

#### **Fitness Center**

Students will complete the transition from modified versions of movement forms to more complex applications across all types of physical activities. This may include outdoor pursuits, fitness activities, dance and rhythmic activities, individual performance activities, and games and sports (net/wall, striking/fielding, and goal/target). Students demonstrate the ability to use basic skills, strategies, and tactics in a variety of lifetime physical activities. Students demonstrate more specialized knowledge in identifying and applying key movement concepts and principles. Students will explain the importance of energy balance and nutritional needs of the body to maintain optimal health and prevent chronic disease. They self-assess their skill performance and develop a personal physical activity program aimed at improving motor skills, movement patterns, and strategies essential to performing a variety of physical activities. They apply their understanding of personal fitness to lifelong participation in physical activity. Students demonstrate independence in making choices, respecting others, avoiding conflict, resolving conflicts appropriately, and using elements of fair play and ethical behavior in physical activity settings. Students demonstrate the knowledge, skills, and abilities required to plan for and improve components of fitness and achieve and maintain a health-enhancing level of personal fitness.

# **Motor Skill Development**

- FC.1 The student will perform basic movement skills and demonstrate movement and biomechanical principles in a variety of activities that may include outdoor pursuits, fitness activities, dance and rhythmic activities, individual performance activities, and games and sports (net/wall, striking/fielding, and goal/target(s).
  - a) Demonstrate proficiency and refinement in locomotor, non-locomotor, and manipulative skills through appropriate activities (e.g., outdoor pursuits, fitness activities, and rhythmic activities, individual performance activities, games and sports (net/wall, striking/fielding, and goal/target). (S1.H1.L1) (S1.H2.L1) (S1.H3.L1) (S2.H2.L1) (S3.H5.L1) (S3.H7.L1)
  - b) Design, implement, evaluate, and/or modify a practice plan for a skill, to include the motor learning process of analysis of performance; application of principles of movement and training; goal setting; and improvement of personal skills through practice, correction, practicing at a higher level, and reassessment. (S2.H3.L1) (S3.H4.L1) (S3.H11.L1) (S3.H12.L1)
  - c) Apply the concepts and principles of levers, force, motion, and rotation in a variety of activities. (S1.H1.L1) (S1.H3.L1) (S2.H2.L1) (S3.H7.L1) (S3.H9.L1)
  - d) Apply physiological principles of warm-up, cool down, overload, specificity, and progression.

- (S1.H1.L1) (S1.H2.L1) (S1.H3.L1) (S2.H1.L1) (S2.H2.L1) (S3.H7.L1) (S3.H9.L1)
- e) Apply biomechanical principles of balance, energy, and types of muscle contractions to a variety of activities. (S1.H1.L1) (S1.H2.L1) (S1.H3.L1) (S2.H2.L1) (S3.H7.L1) (S3.H9.L1)
- f) Demonstrate competency in one or more specialized skills in health-related fitness activities. (S1.H1.L1) (S1.H2.L1) (S1.H3.L1) (S2.H2.L1) (S3.H7.L1) (S3.H9.L1)

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

- FC.2 The student will explain the structures and functions of the body and how they relate to and are affected by human movement.
  - a) Explain and apply selected scientific principles, to include physiological (warm-up, cool down, overload, specificity, and progression) and biomechanical (levers, types of muscle contractions, and force) that aid in the improvement of movement skills. (S1.H1.L1) (S1.H2.L1) (S1.H3.L1) (S2.H2.L1) (S3.H7.L1) (S4.H5.L1)
  - b) Analyze and evaluate proficient and efficient movement in relation to how movement is directed, may include the type of muscle action that directs a movement (concentric, eccentric, and isometric), the direction the body part moves relative to its joints (abduction, adduction, flexion, and extension). (S1.H1.L1) (S1.H2.L1) (S1.H3.L1) (S2.H2.L1) (S3.H5.L1) (S3.H7.L1) (S3.H9.L1) (S4.H4.L1)
  - c) Explain the body's response to the principles of specificity, overload, and progression (SOP) in relation to frequency, intensity, time, and type of exercise (FITT). (S1.H1.L1) (S1.H2.L1) (S1.H3.L1) (S3.H9.L1) (S3.H10.L1) (S4.H4.L1)
  - d) Explain the anaerobic (ATP-PC and Lactic Acid System) and aerobic systems used for energy during activity. (S1.H1.L1) (S1.H2.L1) (S1.H3.L1) (S3.H1.L1) (S3.H9.L1) (S3.H10.L1) (S3.H14.L1)
  - e) Analyze movement performance, and utilize feedback to learn or to improve the movement skills of self and others. (S3.H5.L1) (S3.H8.L1) (S3.H9.L1) (S4.H1.L1) (S4.H3.L1) (S4.H4.L1) (S4.H5.L1) (S5.H1.L1) (S5.H4.L1)

## **Fitness Planning**

FC.3 The student will evaluate current fitness behaviors and demonstrate achievement and maintenance of a health-enhancing level of personal fitness by designing, implementing, self-assessing, and/or modifying a personal fitness program.

