

## COURSE OUTLINE

Revision: Carey Schroyer, April 2008

DEPARTMENT:	Academic Programs
CURRICULUM:	The Natural World
COURSE TITLE:	Majors Plant
COURSE NUMBER:	BIOL& 213
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:	27
PREREQUISITES:	BIOL& 211 and BIOL& 212 or Instructor's permission

## COURSE DESCRIPTION:

BIOL& 213 is the third course in the Biology 200 series. Emphasis on evolution, ecology, and biological principles of monera, fungi protista and plants, including their physical, anatomy, growth process and diversity. Emphasis on diversity and phylogeny of living organisms, evolutionary principles and ecology. Also addresses anatomy, physiology, growth and reproduction of terrestrial plants. Lab included.

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. Describe the evolutionary relationship, history, commonalities and differences among the following Kingdoms: monera, protista, fungi and plantae with respect to structure and function, with an evolutionary perspective.
2. Explain how cellular structure and processes determine the structure and function of multicellular organisms, especially plants.
3. Describe the adaptations that evolved in plants to allow the transition to life on land.
4. Describe the approach of ecology and the inter-relationships among organisms.
5. Describe and explain ecosystem function, population dynamics, the factors that determine the distribution and abundance of organisms, and the effect humans are having on the biosphere.
6. Explain the implications for humans of the topics we cover.
7. Appropriately use the dissecting and compound light microscopes and understand basic principles of dissection.

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TOPICAL OUTLINE:

APPROX. HOURS

I.	Diversity of Monera, Protista, and Fungi, Plants	20
II.	Plant physiology	30
III.	Principles of ecology and behavior	27
	Total hours	77

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SLO #	Included in Course Objective Number	SSCC Student Learning Outcomes
SLO 1.1	1,2,3,4,5	Communication - Read and listen actively
SLO 1.2	1,2,3,4,5	Communication - Speak and write effectively
SLO 2.1		Computation - Use mathematical operations
SLO 2.2	5	Computation - Apply quantitative skills
SLO 2.3		Computation - Identify, interpret, and utilize higher level mathematical and cognitive skills
SLO 3.1	6,7	Human Relations - Use social interactive skills to work in groups effectively
SLO 3.2	6,7	Human Relations - Recognize the diversity of cultural influences and values
SLO 4.1	1,2,3,4,5	Critical Thinking and Problem Solving -
SLO 5.1	7	Technology - Select and use appropriate technological tools
SLO 6.1	1 – 7	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	6	Personal Responsibility - Be aware of civic and environmental issues
SLO 7.1	6	Information Literacy - Access and evaluate information
SLO 7.2	6	Information Literacy - Use information to achieve personal, academic, and career goals, as well as to participate in a democratic society

PREPARED BY: C. Schroyer  
 DATE: April 2008