

CORE CURRICULUM COMPONENT APPLICATION  
Texarkana College

**Part I: Course Information**

Course Type

- Existing/Restructured  
 New Course

Course Prefix & Number: **BIOL 2301**

Texas Common Course Number (TCCN): **2301**

Course Title: **Anatomy & Physiology I**

Course Catalog Description

**Anatomy & Physiology I (4,3,3).** A study of the gross and microscopic anatomy and physiology of cells, tissues, integument, muscular-skeletal, and nervous systems. Prior completion of CHEM 1405 is strongly recommended..

Course Prerequisites:

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 anatomy of the integumentary system and discuss its role in homeostasis.
2. Identify the anatomical features of the human skeleton and the functions of the skeletal system.
3. Describe the histology and physiology of the muscular system.
4. Describe the organization of the nervous system and the major functional divisions
5. Name the cranial nerves and describe the body region and structures innervated by each
6. Use and understand the language of anatomy

[See attached syllabus.](#)

**Part III: THECB Skill Objectives**

**1. Critical Thinking Skills:** to include creative thinking, innovation, inquiry, and analysis, evaluation

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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 anatomy of the integumentary system and discuss its role in homeostasis.
2. Identify the anatomical features of the human skeleton and the functions of the skeletal system.
3. Describe the histology and physiology of the muscular system.
4. Describe the organization of the nervous system and the major functional divisions
5. Name the cranial nerves and describe the body region and structures innervated by each
6. Use and understand the language of anatomy

[See attached syllabus.](#)

<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 #6) Use and understand the language of anatomy
<b>Course Student Learning Outcome</b>	(SLO #6) Use and understand the language of anatomy
<b>General Learning Activities</b>	Students will complete the lab Cell Membranes and Osmolarity. First, the students will be given an introduction to the plasma membrane via powerpoint illustrating the key concepts regarding movement of materials across the membrane. Then, in lab teams, they will prepare slides that expose sheep's blood to various types of solutions causing crenation, hemolysis, etc. They will observe the slides, draw their result, and determine what the effect each solution had on the blood cell. <a href="#">See attached activity.</a>

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<b>Assessment</b> <i>Must Include Assignment &amp; Rubric</i>	Grade. <a href="#">See attached rubric.</a>
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<b>Skill Objective:</b>	<b>Communication Skills:</b> to include effective written, oral, and visual communication
<b>THECB Course Objective</b>	(SLO #6) Use and understand the language of anatomy
<b>Course Student Learning Outcome</b>	(SLO #6) Use and understand the language of anatomy
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<b>Skill Objective:</b>	<b>Empirical and Quantitative Skills:</b> to include applications of scientific and mathematical concepts.
<b>THECB Course Objective</b>	(SLO #6) Use and understand the language of anatomy
<b>Course Student Learning Outcome</b>	(SLO #6) Use and understand the language of anatomy
<b>General Learning Activities</b>	Students will complete the lab Cell Membranes and Osmolarity. First, the students will be given an introduction to the plasma membrane via powerpoint illustrating the key concepts regarding movement of materials across the membrane. Then, in lab teams, they will prepare slides that expose sheep's blood to various types of solutions causing crenation, hemolysis, etc. They will observe the slides, draw their result, and determine what the effect each solution had on the blood cell. <a href="#">See attached activity.</a>
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<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
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