

# **Advanced Physical Education**

Students participating in the above physical education course will be proficient in fundamental movement skills, skill combinations and are competent in self-selected physical activities that they are likely to pursue throughout life including outdoor pursuits, fitness activities, selected individual performance activities, and games. They understand and apply concepts related to the principles of mechanics and anatomy in relation to human movement. They apply the concepts and principles of the body's metabolic response to short-term and long-term physical activity. Students will demonstrate positive leadership skills; respect others, and avoid unsafe physical activity situations. Students demonstrate competency in lifelong physical activities, implement, self-assess, and/or modify a personal fitness plan. Students are prepared to lead a physically active lifestyle.

## **Motor Skill Development**

- 10.1 The student will demonstrate proficiency, apply the concepts and principles of exercise physiology, biomechanics, and anatomy in a variety of lifetime activities. This may include outdoor pursuits, fitness activities, selected individual performance activities, and games in at least two lifelong, skill-related physical activities.
  - a) Demonstrate skill attainment in lifetime activities. (S1.H1.L2) (S1.H2.L2) (S1.H3.L2) (S2.H2.L2) (S2.H3.L2)
  - b) Apply and demonstrate knowledge of how movement is created, directed, and stabilized in one or more lifetime activities. (S1.H1.L2) (S1.H2.L2) (S1.H3.L2) (S2.H3.L2)
  - c) Demonstrate appropriate and proper use of equipment in lifetime activities. (S3.H5.L2) (S4.H5.L2)

#### **Anatomical Basis of Movement**

- 10.2 The student will apply, analyze, and evaluate the knowledge of biomechanics and anatomy in a variety of lifetime activities.
  - a) Explain how the body responds to energy needs for anaerobic and aerobic activities which may include fast and slow-twitch muscle fibers. (S1.H1.L2) (S3.H2.L2) (S3.H7.L2) (S3.H8.L2) (S3.H9.L2) (S3.H10.L2)
  - b) Analyze movement activities for component skills and movement patterns for lifetime activities. (S1.H1.L2) (S1.H2.L2) (S1.H3.L2) (S2.H2.L2) (S2.H3.L2) (S3.H3.L2) (S3.H10.L2)
  - c) Identify and explain the relationship of opposing muscle groups (agonist/antagonist). (S3.H7.L2) (S3.H9.L2)
  - d) Design and implement a warm-up or cool down program. (S3.H7.L2) (S2.H10.L2) (S3.H3.L2) (S3.H9.L2) (S3.H14.L2)



e) Apply rate of perceived exertion (RPE) and pacing to a conditioning plan that meets the needs of lifetime activities. (S3.H3.L2) (S3.H6.L2) (S3.H7.L2) (S3.H10.L2) (S3.H11.L2)

## **Fitness Planning**

- 10.3 The student will demonstrate the ability to apply basic principles of training, evaluate current fitness behaviors and identify strategies needed for health-enhancing fitness for life.
  - a) Use a variety of resources, including available technology, to analyze and improve personal fitness. (S3.H2.L2) (S3.H10.L2)
  - b) Identify fitness needs to prevent health concerns throughout a lifetime. (S3.H1.L2) (S3.H4.L2) (S3.H5.L2) (S3.H1.L2) (S4.H5.L2) (S5.H1.L2)
  - c) Identify the impact of life choices, origin of of lifetime activities, motivation, accessibility, exercise adherence, and participation in physical activity.., (S2.H1.L2) (S3.H1.L2) (S3.H4.L2) (S3.H5.L2) (S3.H4.L1) (S4.H5.L2) (S5.H1.L2)
  - d) Describe components of health-related fitness. (S3.H8.L2) (S3.H9.L2)
  - e) Explain the impact of physical activity on emotional and social well-being. (S4.H4.L2) (S5.H2.L2)

## **Social Development**

- 10.4 The student will demonstrate appropriate behaviors and social skills in all physical activity settings in order to be a contributing member of society.
  - a) Demonstrate the importance of communication skills in a physical activity setting. (S1.H2.L2) (S1.H3.L2) (S4.H2.L2) (S4.H3.L2) (S4.H4.L2) (S4.H5.L2) (S5.H4.L2)
  - b) Explain the importance of critical thinking and problem solving skills for health and fitness. (S3.H12.L2) (S4.H2.L2) (S4.H3.L2) (S4.H4.L2)
  - c) Identify and avoid potentially dangerous situations in physical activity settings. (S4.H2.L2) (S4.H5.L2)
  - d) Explain the importance of understanding cultural diversity for personal health and fitness. (S4.H1.L2) (S4.H2.L2) (S4.H4.L2) (S5.H1.L2)
  - e) Evaluate opportunities for social interaction and social support in a physical activity setting. (S4.H1.L2) (S4.H2.L2) (S4.H4.L2) (S5.H1.L2)
  - f) Apply stress-management strategies (e.g., mental imagery, relaxation techniques, deep breathing, aerobic exercise, meditation) to reduce stress. (S3.H14.L2)
  - g) Explain possible benefits of mind-body exercise/activities (e.g., yoga, Pilates, tai chi). (S3.H14.L2)
  - h) Demonstrate conflict resolution skills for health and fitness. (S4.H4.L2) (S4.H2.L2)
  - i) Demonstrate and understand the importance of proper hygiene. (S4.H5.L2)

## **Energy Balance**



- 10.5 The student will explain the importance of energy balance, evaluate current caloric intake and caloric expenditure to maintain optimal health and prevent chronic disease throughout a person's lifetime.
  - a) Evaluate current activity and intensity levels. (S3.H3.L2) (S3.H10.L2) (S5.H2.L2)
  - b) Evaluate the caloric intake needs for before, during, and after a variety of lifetime activities. (S3.H1.L2)
  - c) Explain energy balance (caloric expenditure vs. caloric intake) in relation to changing needs from adolescence through adulthood. (S3.H1.L2) (S3.H8.L2)
  - d) Explain the consequences of over-exercising. (S3.H5.L2) (S4.H5.L2)
  - e) Analyze the relationships among physical activity, nutrition, and body composition which are optimal for personal health and/or for participation in lifetime activities. (S3.H1.L2)