

STRENGTH TRAINING AND FITNESS I, II and III

Essential Discipline Goals

Develop an acceptable level of fitness and an understanding of the components of fitness and an appreciation of the life-long value of fitness through personalized physical education activities

Develop through a purposeful physical education experience a more positive self-concept appropriate to social and emotional behaviors, self-direction and an appreciation of individual differences

Develop physical skills and acquire knowledge of efficient and creative movement through participation in a sequential program of varied activities and develop an appreciation for the value of this type of movement Develop an awareness of safety practices and procedures

Elective

PE.STF. Strength Training and Fitness I, II and III

Grades 10-12

Standard Indicators

PE.STF.10. Exercise Physiology—Students will demonstrate an ability to use scientific principles to design and participate in a regular, moderate to vigorous physical activity program that contributes to personal health and enhances cognitive and physical performance on a variety of academic, recreational and life tasks.

PE.STF.10.01 Identify strength training components and the role they play in the total body fitness

PE.STF.10.01.a Identify personal training needs PE 1.12.2

PE.STF.10.01.b Formulate an individualized training program PE 1.12.3

PE.STF.10.01.c Assess individual progress

PE.STF.10.01.d Describe and make strength training and sport application and connections for the five parts of health-related fitness (flexibility, body fatness, cardiovascular fitness, strength, muscular endurance) PE 1.12.4, PE 5.12.1

- PE.STF.10.01.e** Describe and make strength training and sport application and connections for the six parts of skill-related fitness (agility, balance, coordination, power, reaction time, speed)
PE 5.12.1
- PE.STF.10.02** Demonstrate an understanding of the knowledge and skills essential for strength training and fitness
- PE.STF.10.02.a** Demonstrate knowledge of weight training and fitness components as required through daily participation—practical and written test
- PE.STF.10.02.b** Develop an understanding of procedures and methods for arriving at starting point for workouts
- PE.STF.10.02.c** Develop an understanding of workout progression as it relates to an individualized program based on one's improvement, needs and physiological development PE 1.12.3
- PE.STF.10.02.d** Understand components and progressions of various strength and fitness programs
- PE.STF.10.02.e** Demonstrate an understanding of the components of strength and fitness programs to be able to develop programs that serve the varied and specific purposes of strength training
- PE.STF.10.02.f** Demonstrate knowledge of strength training and physical fitness terms during class discussions and on written tests PE 1.12.4
- PE.STF.10.03** Develop and apply knowledge necessary to understand the effects of performance enhancing substances
- PE.STF.10.03.a** Distinguish between accepted medical uses for steroids, illegal steroid use, and other performance enhancing substances
- PE.STF.10.03.b** Describe various methods of administration of performance enhancing substances
- PE.STF.10.03.c** Discuss why someone would use performance enhancing substances
- PE.STF.10.03.d** Identify methods of detecting performance enhancing drug use
- PE.STF.10.03.e** Identify warning signals of performance enhancing drug use
- PE.STF.10.03.f** Recognize the long and short term effects of performance enhancing drug use of males and females
- PE.STF.10.03.g** Demonstrate knowledge of refusal skills

- PE.STF.20.** Biomechanical Principles—Students will improve their movement effectiveness and safety by applying the principles of biomechanics to generate and control force.
- PE.STF.20.01** Apply correct biomechanical and physiological principles to exercise and training
- PE.STF.20.01.a** Demonstrate correct lifting techniques PE 4.12.3
 - PE.STF.20.01.b** List injuries related to incorrect lifting techniques
 - PE.STF.20.01.c** Relate exercise to injury prevention
 - PE.STF.20.01.d** Explain the importance of warming up and cooling down as related to exercise PE 5.12.4
 - PE.STF.20.01.e** Discuss and apply basic training principles
 - PE.STF.20.01.f** Explain frequency, intensity and time (FIT formula) as it applies to training and fitness
 - PE.STF.20.01.g** Locate pulse (carotid, radial, brachial)
 - PE.STF.20.01.h** Calculate heart rates as it relates to exercise, target, resting, maximum and recovery
- PE.STF.20.02** Evaluate nutritional needs conducive to individual fitness needs
- PE.STF.20.02.a** Review basic principles of nutrition as they relate to strength training performance PE 1.12.5
 - PE.STF.20.02.b** Discuss eating disorders and the health problems they cause (Anorexia Nervosa/Bulimia)
 - PE.STF.20.02.c** Analyze an individual weight management program PE 1.12.5
 - PE.STF.20.02.d** Describe common food myths
 - PE.STF.20.02.e** Understand the chemistry of nutrition and exercise
 - PE.STF.20.02.f** Understand ergogenic aids as a performance enhancement PE 1.2.7
- PE.STF.20.03** Relate basic anatomy to exercise
- PE.STF.20.03.a** Identify muscle groups and bones
 - PE.STF.20.03.b** Identify specific muscles as they relate to individual exercise and strength training activities PE 2.12.3
- PE.STF.30.** Social Psychological Principles—The student will demonstrate skills essential for developing self-efficacy, fostering a sense of community, and working effectively with others in physical activity settings.
- PE.STF.30.01** Demonstrate an appreciation of individual differences and the positive relationships that can be established and enhanced through physical activity experiences

