University of Arkansas - Fort Smith 5210 Grand Avenue P. O. Box 3649 Fort Smith, AR 72913-3649 479-788-7000

General Syllabus

BIOL 24003 Human Anatomy

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

Prerequisites: BIOL 10043/10031 Biological Science/Lab or BIOL 20083 Introduction to Cell

Biology

Prerequisites or corequisites: BIOL 24001 Human Anatomy Laboratory and CHEM

10003/10001 Chemical Principles/Lab or higher level chemistry

Effective Catalog: 2018- 2019

I. Course Information

A. Catalog Description

Study of the microscopic and gross anatomical structures of the major human organ systems.

B. Additional Information - None

II. Student Learning Outcomes

A. Subject Matter

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

- 1. Discuss the relationship between cell/tissue structure and function.
- 2. Discuss the skeletal system and its embryological development, histology, structure of bone and arthrology.
- 3. Discuss the muscular system including origins, insertions and actions of superficial muscles.
- 4. Discuss the integumentary system.
- 5. Discuss the nervous system including neuronal structure, neuroglia, brain and spinal cord, cranial and spinal nerves, and autonomic nervous system.
- 6. Discuss the cardiovascular system including cardiac structure and cycle, blood vessels and hematopoiesis.
- 7. Discuss the lymphatic system structures.
- 8. Discuss the respiratory system microscopic and macroscopic structures.
- 9. Discuss the digestive system organs, mesenteries, and glands.

- 10. Discuss the urinary system microscopic and macroscopic structures including the process of urine formation.
- 11. Discuss the male and female reproductive structures and their embryologic development.

B. University Learning Outcomes (ULO)

This course enhances student abilities in the following areas:

Analytical Skills:

Critical Thinking Skills: Students will analyze and apply information when they create examples and apply principles to the study of human anatomy. Students will identify information includes such things as terminology, facts, methods, processes, and patterns by which information and ideas are organized.

Communication Skills (written and oral)

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

Ethical Decision Making

Students will identify ethical perspectives of the care and treatment of the human body. Students will apply ethical standards to the field of medicine and evaluate ethical situations common to the medical community.

Global and Cultural Perspectives:

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

III. Major Course Topics

- A. Human Body Orientation
 - 1. Anatomical Position
 - 2. Body directional terms
- B. Cells
 - 1. Cell structure
 - 2. Cell Division
- C. Tissues
 - 1. Epithelial Tissues
 - 2. Connective Tissues
 - 3. Muscle Tissues
 - 4. Nervous Tissues
- D. Integumentary System
 - 1. Skin and hypodermis
 - 2. Appendages of the skin
- E. Bone Tissue
- F. Skeletal System
 - 1. Axial Skeleton

- 2. Appendicular Skeleton
- G. Articulations
 - 1. Fibrous Joints
 - 2. Cartilaginous Joints
 - 3. Synovial Joints
- H. Muscular System
- I. Nervous System
 - 1. Central Nervous System
 - 2. Peripheral Nervous System
 - 3. Autonomic Nervous System
- J. Special Senses
 - 1. Taste
 - 2. Olfaction
 - 3. Hearing and Equilibrium
 - 4. Sight
- K. Cardiovascular System
 - 1. Blood
 - 2. Heart
 - 3. Blood Vessels
 - 4. Lymphatic System
- L. Endocrine System
- M. Respiratory
- N. Digestive System
- O. Urinary System
- P. Reproductive system
 - 1. Male
 - 2. Female