

# PE 260

## Personnel and Community Health

### Competencies

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

##### *Cognitive Domain*

- Outlines the basic concepts and practice of wellness screening. This includes, but is not limited to, various baselines and standards and other fundamental methods used to screen for wellness
- Defines the use of standard tests, test equipment, and testing protocol for the measurement of cardiovascular respiratory fitness, body composition, posture, flexibility or muscular strength, power, and endurance.\
- Compares and contrasts the use of various types of flexibility and stretching programs, considering the results athletes and others involved in physical activity would expect if they followed a recommended routine.
- Compares and contrasts the use of various types of strength training and cardiovascular conditioning programs, considering the effects that athletes and others involved in physical activity would expect if they followed a recommended routine.
- Lists the safety precautions, hazards, and contraindications of various stretching, strengthening, or flexibility routines and/or equipment.
- Identifies the precautions and risks associated with exercise in adolescents.
- Identifies the precautions and risks associated with exercise in individuals who have systemic medical conditions.
- Describes the components of an educational program for self-identification of the warning signs of cancer, including self-examination of the breasts and testicles.
- Identifies the basic principles and concepts of home, school, and work place ergonomics and their relationship to the prevention of illness and injury.

##### *Psychomotor Domain*

- Uses commercial fitness equipment to administer standard physical fitness tests and records and interprets the test results
- Provides supervision and instruction to an individual in the use of commercial weight training equipment.
- Implements and administers fitness programs, including correction or modification of inappropriate, unsafe, or dangerous fitness routines.

##### *Affective Domain*

- Accepts the moral, professional, and legal responsibilities to conduct safe programs to minimize injury and illness risk factors for individuals involved in physical activity.
- Acknowledges the importance of developing and implementing a thorough, comprehensive injury and illness prevention program.
- Appreciates the importance of the body's thermoregulatory mechanisms for acclimation and conditioning, fluid and electrolyte replacements, proper practice and competition attire, and weight loss.
- Appreciates and respects the principles and concepts of home, school, and work place ergonomics.

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

##### *Cognitive Domain*

- Describes and explains cell adaptations

- Describes the aging process as it relates to athletes and others involved in physical activity.
- Defines the inflammatory response to acute and chronic injury and illness.
- Outlines the autoimmune and immunodeficiency responses and their associated diseases.
- Analyzes the physiologic responses of diseases to physical activity and inactivity.
- Describes the pathology of diseases of the blood that would impair strenuous physical activity.
- Recognizes the common warning signs and symptoms of cancer.
- Describes the healing process of bone.

#### *Affective Domain*

- Promotes accountability for moral and ethical decision-making in the treatment of pathologic conditions.
- Understands how the use of exercise will improve the non-diseased organ system, thus enhancing overall wellness.

### **ASSESSMENT AND EVALUATION**

#### *Cognitive Domain*

- 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 physiological and psychological effects of physical activity and their impact on the performance of athletes and individuals involved in other forms of physical activity.
- Explains the distinction between body weight and body composition.
- Describes the location and function of the urinary, digestive, reproductive, and lymphatic systems.

### **ACUTE CARE OF INJURIES AND ILLNESSES**

#### *Cognitive Domain*

- Recognizes the signs and symptoms of toxic drug overdose.
- Recognizes the signs and symptoms of common infectious diseases, and takes appropriate steps to prevent disease transmission through appropriate medical referral

### **PHARMACOLOGY**

#### *Cognitive Domain*

- Identifies the role of the Food and Drug Administration (FDA) in approving and recalling drugs.
- Describes how physical activity may influence a drug's therapeutic effect.
- Describes the potential risks of co-interaction between two or more pharmaceutical agents.
- Recognizes the difference between cortical and anabolic steroids and other androgenics.
- Lists the general indications, contraindications, and adverse reactions of bronchodilators and other prescription and nonprescription respiratory medications as they relate to physical activity
- Identifies the general adverse reactions of gastrointestinal prescription and nonprescription medications.
- Lists the general indications, contraindications, and adverse reactions of beta-blockers and antihypertensives.
- Identifies the usage patterns, general effects, and adverse short- and long-term reactions of performance enhancing drugs.

#### *Affective Domain*

- Recognizes the importance of pharmacological concepts in health care.

