

# BI 231Z : HUMAN ANATOMY AND PHYSIOLOGY I

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## Transcript title

Human Anatomy and Physiology I

## Credits

4

## Grading mode

Standard letter grades

## Total contact hours

60

## Lecture hours

30

## Lab hours

30

## Prerequisites

WR 065 or WR 121Z or minimum placement Wr/Comm Level 7.

## Course Description

Examines the structure and function of the human body through a body systems approach. Explores anatomy and physiology of the integumentary, skeletal and muscular systems at the relevant levels of biological organization (chemical, cellular, tissue, organ, and organ system). Covers neurophysiology and excitable membranes. Includes foundational aspects such as anatomical terminology and homeostasis. This course includes a laboratory component.

## Course learning outcomes

1. Explain key homeostatic mechanisms and feedback loops in the integumentary and skeletal systems.
2. Describe anatomical structures and their relationships to function in the integumentary, skeletal, muscular systems, and neural tissue.
3. Explain key processes of the integumentary, skeletal, and muscular systems and neural signaling.
4. Relate the relevant levels of biological organization to the functions of the integumentary, skeletal, muscular systems, and neural tissue.
5. Describe how the integumentary, skeletal, muscular systems, and neural tissue interact with other body systems.
6. Apply physiological and/or anatomical concepts of the integumentary, skeletal, and muscular systems, and neural tissue to practical scenarios such as clinical, public health, and societal issues.
7. Identify major structures in tissues, integumentary, skeletal and muscular systems using lab materials.
8. Apply foundational concepts of cell biology including differentiation of primary tissue types to human body systems.

## Required materials

Textbook may be required.

## General education/Related instruction lists

- Science Lab