- a) Demonstrate program-planning skills during a structured educational setting and/or planned outside personal program of fitness by assessing, analyzing, setting goals, devising strategies, making timelines, and evaluating the components and progress of the personal fitness plan. (S2.H3.L1) (S3.H6.L1) (S3,H7.L1) (S3.H9.L1) (S3.H11.L1) (S3.H12.L1)
- b) Apply the FITT (frequency, intensity, time, type) principle and other principles of training such as overload, specificity, and progression, in accordance with personal goals to the personal fitness plan.(S2.H3.L1) (S3.H9.L1)(S3.H11.L1)(S3.H12.L1)
- Explain the characteristics, including scientific principles and concepts, of safe and appropriate muscular-stretching, muscular-strengthening, and cardiorespiratory exercise programs to improve the health-related components of fitness.
  (S2.H2.L1)(S3.H1.L1)(S3.H5.L1)(S3.H8.L1)(S3.H9.L1)(S3.H10.L1)(S4.H5.L1)
- d) Explain the relationship between heart rate, training zones, and exercise intensity, to include measures (e.g., heart rate monitors, pedometers, accelerometers) and appropriate training zones to meet exercise and personal fitness goals. (S3.H8.L1)(S3.H10.L1)(S3.H10.L1)
- e) Demonstrate appropriate techniques for resistance-training activities such as machines, body weight exercises, and/or free weights. (S1.H1.L1)(S1.H2.L1)(S1.H3.L1)(S3.H5.L1)(S3.H7.L1)
- f) Evaluate resting heart rate, target heart rate, and blood pressure. (S3.H1.L1)(S3.H5.L1)(S3.H8.L1)(S3.H10.L1)(S4.H5.L1)(S5.H1.L1)
- g) Identify types of strength exercises (isometric, concentric, eccentric) and stretching exercises (static, ballistic, dynamic) for personal fitness development (e.g., strength, endurance, range of motion). (S2.H2.L1)(S3.H9.L1)(S3.H14.L1)
- h) Define and describe terms and activities associated with fitness such as set, repetition, isometric, isotonic, isokinetic, core, upper body, and lower body exercises.
  (S2.H2.L1)(S3.H9.L1)

### **Social Development**

- FC.4 The student will explain and demonstrate the skills needed to be safe, responsible, and respectful in all physical activity settings.
  - a) Identify and demonstrate proper etiquette, respect for others, integrity, and teamwork while engaging in a variety of activities. (S1.H1.L1) (S1.H2.L1) (S1.H3.L1) (S4.H1.L1) (S4.H2.L1) (S4.H3.L1) (S4.H4.L1) (S5.H4.L1)
  - b) Explain the impact of sports and activities in developing respect for the unique characteristics, differences and abilities of peers. (S1.H1.L1) (S1.H2.L1) (S1.H3.L1) (S3.H1.L1) (S3.H2.L1) (S3.H3.L1) (S4.H2.L1) (S4.H4.L1) (S4.H5.L1) (S5.H4.L1)
  - c) Apply conflict-resolution skills in physical activity settings. (S4.H2.L1) (S4.H3.L1) (S4.H4.L1) (S5.H1.L1)
  - d) Identify an opportunity for social support in a physical activity setting. (S4.H3.L1) (S4.H4.L1) (S5.H3.L1) (S5.H4.L1)
  - e) Apply communication skills and strategies that promote positive team/group dynamics. (S4.H1.L1) (S4.H2.L1) (S4.H3.L1) (S5.H3.L1) (S5.H4.L1)
  - f) Apply problem-solving and critical-thinking skills in physical activity settings, both as an individual and in groups. (S4.H1.L1) (S4.H2.L1) (S4.H3.L1) (S4.H4.L1) (S5.H4.L1)
  - g) Apply best practices for participating safely in physical activity, and exercise (e.g., injury prevention, proper alignment, hydration, use of equipment, implementation of rules, sun protection). (S4.H5.L1) (S5.H4.L1)
  - h) Analyze and compare psychological benefits derived from various physical activities (e.g., decreased stress and anxiety, increased self-esteem, increased mental alertness, improved mood). (S3.H14.L1) (S4.H1.L1) (S4.H4.L1)(S5.H4.L1)

i) Demonstrate and understand the importance of proper hygiene. (S3.H5.L1)(S5.H4.L1)

# **Energy Balance**

- FC.5 The student will explain the importance of energy balance and evaluate caloric intake and caloric expenditure to maintain optimal health and prevent chronic disease.
  - a) Explain the body's physiological response to sugar, sodium, and fat.(S3.H8.L1)
  - b) Assess and analyze current energy balance, to include intake and expenditure, activity levels, food choices, and amount of sleep.(\$3.H8.L1).(\$3.H13.L2)
  - c) Assess body composition, using body mass index (BMI) and other measures, the variety of body types, and healthy body weight. (S3.H1.L1)(S3.H5.L1)
  - d) Discuss options that maintain an appropriate energy balance for a healthy, active lifestyle, to include intake, expenditure (levels of intensity), hydration and sleep.
    (S4.H1.L1)(S4.H5.L1)(S5.H1.L1)