## **GENERAL MEDICAL CONDITIONS AND DISABILITIES**

### *Cognitive Domain*

- Describes congenital or acquired abnormalities, physical disabilities, and diseases.
- Identifies common illnesses and diseases of the body's systems based on contemporary epidemiological studies of the injuries of athletes and others involved in physical activity.
- Describes the general principles of health maintenance and personal hygiene, including skin care, dental hygiene, sanitation, immunizations, avoidance of infectious and contagious diseases, diet, rest, exercise, and weight control.
- Describes strategies for reducing the frequency and severity of asthma attacks.
- Identifies the possible causes of sudden death syndrome among athletes and others involved in physical activity.
- Recognizes the relationship between changes in blood pressure and changes in activity level.
- Recognizes the relationship between changes of respiration rate and changes in activity level.
- Explains the typical history, signs, and symptoms associated with cardiopulmonary conditions
- Describes common heart conditions, such as coronary artery disease, hypertrophic cardiomyopathy, heart murmurs, and mitral valve prolapse.
- Identifies the typical symptoms and clinical signs of an injury or illness, including those associated with local tissue inflammation and systemic infection
- Describes the common conditions that affect the liver, gall bladder, and pancreas
- Explains and recognizes the etiology, signs, symptoms, and management of diabetes mellitus.
- Describes the signs and symptoms of the common disorders of the gastrointestinal tract. Lists examples of the common conditions of the urinary tract, kidneys, and bladder
- Lists the common infections and conditions of the male reproductive organs
- Lists the common infections and conditions of the female reproductive organs
- Describes the common conditions of the breast
- Describes the various menstrual irregularities, the relationship that physical activity plays in their development, their resolutions, and their implications on performance, as well as detrimental systemic effects
- 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.
- Describes the signs, symptoms, and management of common sexually transmitted diseases (STD).
- Recognizes skin lesions, infections, and disorders
- Identifies skin infections that are potentially contagious
- Recognizes conditions that affect bones and joints
- Describes common conditions that affect muscles
- Identifies the common signs and symptoms of contagious viral diseases.
- Lists the advantages and disadvantages of sports participation by individuals with hepatitis B virus or human immunodeficiency virus (HIV).
- Describes the etiology, signs, symptoms, and management of common viruses
- Describes where and how to seek appropriate medical assistance on disease control, notification, and epidemic prevention.

## **NUTRITIONAL ASPECTS**

### *Cognitive Domain*

- Describes personal health habits (hygiene, diet, nutrition, weight control, proper amount of sleep, effects of alcohol, tobacco, and drugs) and their role in preventing injury or illness and in maintaining a healthy lifestyle.
- Constructs methods to determine the recommended daily allowances (RDAs) of a healthy diet for athletes and others involved in physical activity.
- Describes the nutritional food pyramid and explains its use.
- Lists the primary organizations responsible for nutritional information.

- Identifies the nutritional considerations in rehabilitation, including nutrients involved in healing and nutritional risk factors.
- Explains the importance of good nutrition in enhancing performance and preventing injury and illness
- Describes the common illnesses and injuries that are attributed to poor nutrition.
- Evaluates the energy and nutritional demands of specific activities and the nutritional demands placed on athletes and others involved in physical activity.
- Delineates the effects of poor dietary habits on bone loss, injury, and long term health.
- Applies the principles of nutrition, including the roles of fluids and electrolytes, vitamins, minerals, ergogenic aids, macronutrients, carbohydrates, protein, fat, and dietary supplements, as they relate to the dietary and nutritional needs of athletes and others involved in physical activity.
- 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.
- Paraphrases the prevailing misconceptions regarding the proper use of food, fluids, and nutritional supplements (common food fads and fallacies and strength or weight gain diets).
- Describes the advantages or disadvantages of supplementing nutrients in the athlete's diet.
- Describes the principles, advantages, and disadvantages of the ergogenic aids and dietary supplements used by athletes and others involved in physical activity, in an effort to improve performance.
- Recognizes the implications of FDA endorsement of nutritional products.
- Locates, obtains, and interprets scientific position papers describing healthy weight loss, fluid maintenance, disordered eating, nutritional ergogenic aids, diet supplements, and assessment of body composition in athletes and others involved in physical activity.
- Analyzes the principles of weight control, including body fat percentage, caloric requirements, effects of exercise, and fluid loss.
- Identifies the consequences of improper fluid replacement.
- Describes and applies the principle of caloric balance.
- Summarizes the proper use of food, fluids, and exercise in weight control to dispel the prevailing misconceptions regarding weight control diet fads and fallacies.
- Explains the guidelines for safe weight loss and weight gain.
- Describes the principles of body mass index computation.
- Describes the signs, symptoms, and physical consequences of disordered eating.
- Describes the differences between saturated, unsaturated, and polyunsaturated fats and the effects of each on diet, performance, health care, heart disease, diabetes, and cancer.
- Describes the signs, symptoms, and physiological effects of iron deficiency and anemia and identifies foods that enhance iron absorption and are high in iron.
- Demonstrates how to determine the recommended daily allowances and identifies common food sources of essential vitamins and minerals.

