

**Core Curriculum  
Course Proposal Cover Sheet**

**Department: Biological Sciences  
College: Science and Technology  
Department Head: John Calahan**

**Course Prefix & Number: Biol 219**

**Course Title: Anatomy and Physiology**

**Course Description: Basic human anatomy and physiological principles focusing on the cellular and tissue levels and their integration into the integumentary, skeletal, muscular and nervous systems. 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:

Anatomy and Physiology is a basic life science examining the structural hierarchy of human anatomy, starting with chemistry, cells and tissues and working up to the various organ systems. The course also examines the function of these various structures and how they cooperate and are integrated into the whole organism.

**STUDENT LEARNING OUTCOME ALIGNMENT FORM**  
**Life and Physical Sciences**

**Course Prefix/Number: BIOL 219**

**Course Title: Human Anatomy and Physiology**

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

Course SLO(s): CT1: Students will evaluate evidence in analysis, and interpretation.

Learning Activities: Students will use the microscope, preserved specimen and anatomical models to correctly identify structures within organ systems.

Means of Assessment:

Exam questions on identification.

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

Course SLO(s): CT2: Students will synthesize varied components of information to form a rational conclusion.

Learning Activities: Students will be instructed orally and with 2 dimensional figures, they then must come to an understanding and apply this to structures on 3 dimensional dissected specimen.

Means of Assessment: Targeted exam questions on the preserved specimen.

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

Learning Activities: Students will receive written and oral instructions which they then must discuss in groups and come to a consensus and apply the data to various specimen and/ or models.

Means of Assessment: Targeted exam questions on the preserved specimen will assess vocabulary recognition and listening skills.

**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 gather, interpret or use numerical data/observable facts to arrive at an informed conclusion.

Learning Activities: The students must understand the variance in quantity of ATP production due to both variance in starting reactants or variance in metabolic pathways followed

Means of Assessment: Scores on embedded exam questions.

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

Course SLO(s):

Students will work in coordination in labs to complete specific tasks.

Learning Activities

Students work in assigned lab groups to apply the instructions provided.

Means of Assessment

Impact of group work will be evaluated by assessing individual performance versus group performance on lab scores.

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)*

Stephen McReynolds