# Strength & Conditioning

April 4, 2022

## Course Description:

This course meets the requirements of one-half credit for physical education or can be taken for one-half elective credit. Routines consist of a weight-training program of five different levels. The focus is to improve an athlete's power, strength, flexibility, mobility, muscular endurance, and agility by stressing technique and attention to detail. This class should be taken for consecutive semesters to obtain maximum benefits.

## Grades:

9th-12th Grade

## Course Expectations and Rationale:

Fundamental techniques in strength training, cardiovascular training, stretching, and speed and agility will be taught in this course. Formative and summative assessments documenting individual progress will be used to evaluate student performance. Strength training increases metabolic rate, increases or restores bone density, and improves lean muscle mass, strength, and endurance. Strength training has been shown to enhance athletic performance, as well as improve quality of life. Using proper safety procedures, students will perform core, power, and auxiliary weight training techniques to work towards these benefits.

## Big Ideas:

Demonstrate cardiovascular growth while completing fitness tests and cardiovascular activities.

Improve level of overall fitness and desire to continue to be physically active.

Engage in a variety of activities and execute movements using proper technique.

## Course Enduring Understandings:

Students will demonstrate competency in motor skills and movement patterns needed to perform a variety of physical activities.

Students will demonstrate an understanding of movement concepts, principles, and strategies as they apply to the learning and performance of physical activities.

Students will participate regularly in physical activity.

Students will incorporate fitness and wellness concepts to achieve and maintain a health-enhancing level of physical fitness.

Students will exhibit responsible personal and social behavior that respects self and others in physical activity settings.

Students will choose physical activity for health, enjoyment, challenge, self-expression, and/or social interaction to sustain a physically active lifestyle.

**Course Power Standards:**

Standard 1. The physically literate individual demonstrates competency in a variety of motor skills and movement patterns.
Standard 2. The physically literate individual applies knowledge of concepts, principles, strategies, and tactics related to movement and performance.
Standard 3. The physically literate individual demonstrates the knowledge and skills to achieve and maintain a health-enhancing level of physical activity and fitness.
Standard 4. The physically literate individual exhibits responsible personal and social behavior that respects self and others.
Standard 5. The physically literate individual recognizes the value of physical activity for health, enjoyment, challenge, self-expression, and/or social interaction.

**Course Essential Vocabulary:**

- **Muscles:**

| | | |
|---|---|---|
| Hamstring | Pectoral major | Erector spinae |
| Quadricep | Triceps | Latisumuss dorsi |
| Gluteus maximus | Biceps | Obliques |
| Gastrocnemius | Rhomboids | Abdominal |
| Achilles tendon | Deltoids | Trapezius |

- **Movements/exercises:**

| | | |
|---|---|---|
| Weight distribution<br>Full range of motion<br>Hip hinge<br>Flexibility<br>Breathing pattern<br>Lunges<br>Pivot squats<br>Bunny hops<br>Scissors<br>Hopscotch<br>Running biomechanics<br>Coordination<br>Lateral stability<br>Internal/External rotation | Spotting<br>Squat<br>Bench press<br>Incline bench press<br>Hang clean<br>Standing broad jump<br>Vertical jump<br>Pull-ups<br>Bent over rows<br>Reverse flys<br>Front shoulder raises<br>Lateral shoulder raises<br>Arnold press | Rotator cuff<br>Step-ups<br>Child pose<br>Seal jacks<br>Sleeper stretch<br>Pfeifer scissors<br>Planks<br>V-rows<br>AMRAP<br>Curls<br>Upright row<br>Sumo front squat<br>Bulgarian split<br>Romanian deadlift |

