Biology
February 2008

TOPICAL OUTLINE:

I. Diversity of life and its chemical foundations
II. The cell and metabolism
III. Energy
IV. Mitosis and meiosis
V. Inheritance and DNA
VI. Proteins
VII. Micro- and Macro- evolution
VIII. Classifications of life
IX. Plant structure and reproduction
X. Animal structure and reproduction
XI. Animal systems
XII. Populations and communities
XIII. Ecosystems and the biosphere

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