- PE.STF.30.01.a** Value participation in activities with individuals of varying skill levels, cultural backgrounds, race or gender PE 3.12.1
- PE.STF.30.01.b** Adjust performance relative to differences among individuals in characteristics such as to strength, speed, size, and skill level PE 3.12.2
- PE.STF.30.02** Demonstrate socially acceptable behaviors including respect, cooperation, responsibility, honesty and a positive competitive spirit
 - PE.STF.30.02.a** Value peer assistance by using classmates' comments constructively in an effort to enhance performance PE 2.12.1
 - PE.STF.30.02.b** Support peer leadership activities
 - PE.STF.30.02.c** Encourage others to display good sportsmanship as leaders, participants and spectators
 - PE.STF.30.02.d** Demonstrate a competitive spirit that strives to win fairly and accept defeat rationally
 - PE.STF.30.02.e** Respond appropriately to ethical and unethical behaviors demonstrated in the activity setting PE 3.12.6
- PE.STF.30.03** Relate the effects of a training program to stress management
 - PE.STF.30.03.a** Define the term "stress"
 - PE.STF.30.03.b** Compare good and bad stress
 - PE.STF.30.03.c** Discuss the emotional, physical and social effects of stress
 - PE.STF.30.03.d** Cite coping mechanisms for stress prevention/management PE 3.12.3
 - PE.STF.30.03.e** Name sources of support
 - PE.STF.30.03.f** Understand strength training as a vehicle for stress reduction
- PE.STF.40.** Motor Learning Principles—Students will explain and demonstrate how motor skills are learned and proficiency developed through frequent practice opportunities in which skills are repeatedly performed correctly in a variety of situations.
- PE.STF.50.** Physical Activity—Students will participate in a regular, personalized purposeful program of physical activity to gain health and cognitive/academic benefits. They will learn and utilize principles of exercise physiology, social psychology and biomechanics to design a safe and effective program consistent with their health, performance and fitness goals.
 - PE.STF.50.01** Participate in strength training activities that can continue through life

- PE.STF.50.01.a** Participate in different methods of training designed to strengthen the total body PE 5.12.2
- PE.STF.50.01.b** Participate in an individualized training program PE 1.12.3
- PE.STF.50.01.c** Identify the benefits attained through a comprehensive strength training program
- PE.STF.50.01.d** Discuss the term “fitness for life”
- PE.STF.50.01.e** Participate in a regular daily training program PE 5.12.5
- PE.STF.50.02** Develop and apply appropriate safety practices related to strength training and specific activities within the environment
 - PE.STF.50.02.a** Recognize and demonstrate proper warm-up techniques PE 5.12.4
 - PE.STF.50.02.b** Recognize and demonstrate proper lifting techniques PE 6.12.1
 - PE.STF.50.02.c** Recognize and demonstrate proper spotting and assisting techniques
 - PE.STF.50.02.d** Recognize and demonstrate proper maintenance of equipment and facility
- PE.STF.60.** Skillfulness—Students will enhance their ability to perform a variety of skills and applications by developing fundamental movement skills, creating original skill combinations, combining skills effectively in skill themes, and applying skills to a variety of recreational and daily life experiences.
 - PE.STF.60.01** Demonstrate the fundamental components of strength training
 - PE.STF.60.01.a** Demonstrate appropriate warm-up exercises PE 5.12.4
 - PE.STF.60.02.b** Demonstrate fundamental techniques of lifting PE 6.12.1
 - PE.STF.60.02.c** Demonstrate proper spotting techniques
 - PE.STF.60.02.d** Apply various training regimens intended to develop strength, endurance and power through a variety of training routines PE 6.12.4
 - PE.STF.60.02.e** Develop an individualized strength training program based on individual needs and goals