### *Psychomotor Domain*

- Accesses and uses information regarding the principles of fluid and electrolyte replacement
- Applies the principles of nutrition, including the roles of fluids and electrolytes, vitamins, minerals, and ergogenic aids, as they relate to the dietary and nutritional needs of athletes and others involved in physical activity.
- Includes the proper percentages of carbohydrates, protein, and fat in a diet based on age, gender, and type and level of physical activity.

### *Affective Domain*

- Appreciates the role of proper nutrition in the health care of athletes and others involved in physical activity.
- Respects the various recognized position papers that discuss nutrition wellness.

- Appreciates the long-term effects of disordered eating, bone density loss, and secondary amenorrhea on the skeletal health of the physically active.

## **PSYCHOSOCIAL INTERVENTION AND REFERRAL**

### *Cognitive Domain*

- Identifies the symptoms and clinical signs of common disordered eating and the psychological and sociocultural factors associated with these disorders.
- Identifies the psychological issues that relate to physically active women of childbearing years.
- Identifies the medical and community-based resources that disseminate information regarding safe sexual activity and the health risk factors associated with sexually transmitted diseases.
- Describes commonly abused substances and their impact on an individual's health and physical performance.
- Recognizes the signs and symptoms of drug abuse and the use of ergogenic aids and other substances.
- Identifies the societal influences toward substance abuse in the athletic and physically active population.
- Contrasts psychological and physical dependence, tolerance, and withdrawal syndromes that may be seen in individuals addicted to alcohol, prescription or nonprescription medications, and/or 'street' drugs.
- Describes the basic signs and symptoms of mental disorders (psychoses), emotional disorders (neuroses, depression), or personal/social conflict (family problems, academic or emotional stress, personal assault or abuse, sexual assault, sexual harassment) and the appropriate referral.
- Identifies contemporary personal, school, and community health service agencies, such as community-based psychological and social support services.
- Defines seasonal affective disorder (SAD).
- Cites the potential need for psychosocial intervention and referral when dealing with populations requiring special consideration

## **HEALTH CARE ADMINISTRATION**

### *Cognitive Domain*

- Identifies contemporary personal and community health issues and the commonly available school health services, community health agencies, and community-based psychological and social support services
- Describes the role and function of various community-based medical, paramedical, and other health care providers.
- Locates and interprets current banned-drug lists that are published by various governing athletic associations

# PROFICIENCIES INSTRUCTED

## **General Medical Conditions and Disabilities**

The student will recognize the signs, symptoms, and predisposing conditions associated with the following diseases and conditions:

- Sexually Transmitted Diseases/Diseases Transmitted by Body Fluid
- HIV/AIDS
- genital warts
- hepatitis
- gonorrhea
- chlamydia
- syphilis
- Gynecological Disorders
- amenorrhea
- pelvic inflammatory disease
- dysmenorrhea
- vaginitis
- oligomenorrhea
- Viral Syndromes
- infectious mononucleosis
- measles
- mumps
- Systemic Diseases
- iron-deficiency anemia
- sickle cell anemia
- Lyme disease

## **Nutritional Aspects**

The student will demonstrate the ability to access and recommend nutritional guidelines for the following:

- pre-participation meal
- weight loss
- weight gain

The student will demonstrate the ability to use the nutritional food pyramid.

The student will demonstrate the ability to access and assess the following nutritional intake values:

- RDA or equivalency
- vitamin intake
- protein intake
- mineral intake
- fat intake
- fluid intake
- carbohydrate intake

The student will demonstrate the ability to calculate the basal metabolic rate of energy expenditure.

## **Psychosocial Intervention And Referral**

The student will demonstrate the ability to determine energy expenditure and caloric intake.