| | |
|---|---|
| **Unit 1** | **Motor Skills and Performance**<br>Students will learn about kinesiology, the musculoskeletal system, core, power, and auxiliary weight training techniques. Students will learn to navigate the weight room with confidence. Students will learn proper spotting, lifting, and warm up techniques. Students will learn the importance of goal setting while creating individualized workouts. The goal of the Strength & Conditioning course is to prepare all students for a physically active lifestyle. |
| **Unit 1 Guiding & Essential Questions** | What different ways can the body move, given a specific purpose? |
| **Unit 1 Learning Goal(s)** | Students will demonstrate competency in motor skills and movement patterns needed to perform a variety of physical activities. |
| **Unit 1 MO GLEs** | Demonstrates competency in performing activities that contribute to improving each of the five components of health-related fitness. (S1.H3.L1) |

| | |
|---|---|
| **Unit 1 National Standards SHAPE America** | The physically literate individual demonstrates competency in a variety of motor skills and movement patterns.<br>● Demonstrates competency and/or refines activity-specific movement skills in 2 or more lifetime activities (outdoor pursuits, individual-performance activities, aquatics, net/wall games or target games). (S1.H1.L1)<br>● Demonstrates competency in performing activities that contribute to improving each of the five components of health-related fitness. (S1.H3.L1). |
| **Unit 1 Assessments** | Observational<br>Summative<br>Formative<br>Performance assessment |

| | |
|---|---|
| **Unit 2** | **Concepts and Strategies**<br><br>Students will learn about kinesiology, the musculoskeletal system, core, power, and auxiliary weight training techniques. Students will learn to navigate the weight room with confidence. Students will learn proper spotting, lifting, and warm up techniques. Students will learn the importance of goal setting while creating individualized workouts. The goal of the Strength & Conditioning course is to prepare all students for a physically active lifestyle. |
| **Unit 1 Guiding & Essential Questions** | How can we move effectively and efficiently? |
| **Unit 2 Learning Goal(s)** | Students will demonstrate an understanding of movement concepts, principles, and strategies as they apply to the learning and performance of physical activities. |
| **Unit 2 MO GLEs** | ● Uses movement concepts and principles (e.g., force, motion, rotation) to analyze and improve performance of self and/or others in a selected skill. (S2.H2.L1)<br>● Identify and analyze the critical elements of selected advanced skills (e.g., strength training, games). (1.E. HPE4)<br>● Analyze skill techniques of self and others, detect skill errors, and make corrections to show improvement (e.g., peer assessment). (2.A.HPE4) |

| | |
|---|---|
| | ● Summarize the history, rules, terminology, scoring and etiquette in a variety of individual, dual and team sports. Identify and apply rules of play, skill techniques and basic game strategies in a variety of individual, dual and team sports. Consistently demonstrate skill competency in a variety of individual, dual and team sports. (2.B.HPE4) |
| **Unit 2 National Standards SHAPE America** | The physically literate individual applies knowledge of concepts, principles, strategies, and tactics related to movement and performance.<br>● Applies the terminology associated with exercise and participation in selected individual-performance activities, dance, net/wall games, target games, aquatics and/or outdoor pursuits appropriately. (S2.H1.L1)<br>● Uses movement concepts and principles (e.g., force, motion, rotation) to analyze and improve performance of self and/or others in a selected skill. (S2.H2.L1)<br>● Creates a practice plan to improve performance for a self-selected skill. (S2.H3.L1)<br>● Identifies examples of social and technical dance forms. (S2.H4.L1)<br>● Uses strategies and tactics effectively during game play in net/wall and/or target games. (S2.H5.L1) |
| **Unit 2 Assessments** | Observational<br>Summative<br>Formative<br>Performance assessment |

| | |
|---|---|
| **Unit 3** | **Physical Activity and Participation**<br><br>Students will learn about kinesiology, the musculoskeletal system, core, power, and auxiliary weight training techniques. Students will learn to navigate the weight room with confidence. Students will learn proper spotting, lifting, and warm up techniques. Students will learn the importance of goal setting while creating individualized workouts. The goal of the Strength & Conditioning course is to prepare all students for a physically active lifestyle. |
| **Unit 3 Guiding & Essential** | What can we do to be physically active and why is this important? |

