

# BI 216

## Human Anatomy and Physiology II

### Competencies

#### **RISK MANAGEMENT AND INJURY PREVENTION**

##### *Cognitive Domain*

- Identifies the precautions and risks associated with exercise in individuals who have systemic medical conditions.

#### **PATHOLOGY OF INJURIES AND ILLNESSES**

##### *Cognitive Domain*

- Describes the aging process as it relates to athletes and others involved in physical activity
- Outlines the autoimmune and immunodeficiency responses and their associated diseases
- Describes the pathology of diseases of the blood that would impair strenuous physical activity.
- Recognizes the common warning signs and symptoms of cancer.

##### *Affective Domain*

- Appreciates that an understanding of pathology is essential to care for athletes and others involved in physical activity.

#### **ASSESSMENT AND EVALUATION**

##### *Cognitive Domain*

- Demonstrates knowledge of the normal anatomical structures of the human body systems and their physiological functions, including the musculoskeletal (including articulations), nervous (central and peripheral), cardiovascular, respiratory, digestive, urogenital, endocrine, dermatological, reproductive, and special sensory systems.
- Distinguishes the anatomical and physiological growth and development characteristics of athletic and physically active males and females in the following stages: pre-adolescent; adolescent; adult; and senior.
- Describes the location and function of the urinary, digestive, reproductive, and lymphatic systems.

#### **PHARMACOLOGY**

##### *Cognitive Domain*

- Recognizes the difference between cortical and anabolic steroids and other androgenics.

#### **GENERAL MEDICAL CONDITIONS AND DISABILITIES**

##### *Cognitive Domain*

- Identifies the physiological effects and the changes to woman's body caused by pregnancy, and describes the body's response to exercise during pregnancy. Also identifies the indications and contraindications for exercise throughout pregnancy.

#### **NUTRITIONAL ASPECTS**

##### *Cognitive Domain*

- Illustrates the physiological processes and time factors involved in the digestion, absorption, and assimilation of food, fluids, and nutritional supplements as they relate to the design and planning of pre- and post-activity meals, considering menu content, time scheduling, and the effect of tension and anxiety before activity.