RANGER COLLEGE

STEPHENVILLE, TEXAS

COURSE SYLLABUS

Anatomy and Physiology

Biology 2401

4 credit hours

INSTRUCTOR:

Kathleen Huckabee

INSTRUCTOR: Kathleen Huckabee
EMAIL: Kathleen.huckabee@sville.us
OFFICE: Room 503 Stephenville High School
PHONE: 254-968-4141
HOURS: 7:45 am to 11:45 pm

I. Texas Core Curriculum Statement of Purpose

Through the Texas Core Curriculum, students will gain a foundation of knowledge of human cultures and the physical and natural world, develop principles of personal and social responsibility for living in a diverse world, and advance intellectual and practical skills that are essential for all learning.

II. Course Description

Anatomy and Physiology I is the first part of a two-course sequence. It is a study of the structure and function of the human body including cells, tissues and organs of the following systems: integumentary, skeletal, muscular, nervous and special senses. Emphasis is on interrelationships among systems and regulation of physiological functions involved in maintaining homeostasis.

III. Required Background or Prerequisite

Recommended prerequisite: BIOL 1406.

IV. Required Textbook and Course Materials

The textbook for this course is provided by Lumen Learning. There is no separate book to purchase. It can be accessed in Blackboard.

V. Course Purpose

Courses in the life and physical sciences 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.

VI. Learning Outcomes

Upon successful completion of this course, students will:
*Use anatomical terminology to identify and describe locations of major organs of each system covered.
*Explain interrelationships among molecular, cellular, tissue, and organ functions in each system.
*Describe the interdependency and interactions of the systems.
*Explain contributions of organs and systems to the maintenance of homeostasis.
*Identify causes and effects of homeostatic imbalances.
*Describe modern technology and tools used to study anatomy and physiology

VII. Core Objectives

This course meets the following of the six Core Objectives established by Texas:

☒ **Critical Thinking Skills (CT) –** Creative thinking, innovation, inquiry, and analysis; evaluation and synthesis of information

☒ **Communication Skills (COM) –** effective development, interpretation and expression of ideas through written, oral, and visual communication

☒ **Empirical and Quantitative Skills (EQS) –** The manipulation and analysis of numerical data or observable facts resulting in informed conclusions

☒ **Teamwork (TW) –** The ability to consider different points of view and to work effectively with others to support a shared purpose or goal

☐ **Social Responsibility (SR) –** Intercultural competence, knowledge of civic responsibility, and the ability to engage effectively in regional, national, and global communities

☐ **Personal Responsibility (PR) –** The ability to connect choices, actions, and consequences to ethical decision-making

VIII. Methods of Instruction

1. Lectures (3 times weekly) in which the major concepts and theories in anatomy and physiology will be discussed.

2. Labs (2 times weekly) in which major anatomical and physiological principles will be demonstrated by examination of specimens and viewing videos.

3. Case Studies will be assigned each semester.

IX. Methods of Assessment

The course grade will be computed as follows:

Average of lecture exams and quizzes (CT, COM, EQS), lab practicals, and case studies (CT, COM, EQS, TW) = 75%

Final Exam (CT, EQS) = 25%

Letter grades will be assigned as follows:

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

X. Course/Classroom Policies

Regular and punctual attendance in all classes and labs is considered essential for optimum academic success. If the student has the equivalence of three weeks of unofficial absences the instructor may drop the student from the course with a grade of F (Ranger College General Catalog). Students are expected to be seated by the beginning of the lecture period. Excessive tardies (6) may be considered as absences. Excessive unexcused absences (6) may result in a grade of I (incomplete) and may result in dismissal from the course with a grade of F. It is your responsibility to inform the instructor of an excused absence. An absence is excused if you are excused by the Dean to participate in an authorized College activity or if you have a valid medical excuse. Any student who is disruptive to the class will be dismissed from the class and may be dismissed from the course. Any student found with unauthorized notes (cheat sheets, electronic devices, etc.) during an exam or copying from another student's exam will be subject to disciplinary action. Any student misconduct will be reported to the Dean of Student Services (See Student Handbook).

No tobacco use is permitted on campus.

XI. Course Outline/Schedule

CLASS	LECTURE TOPIC	TEXT ASSIGNMENT
1	Introduction to Anatomy and Physiology	Ch. 1
2	Muscle dissection	
3	Cell organelles and transport	Ch. 3
4	Mitosis webquest / Intro and cell test review	Ch. 3
5	**Exam 1: Intro. and Cell**, muscle dissection	
6	Tissue Module	Ch. 5
7	Epithelial and connective tissue histology lab	Ch. 5
8	Epithelial and connective tissue histology lab	Ch. 5
9	**Exam 2: Tissues**, Muscle dissection	
10	Integumentary system, muscle dissection	Ch. 6

11	Integumentary system, muscle dissection	Ch. 6
12	**Lab Practical 1,** Integumentary System	Ch. 6
13	**Exam 3: Integument**, disarticulated skeleton	Ch. 7
14	Skeletal system, disarticulated skeleton	Ch. 7
15	Skeletal system, disarticulated skeleton	Ch. 7
16	Muscular system, disarticulated skeleton	Ch. 8
17	**Lab Practical 2**, muscular system	Ch. 8
18	Muscular system, muscle dissection	Ch. 8
19	**Exam 4: Skeletomuscular**, muscle dissection	
20	Divisions of the nervous system, muscle dissection	Ch. 9
21	Impulse transmission, processing, pathways	Ch. 9
22	Meninges, CSF, ventricles, sheep brains	Ch. 9
23	**Exam 5: Nervous System**, sheep brains	
24	PNS, cranial nerves, sheep brains	Ch. 9
25	**Lab Practical 3,** Spinal nerves, ANS	Ch. 9
26	Cranial nerve lab	Ch. 9
27	Senses and sensory lab	Ch. 10
28	Semester Exam Review	
29	**Final Exam** (comprehensive)	

XII. Non-Discrimination Statement

Admissions, employment, and program policies of Ranger College are nondiscriminatory in regard to race, creed, color, sex, age, disability, and national origin.

XIII. ADA Statement

Ranger College provides a variety of services for students with learning and/or physical disabilities. Students are responsible for making initial contact with the Ranger College Counselor, Gabe Lewis (glewis@rangercollege.edu). It is advisable to make this contact before or immediately after the semester begins.

XIV. Exit plan for the science building

In case of fire or other emergency, the nearest exit from the classroom is the door by the small gym. Please remain outside the building until otherwise notified by campus officials.