

**I. COURSE INFORMATION**

- A. Biology 260 Human Anatomy and Physiology I
- B. 4 credit hours
- C. Amerman, Erin. *Human Anatomy & Physiology*. 2<sup>nd</sup> ed. Pearson Publishing
- D. Prerequisites: Completion of BIO 102 Principles of Biology or BIO 150 Biology I (Cellular) with a C grade or above
- E. KRSN: BIO 2030 Anatomy & Physiology with Lab

The learning outcomes and competencies detailed in this course outline or syllabus meet or exceed the learning outcomes and competencies specified by the Kansas Core Outcomes Groups project for this course as approved by the Kansas Board of Regents.

**II. COURSE DESCRIPTION**

This is an integrated lecture and laboratory course focusing on orientation, histology, integumentary, skeletal, muscular, urinary, and digestive systems. This course covers the macroscopic and microscopic structures and the chemical processes of involved cells, tissues, organs, and organ systems of the body. This is one semester of a two-semester course sequence. This course must be taken in addition to BIO 265 to be equivalent to BIO257. This course is an intermediate study designed primarily for pre-professional students in health-related fields.

**III. LEARNING OUTCOMES**

- A. Demonstrate measurable understanding of descriptive anatomical and directional terminology
- B. Demonstrate measurable understanding of the basic concept of homeostasis and how homeostatic mechanisms apply to body systems
- C. Demonstrate measurable understanding of basic chemistry and cellular structures and function
- D. Demonstrate measurable understanding of the basic tissues of the body, their location and functions with an emphasis on the following systems: integumentary, skeletal, muscular, urinary, and digestive systems
- E. Demonstrate measurable understanding of major gross and microscopic anatomical components of the integumentary system and describe the functions of the system
- F. Demonstrate measurable understanding of major gross and microscopic anatomical components of the skeletal system and explain their functional roles in osteogenesis, repair, and body movement
- G. Demonstrate measurable understanding of major gross and microscopic anatomical components of the muscular system and explain their functional roles in body movement, maintenance of posture, and heat production
- H. Demonstrate measurable understanding of the major gross and microscopic anatomical components of the digestive system and explain their functional roles in digestion, absorption, excretion and elimination
- I. Demonstrate measurable understanding of the functional relationship among cellular, tissue and organ level metabolism, the role nutrition plays in metabolism, and the mechanisms by which metabolic rate is regulated in the body
- J. Demonstrate measurable understanding of the major gross and microscopic anatomical components of the urinary system and explain their functional roles
- K. Demonstrate measurable understanding of the physiology of the homeostatic mechanisms that control fluid/electrolyte and acid/base balance

**IV. MAJOR CONTENT AREAS**

- A. Anatomical terminology
- B. Homeostasis
- C. Chemistry
- D. Cells
- E. Tissues

- F. Integumentary system
- G. Skeletal system
- H. Muscular system
- I. Digestive system
- J. Metabolism
- K. Urinary system
- L. Fluid and electrolyte balance

**V. ASSIGNMENTS** (may include but are not limited to)

- A. Assignments
- B. Laboratory activities
- C. Quizzes
- D. Exams

**VI. EVALUATION METHODS** (may include but are not limited to)

- A. Exams
- B. Projects and lab exercises
- C. Assignments
- D. Quizzes and exams