

GRADE TEN

Students in grade ten 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 motion (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, including 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).
 - Explore common musculoskeletal injuries and the role of ergonomically correct movement for injury prevention.
 - Explain and demonstrate ergonomically correct form in strength and conditioning 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.
- Construct a fitness and activity plan for the present and the future (postsecondary education, college/career) to address the health-related components of fitness.
 - Identify the key factors an informed fitness consumer must evaluate to make critical and effective decisions when purchasing fitness products and/or services.
 - Identify fitness needs to prevent health concerns in the present and into the future.
 - Identify the effects of life choices, economics, motivation, accessibility, exercise adherence, and participation in physical activity in college or career settings.
 - Describe components of health-related fitness in relation to one career goal.

- f) Explain the effects of physical activity on emotional and social well-being for the present and into the future.
- g) Apply rate of perceived exertion (RPE) and pacing to a conditioning plan that meets the needs of one or more lifetime activities.
- h) Design and implement a program for strength and conditioning.

Social and Emotional 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 effective communication skills in physical activity settings.
 - b) Explain the importance of and apply relationship and conflict resolution skills and social awareness for current and future health and fitness.
 - c) Identify and avoid prejudices and biases 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 the mental and emotional benefits of mind-body exercise/activities (e.g., yoga, Pilates, tai chi).
 - h) Identify ways to promote equity and inclusion and embrace diversity in a physical activity setting.

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 caloric expenditure and intake needs.
 - d) Evaluate current 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 potential consequences of energy imbalance (e.g., over-exercising, under-eating, overeating, sedentary lifestyle).
 - h) Explain the role of perseverance and tenacity in achieving lifelong energy balance.