University of Arkansas – Fort Smith 5210 Grand Avenue PO Box 3649 Fort Smith, AR 72913 479-788-7000

General Syllabus

HEAL 31003 Pathophysiology

Credit Hours: 3 Lecture Hours: 3 Laboratory or other types of Hours: 0

Prerequisite(s): BIOL 22003/22001 Human Anatomy/Laboratory; BIOL 24103/24101 Human

Physiology/Laboratory

Effective Catalog: 2023-2024

I. Course Information

A. Catalog Description:

Study designed for the understanding of selected pathological disturbances relating to human disease processes. Principles of specific mechanisms of human disease pathophysiology are presented by organ system. Selected interventional technologies are explored.

B. Additional Course Description:

This course will be presented utilizing multiple teaching/learning strategies.

II. Student Learning Outcomes

A. Subject Matter:

Upon completion of this course, the student will:

- 1. Apply principles of normal anatomy and physiology of human body systems to the pathophysiology processes of common health problems.
- 2. Examine the role of genetics and cellular responses to stress, injury, and aging.
- 3. Identify concepts, principles, and responses related to pathophysiologic processes that result in disease and health problems.
- 4. Identify the pathogenesis, clinical manifestations, and outcomes of selected disease processes and health problems.
- 5. Discuss appropriate diagnostic techniques and pharmacological treatments of specific diseases.

B. University Learning Outcomes:

This course enhances student abilities in the following areas:

Analytical Skills

Critical Thinking Skills:

Students will identify problems/issues and develop solutions/analysis.

Communication Skills (written and oral):

Students will communicate proficiently.

III. Major Course Topics

- A. Cell Function, Skin, Cancer, and Inflammation
 - 1. Alterations of Cellular & Tissue Biology
 - 2. Stress & Disease
 - 3. Inflammation and Wound Healing
 - 4. Biology & Epidemiology of Cancer
 - 5. Pain, Temperature, and Sleep Disorders
- B. Skin and Cardiovascular Disorders
 - 1. Skin Integrity
 - 2. Cardiovascular Disorders
- C. Pulmonary and Gastrointestinal Disorders
 - 1. Pulmonary Disorders
 - 2. Gastrointestinal & Liver Disorders
- D. Nervous & Musculoskeletal Disorders
 - 1. Nervous System Disorders
 - 2. Musculoskeletal Disorders
- E. Renal and Reproductive Disorders
 - 1. Renal Disorders
 - 2. Female & Male Reproductive Disorders
- F. Hemopoietic & Endocrine Disorders
 - 1. Hemopoietic Disorders
 - 2. Endocrine Disorders