

Grade Ten

Students in grade 10 are proficient in fundamental movement skills and skill combinations and are competent in self-selected physical activities that they are likely to pursue throughout life including outdoor pursuits, fitness activities, dance and rhythmic activities, aquatics, selected individual performance activities, and net/wall and target games. They understand and apply concepts and principles of mechanics and anatomy in relation to human movement and apply the concepts and principles of the body's metabolic response to short-term and long-term physical activity. Students are good leaders and good followers; they respect others, and anticipate and avoid unsafe physical activity situations. They develop the ability to understand and they anticipate how physical activity interests and abilities change across a lifetime. Students demonstrate competency in lifelong physical activities and plan, implement, self-assess, and modify a personal fitness plan. Students are prepared to lead a physically active lifestyle.

Motor Skill Development

- 10.1 The student will demonstrate proficiency and apply the concepts and principles of exercise physiology, biomechanics, and anatomy in a variety of lifetime activities that may include outdoor pursuits, fitness activities, dance and rhythmic activities, aquatics, selected individual performance activities, and net/wall and target games in at least two self-selected, lifelong, skill-related physical activities.
- Demonstrate skill attainment in one or more lifetime activities.
 - Apply and demonstrate knowledge of how movement is created, directed, and stabilized in one or more lifetime activities.
 - Identify and demonstrate movement activities in each plane of movement (frontal, sagittal, and transverse) and activities that occur in multiple planes.
 - Demonstrate appropriate and proper use of equipment in one or more lifetime activities.

Anatomical Basis of Movement

- 10.2 The student will apply knowledge of biomechanics and anatomy and analyze and evaluate the ability to move proficiently and efficiently in a variety of lifetime activities.
- Explain how the body responds to energy needs for anaerobic and aerobic activities, to include fast and slow-twitch muscle fibers, and anaerobic respiration (ATP-PC and Lactic Acid System) and aerobic respiration.
 - Analyze movement activities for component skills and movement patterns for one or more lifetime activities.
 - Identify and explain the relationship of opposing muscle groups (agonist/antagonist).
 - Design and implement a program for strength and conditioning.
 - Explain why blood pressure is an indicator of personal health.
 - Apply rate of perceived exertion (RPE) and pacing to a conditioning plan that meets the needs of one or more lifetime activities.

Fitness Planning

- 10.3 The student will demonstrate the ability to apply basic principles of training and scientific concepts and principles to evaluate current fitness behaviors and identify strategies needed for health-enhancing fitness for the present and into adulthood.
- Create a fitness and activity plan for the present and a potential plan for the future (postsecondary education, college/career) to address the health-related components of fitness.
 - Use a variety of resources, including available technology, to analyze current fitness and activity levels, and to improve physical activity and personal fitness.
 - Identify fitness needs to prevent health concerns in the present and into the future.

- d) Identify the impact of life choices, economics, motivation, accessibility, exercise adherence, and participation in physical activity in college or career settings.
- e) Describe components of health-related fitness in relation to one career goal.
- f) Explain the impact of physical activity on emotional and social well-being for the present and into the future.

Social Development

10.4 The student will demonstrate appropriate behaviors in all physical activity settings and the social skills needed to be a contributing member of society.

- a) Explain the importance of and demonstrate communication skills in physical activity settings.
- b) Explain the importance of critical thinking and problem solving for current and future health and fitness.
- c) Identify and avoid potentially dangerous situations in physical activity settings.
- d) Explain the importance of understanding cultural diversity for personal health and fitness.
- e) Evaluate opportunities for social interaction and social support in a self-selected physical activity or dance.
- f) Apply stress-management strategies (e.g., mental imagery, relaxation techniques, deep breathing, aerobic exercise, meditation) to reduce stress.
- g) Explain possible benefits of mind-body exercise/activities (e.g., yoga, Pilates, tai chi).
- h) Explain the importance of conflict resolution for current and future health and fitness.

Energy Balance

10.5 The student will explain the importance of energy balance and evaluate current caloric intake and caloric expenditure to maintain optimal health and prevent chronic disease for the present and into adulthood.

- a) Analyze the relationships among physical activity, nutrition, body composition, and sleep that are optimal for personal health and/or for participation in lifetime activities.
- b) Evaluate current activity and intensity levels.
- c) Evaluate current and future caloric expenditure and intake needs.
- d) Evaluate current and future sleep needs.
- e) Evaluate the caloric intake needs for before, during, and after a variety of lifetime activities.
- f) Explain energy balance (caloric expenditure vs. caloric intake) in relation to changing needs from adolescence through adulthood.
- g) Explain the consequences of over-exercising.