

El Paso Community College
Syllabus
Part II
Official Course Description

SUBJECT AREA	<u>Biology</u>
COURSE RUBRIC AND NUMBER	<u>BIOL 1407</u>
COURSE TITLE	<u>General Biology-Science Majors II</u>
COURSE CREDIT HOURS	<u>4 3 :</u> <u>3</u> Credits Lecture Lab

I. Catalog Description

Continues BIOL 1406. General Biology course designed for science majors. Studies the reproduction and development, classical and molecular genetics, ecology, evolution, and an introduction to the diversity of the prokaryotes, protists, fungi, plant and animal kingdoms for a taxonomic, morphological, and physiological standpoint. Laboratory required. **Prerequisite: BIOL 1406 or by placement exam. (3:3). Lab fee.**

II. Course Objectives

A. Unit I: The Evolutionary History of Biological Diversity

1. Describe how the earth has changed, the origin of life, and the classification of life into kingdoms.
2. Describe the most important characteristics of simple organisms (Viruses, Bacteria, Protists, and Fungi) and discuss important examples, ecological interactions and their phylogenetic relationships.
3. Analyze the evolutionary history and diversity of the major groups of plants and animal phyla, and their ecological relationships with other organisms and their environment.
4. Analyze some examples/cases in the field of conservation biology, to protect our ecosystems.

B. Unit II: Plant Form and Function

1. Discuss the influence of animals (and other organisms) on the form and function of present-day plants
2. Discuss general aspects of transport systems and nutrition in plants.
3. Analyze different plant reproductive strategies

C. Unit III: Animal Form and Function.

1. Analyze general aspects of animal organization, (tissue to organ systems) and the necessity of structural features such as hydrostatic, exo, and endoskeletons (cartilage and bony)

2. Compare and contrast the methods used by animals to regulate internal temperature (ecto vs. endothermic); place special emphasis on energy consumption, efficiency, behavioral adaptations, and limitations.
3. Describe (in a comparative manner) the nervous system of the major animal taxa.
4. Explain how the nervous, muscular, cardiovascular, respiratory, digestive, and urinary systems work together to allow for proper functioning of the body.
5. Analyze the different reproductive strategies in the different animal Phyla.

III. Evaluation

A. Pre-assessment Not required

B. Post-assessment

1. Lecture (75% of total grade); Type and number of exams will be determined by the instructor. Take- home exams are not recommended for this course. No exam will be dropped in calculating the final grade. All students are required to take the final exam.
2. Laboratory (25% of total grade), Lab grades will be based on practical's, group activities, presentations. The evaluation methods, frequency and individual weight of each assessment method is to be determined by the instructor.

C. Grading Scale:

90-100	-	A
80-89	-	B
70-79	-	C
60-69	-	D
below 60	-	F

IV. Disability Statement (American with/Disabilities Act [ADA])

EPCC offers a variety of services to persons with documented sensory, mental, physical, or temporary disabling conditions to promote success in classes. If you have a disability and believe you may need services, you are encouraged to contact the Center for Students with Disabilities to discuss your needs with a counselor. All discussions and documentation are kept confidential. Offices located: VV Rm C-112 (831-2426); TM Rm 1400 (831-5808); RG Rm B-201 (831-4198); NWC Rm M-54 (831-8815); and MDP Rm A-125 (831-7024)

V. 6 Drop Rule

Students who began attending Texas public institutions of higher education for the first time during the Fall 2007 semester or later are subject to a 6-Drop limit for all undergraduate classes. Developmental, ESL, Dual Credit and Early College High School classes are exempt from this rule. All students should consult with their instructor before dropping a class. Academic assistance is available. Students are encouraged to see Counseling Services if dropping because exemptions may apply. Refer to the EPCC catalog and website for additional information.