University of Arkansas – Fort Smith

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General Syllabus

BIOL 14483 Basic Anatomy and Physiology

Credit Hours: 3 Lecture Hours: 3 Laboratory Hours: 0

Prerequisite or corequisite: BIOL 14381 Basic Anatomy and Physiology Laboratory or consent of instructor.

Effective Catalog: 2018- 2019

I. Course Information:

A. Catalog Description

Fundamentals of human anatomy and physiology. Includes hierarchy of body structure and organization and basic biological chemistry. Structures and functions of each body system are studied, with emphasis on the contribution that each makes to homeostasis.

B. Additional Information

Students learn the essentials of human anatomy and physiology through lectures, audiovisuals, and textbook study. The course is intended primarily to serve students in certificate programs in the allied health fields, and in college-transfer programs in which one four-hour human anatomy and physiology course is required.

II. Student Learning Outcomes

A. Subject Matter

Upon completion of this course, the student should be able to:

- 1. Identify the major body regions, cavities, planes, and sections.
- 2. Understand chemistry well enough to effectively study human physiology.
- 3. Describe the major structural features of a typical cell, and describe the major physiological processes which occur in cells.
- 4. Describe and identify the major human tissue types, discuss their functions, and describe their locations in the body.
- 5. Identify the major anatomical structures in each body system.
- 6. Describe and explain the major physiological processes that occur in each body system.

7. Explain the concept of homeostasis, and discuss the ways in which the body systems work together to maintain homeostasis.

B. University Learning Outcomes

Basic Anatomy and Physiology enhances student abilities in the following areas:

Analytical Skills

Critical Thinking Skills: Students will identify information including such things as terminology, facts, methods, processes, and patterns by which information and ideas are organized. Students will create examples, apply principles, or demonstrate an ability or skill.

Communication Skills (written and oral)

Students will effectively communicate scientific ideas and principles. Students will compose scientifically sound reports and present facts to peers using correct terminology.

Global and Cultural Perspectives

Students will demonstrate understanding of global discipline of health and be able to work in a group comprised of diverse cultures and cultural perspectives.

III. Major Course Topics

- A. Introduction to Anatomy and Physiology
- B. The Chemical Basis of Life
- C. The Cell
- D. Cellular Metabolism
- E. Tissues
- F. The Skin and the Integumentary Systems
- G. The Skeletal System
- H. The Muscular System
- I. The Nervous System
- J. The Somatic and Special Senses
- K. The Endocrine System
- L. The Digestive System and Nutrition
- M. The Respiratory System
- N. Blood
- O. The Cardiovascular System
- P. The Lymphatic System
- Q. The Urinary System
- R. Water and Electrolyte Balance
- S. The Reproductive System
- T. Pregnancy, Growth, and Development