

**Core Curriculum
Course Proposal Cover Sheet**

Department Biological Sciences
College: Science And Technology
Department Head: Dr. John Calahan

Course Prefix & Number: Biology 121
Course Title General Biology Animal Emphasis

Course Description:

The major animal phyla and vertebrate systems are surveyed, with representative examples and dissection of specimens stressed in the lab. Substantial microscopic observation required.

LIFE AND PHYSICAL SCIENCES

FOUNDATIONAL COMPONENT AREA JUSTIFICATION FORM

Rationale: Please provide a rationale for the course which explains how the course being proposed fits into this component based on the component's description. For your convenience, the overall description and rationale for this component are included below.

Life and Physical Sciences (from THECB Chapter 4: 4.28)

- Courses in this category focus on describing, explaining, and predicting natural phenomena using the scientific method.
- Courses involve the understanding of interactions among natural phenomena and the implications of scientific principles on the physical world and on human experiences.
- The following four Core Objectives must be addressed in each course approved to fulfill this category requirement: Critical Thinking Skills, Communication Skills, Empirical and Quantitative Skills, and Teamwork.
 - Critical Thinking Skills: to include creative thinking, innovation, inquiry, and analysis, evaluation and synthesis of information;
 - Communication Skills: to include effective development, interpretation and expression of ideas through written, oral and visual communication;
 - Empirical and Quantitative Skills: to include the manipulation and analysis of numerical data or observable facts resulting in informed conclusions;
 - Teamwork: to include the ability to consider different points of view and to work effectively with others to support a shared purpose or goal.

Rationale for Inclusion in this Category:

Biology 121 (General Biology II) is a basic science that focuses on the major animal phyla and vertebrate organ systems. This course is intended to give students not only a basic understanding of animal life, but also enable them to make intelligent health decisions.

STUDENT LEARNING OUTCOME ALIGNMENT FORM
Life and Physical Sciences

Course Prefix/Number: BIOL 121

Course Title: General Biology II

Core Objective: Critical Thinking CT1: Students will evaluate evidence in analysis, interpretation or arguments

Course SLO(s): Students will classify organisms into taxonomic categories and develop a phylogenetic tree from empirical observations

Learning Activities: Students will complete laboratory exercises designed to teach them basic principles about classifying organisms and constructing phylogenetic trees

Means of Assessment: ~~Particular~~Specific questions in the lab handout related to classifying organisms and creating phylogenetic trees

Core Objective: Critical Thinking CT2: Students will synthesize varied components of information to form a rational conclusion.

Course SLO(s): Students will examine the fossil record and reconstruct the evolutionary history of a group of organisms

Learning Activities: Students will complete laboratory exercises designed to teach them how empirical evidence can be used to reconstruct evolutionary history

Means of Assessment: ~~Certain~~Specific questions in the lab handout related to reconstructing the fossil record

Core Objective: Communication C1: Students will express ideas in written, visual or oral forms to a range of diverse audiences in multiple settings.

Course SLO(s): Students will work in groups to express ideas in oral form

Learning Activities: Students will work in groups in the laboratory setting to prepare and give a 10 minute presentation over ecological and evolutionary processes that account for their classification, phylogenetic tree, and reconstructed fossil record

Means of Assessment: A rubric will be used to assess the communication skills and visuals demonstrated in the group presentation.

Core Objective: Empirical and Quantitative EQS1: Students will gather, interpret or use numerical data/observable facts to arrive at an informed conclusion.

Course SLO(s): Students will examine empirical and quantitative data to form testable hypotheses.

Learning Activities: Students will examine morphological data to classify organisms and to reconstruct their evolutionary history.

Means of Assessment: ~~Certain-Specific~~ questions in the lab handout related to reconstructing the fossil record.

Core Objective: Teamwork TW1: Students will work in coordination to complete specific tasks.

Course SLO(s): Students will work in groups to understand basic ecological and evolutionary processes that result in particular phylogenetic trees.

Learning Activities: Students will work in groups to complete laboratory exercises on the classification and evolutionary history for a group of organisms.

Means of Assessment: Students will ~~assign grades to evaluate~~ other students in their group based on how much each student contributed to the project.

As department head, I will ensure that all faculty that teach this course are aware of the requirements that these core objectives and learning strategies be incorporated into the above referenced course. This action is taken so that Tarleton State University will be in compliance with Texas Higher Education Coordinating Board foundational component area and core objective requirements for the General Education Core Curriculum.

Signature_____

We, the undersigned faculty, support the proposed changes to this course and agree to incorporate them into our section of the above referenced course. This action is taken so that Tarleton State University will be in compliance with Texas Higher Education Coordinating Board foundational component area and core objective requirements for the General Education Core Curriculum.

(Signed document should be kept in department office, listing names below on the electronic document implies acceptance)