

CORE CURRICULUM COMPONENT APPLICATION  
Texarkana College

**Part I: Course Information**

Course Type

- Existing/Restructured  
 New Course

Course Prefix & Number: **BIOL 2302**

Texas Common Course Number (TCCN): **2302**

Course Title: **Anatomy & Physiology II**

Course Catalog Description

**Anatomy & Physiology II (4,3,3).** A continuation of BIOL 2401. Includes the gross and microscopic anatomy and physiology of the circulatory, respiratory, digestive, urinary, endocrine and reproductive systems, immunity and fluid-electrolyte/acid base balance

Course Prerequisites:

BIOL 2401 and successful completion of the reading portion of the TSI test.

Available Online?

- Yes  
 No

**Part II: THECB Course Objectives**

Upon successful completion of this course, students will:

1. Identify and describe the structural features of the endocrine system and explain the functional roles of hormones on their tissues.
2. identify and describe the components of blood and explain their functional roles.
3. Identify and describe the structural features of the heart and blood vessels and explain their functional role.
4. Identify and describe the structural features of the respiratory system and explain their functional roles in ventilation.
5. identify the structural features of the lymphatic system and explain its role in fluid balance, fat absorption, and defense.
6. Identify and describe structural features of the digestive system and explain their roles in digestion, absorption, and defecation.
7. Identify the structural features of the urinary system and explain their functional roles in urine formation and excretion.
8. Describe the physiology of homeostatic mechanisms that control fluid and electrolyte balance
9. Define buffer systems and explain their roles in acid-base balance.

CORE CURRICULUM COMPONENT APPLICATION  
Texarkana College

10. Identify and describe structural features of the male and female reproductive systems and explain their roles in reproduction and inheritance.

[See attached syllabus.](#)

**Part III: THECB Skill Objectives**

- 1. Critical Thinking Skills:** to include creative thinking, innovation, inquiry, and analysis, evaluation and synthesis of information
- 2. Communication Skills:** to include effective development, interpretation and expression of ideas through written, oral and visual communication
- 3. Empirical and Quantitative Skills:** to include applications of scientific and mathematical concepts.
- 4. Teamwork:** to include the ability to consider different points of view and to work effectively with others to support a shared purpose or goal

**Part IV: Course Student Learning Outcomes (SLO)**

Upon successful completion of this course, students will:

1. Identify and describe the structural features of the endocrine system and explain the functional roles of hormones on their tissues.
2. identify and describe the components of blood and explain their functional roles.
3. Identify and describe the structural features of the heart and blood vessels and explain their functional role.
4. Identify and describe the structural features of the respiratory system and explain their functional roles in ventilation.
5. identify the structural features of the lymphatic system and explain its role in fluid balance, fat absorption, and defense.
6. Identify and describe structural features of the digestive system and explain their roles in digestion, absorption, and defecation.
7. Identify the structural features of the urinary system and explain their functional roles in urine formation and excretion.
8. Describe the physiology of homeostatic mechanisms that control fluid and electrolyte balance
9. Define buffer systems and explain their roles in acid-base balance.
10. Identify and describe structural features of the male and female reproductive systems and explain their roles in reproduction and inheritance.

[See attached syllabus.](#)

CORE CURRICULUM COMPONENT APPLICATION  
Texarkana College

<b>Skill Objective:</b>	<b>Critical Thinking Skills:</b> to include creative thinking, innovation, inquiry, and analysis, evaluation and synthesis of information
<b>THECB Course Objective</b>	(SLO #2) identify and describe the components of blood and explain their functional roles.
<b>Course Student Learning Outcome</b>	(SLO #2) identify and describe the components of blood and explain their functional roles.
<b>General Learning Activities</b>	Students will work in lab teams on a Blood Cell Identification lab. The lab teams will examine the slides provided on six microscopes focused on either erythrocytes of different types of leukocytes. They identify the cells, draw them, and complete the lab report. <a href="#">See attached activity.</a>
<b>Assessment</b> <i>Must Include Assignment &amp; Rubric</i>	Grade. <a href="#">See attached rubric.</a>

<b>Skill Objective:</b>	<b>Communication Skills:</b> to include effective written, oral, and visual communication
<b>THECB Course Objective</b>	(SLO #2) identify and describe the components of blood and explain their functional roles.
<b>Course Student Learning Outcome</b>	(SLO #2) identify and describe the components of blood and explain their functional roles.
<b>General Learning Activities</b>	Students will work in lab teams on a Blood Cell Identification lab. The lab teams will examine the slides provided on six microscopes focused on either erythrocytes of different types of leukocytes. They identify the cells, draw them, and complete the lab report. <a href="#">See attached activity.</a>
<b>Assessment</b> <i>Must Include Assignment &amp; Rubric</i>	Grade. <a href="#">See attached rubric.</a>

<b>Skill Objective:</b>	<b>Empirical and Quantitative Skills:</b> to include applications of scientific and mathematical concepts.
<b>THECB Course Objective</b>	(SLO #2) identify and describe the components of blood and explain their functional roles.
<b>Course Student Learning Outcome</b>	(SLO #2) identify and describe the components of blood

CORE CURRICULUM COMPONENT APPLICATION  
Texarkana College

	and explain their functional roles.
<b>General Learning Activities</b>	Students will work in lab teams on a Blood Cell Identification lab. The lab teams will examine the slides provided on six microscopes focused on either erythrocytes of different types of leukocytes. They identify the cells, draw them, and complete the lab report. <a href="#">See attached activity.</a>
<b>Assessment</b> <i>Must Include Assignment &amp; Rubric</i>	Grade. <a href="#">See attached rubric.</a>

<b>Skill Objective:</b>	<b>Teamwork:</b> to include the ability to consider different points of view and to work effectively with others to support a shared purpose or goal
<b>THECB Course Objective</b>	(SLO #2) identify and describe the components of blood and explain their functional roles.
<b>Course Student Learning Outcome</b>	(SLO #2) identify and describe the components of blood and explain their functional roles.
<b>General Learning Activities</b>	Students will work in lab teams on a Blood Cell Identification lab. The lab teams will examine the slides provided on six microscopes focused on either erythrocytes of different types of leukocytes. They identify the cells, draw them, and complete the lab report. <a href="#">See attached activity.</a>
<b>Assessment</b> <i>Must Include Assignment &amp; Rubric</i>	Grade. <a href="#">See attached rubric.</a>