



RANGER COLLEGE  
STEPHENVILLE, TEXAS

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COURSE SYLLABUS

**Anatomy & Physiology II**

**BIOL2402**

**4 credit hours**

## **INSTRUCTOR:**

**Ed Barnes**

INSTRUCTOR: Ed Barnes  
EMAIL: Ed.Barnes@rangercollege.edu  
HOURS: Monday 3p to 6p

### **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 II is the second part of a two-course sequence. It is a study of the structure and function of the human body including the following systems: endocrine, cardiovascular, immune, lymphatic, respiratory, digestive (including nutrition), urinary (including fluid and electrolyte balance), and reproductive (including human development and genetics). 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 buy. You will have access to the textbook right in Blackboard.

“Laboratory Atlas of Anatomy and Physiology” 6 th edition by Eder. 2009 McGraw Hill. ISBN 10: 0073525677, 13: 978-0073525679

### **V. Course Purpose**

Courses in the life and physical sciences focus on describing, explaining and predicting natural phenomena using the scientific method. These 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 (twice weekly) in which the major concepts and theories in anatomy and physiology will be discussed.
2. Labs (weekly) in which major anatomical and physiological principles will be demonstrated by examination of specimens and viewing videos

### **IX. Methods of Assessment**

Exams: 3 exams @ 200 points each

Comprehensive Final: 200 points

Lab Practicals: 150 points each

Grading scale: A = 90-100%    B = 80-89    C = 70-79    D = 60-69    F = Below 60

### **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. 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. No tobacco use is permitted in the science building, or other locations on RC campuses.

### **XI. Course Outline/Schedule**

<b>Wee</b>	<b>Lecture</b>	<b>Lab</b>
<b>k</b>		
<b>1</b>	<b>Endocrine</b>	
		<b>Medical</b>
<b>1</b>	<b>Endocrine</b>	<b>Terminology</b>
<b>2</b>	<b>Labor Day</b>	<b>Labor Day</b>
<b>2</b>	<b>Endocrine</b>	<b>Prac 1</b>
<b>3</b>	<b>Digestive</b>	
<b>3</b>	<b>Digestive</b>	<b>Endocrine</b>
<b>4</b>	<b>Metabolism/Nutrition</b>	
<b>4</b>	<b>Metabolism/Nutrition</b>	<b>Digestive</b>
<b>5</b>	<b>Exam 1</b>	
<b>5</b>	<b>Heart /Vessels</b>	<b>Prac 2</b>
<b>6</b>	<b>Heart/Vessels</b>	
<b>6</b>	<b>Blood</b>	<b>Heart</b>
<b>7</b>	<b>Blood</b>	
<b>7</b>	<b>Respiratory</b>	<b>Vessels</b>
<b>8</b>	<b>Respiratory</b>	

[Insert Course Code] – [Insert semester]

8	Lymphatic	Blood
9	Exam 2 Review	
9	Exam 2	Prac 3
	Urinary & Fluid	
10	Balance	
	Urinary & Fluid	
10	Balance	Respiratory
11	Reproductive	
		Urinary &
11	Reproductive	Lymphatic
12	Reproductive	
12	Genetics	Reproductive
13	Fetal Dev	
13	Fetal Dev	Prac 4
14	Exam 3	
14	Final Exam Review	
14	Final Exam Review	
15	Final Exam	

## **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.