

COURSE OUTLINE

Revision: Carey Schroyer, February 2008

DEPARTMENT:	Academic Programs
CURRICULUM:	The Natural World
COURSE TITLE:	Majors Animal
COURSE NUMBER:	BIOL& 212
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 (Majors Cellular) or instructor permission

COURSE DESCRIPTION:

BIOL& 212 is the second course in the Biology 200 series. Emphasis on the biological diversity of animals, general principles of animal physiology, growth and development. Lab included.

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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 be able to:

1. Explain population genetics, including Hardy-Weinberg Equilibrium, and the fundamentals of micro and macro evolution.
2. Explain how biologists classify organisms on the basis of evolutionary relationships.
3. Explain the evolutionary relationships and history of the major animal phyla, including identification of the commonalities and differences among the different major animal phyla with respect to structure and function of the major organ systems, with an evolutionary perspective.
4. Directly observe animal histology and describe how cellular structure (within tissues) and processes determine the structure and function of multi cellular organisms.
5. Describe what adaptations evolved to allow the transition to life on land for animals.
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. Population Genetics/ Micro/Macro Evolution	15
II. Evolution	20
III. Animals	15
IV. Animal Systems	27
Total hours	77

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DATE: April 2008

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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	6,7	Communication - Speak and write effectively
SLO 2.1		Computation - Use mathematical operations
SLO 2.2	1	Computation - Apply quantitative skills
SLO 2.3		Computation - Identify, interpret, and utilize higher level mathematical and cognitive skills
SLO 3.1	7	Human Relations - Use social interactive skills to work in groups effectively
SLO 3.2	6	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	1,2,3,4,5,6,7	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	6,7	Personal Responsibility - Be aware of civic and environmental issues
SLO 7.1		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: Carey Schroyer
DATE: April 2008