| **Questions** | |
|---|---|
| **Unit 3 Learning Goal(s)** | Students will participate regularly in physical activity. |
| **Unit 3 MO GLEs** | ● Analyze skill techniques of self and others, detect skill errors, and make corrections to show improvement (e.g., peer assessment). (2.A.HPE4)<br>● Summarize the history, rules, terminology, scoring and etiquette in a variety of individual, dual and team sports. Identify and apply rules of play, skill techniques and basic game strategies in a variety of individual, dual and team sports. Consistently demonstrate skill competency in a variety of individual, dual and team sports. (2.B.HPE4)<br>● Evaluates risks and safety factors that might affect physical activity preferences throughout the life cycle. (S3.H5.L1)<br>● Calculates target heart rate and applies that information to personal fitness plan. (S3.H10.L1) |
| **Unit 3 National Standards SHAPE America** | The physically literate individual demonstrates the knowledge and skills to achieve and maintain a health-enhancing level of physical activity and fitness.<br>● Discusses the benefits of a physically active lifestyle as it relates to college or career productivity. (S3.H1.L1)<br>● Identifies issues associated with exercising in heat, humidity and cold. (S3.H3.L1)<br>● Evaluates risks and safety factors that might affect physical activity preferences throughout the life cycle. (S3.H5.L1)<br>● Participates several times a week in a self-selected lifetime activity, dance or fitness activity outside of the school day. (S3.H6.L1)<br>● Calculates target heart rate and applies that information to personal fitness plans. (S3.H10.L1)<br>● Identifies stress-management strategies (e.g., mental imagery, relaxation techniques, deep breathing, aerobic exercise, meditation) to reduce stress. (S3.H14.L1) |
| **Unit 3 Assessments** | Observational<br>Summative<br>Formative<br>Performance assessment |

| | |
|---|---|
| **Unit 4** | **Responsible Personal and Social Behavior**<br><br>Students will learn about kinesiology, the musculoskeletal system, core, power, and auxiliary weight training techniques. Students will learn to navigate the weight room with confidence. Students will learn proper spotting, lifting, and warm up techniques. Students will learn the importance of goal setting while creating individualized workouts. The goal of the Strength & Conditioning course is to prepare all students for a physically active lifestyle. |
| **Unit 4 Guiding & Essential Questions** | Why is it important to demonstrate responsible personal and social behavior? |
| **Unit 4 Learning Goal(s)** | Students will incorporate responsible personal and social behavior to achieve and maintain a health-enhancing level of physical fitness. |
| **Unit 4 MO GLEs** | Show personal etiquette, respect, and safety skills during physical activities. Identify strategies for including persons of diverse backgrounds and abilities in physical activities. (2.A.HPE2) |
| **Unit 4 National Standards SHAPE America** | The physically literate individual exhibits responsible personal and social behavior that respects self and others.<br>● Employs effective self-management skills to analyze barriers and modify physical activity patterns appropriately, as needed. (S4.H1.L1)<br>● Exhibits proper etiquette, respect for others and teamwork while engaging in physical activity and/or social dance. (S4.H2.L1)<br>● Uses communication skills and strategies that promote team or group dynamics. (S4.H3.L1)<br>● Solves problems and thinks critically in physical activity and/or dance settings, both as an individual and in groups. (S4.H4.L1)<br>● Applies best practices for participating safely in physical activity, exercise and dance (e.g., injury prevention, proper alignment, hydration, use of equipment, implementation of rules, sun protection). (S4.H5.L1) |
| **Unit 4 Assessments** | Observational<br>Summative |

| | |
|---|---|
| | Formative<br>Performance assessment |

| | |
|---|---|
| **Unit 5** | **Benefits of Physical Activity and Community Building**<br><br>Students will learn about kinesiology, the musculoskeletal system, core, power, and auxiliary weight training techniques. Students will learn to navigate the weight room with confidence. Students will learn proper spotting, lifting, and warm up techniques. Students will learn the importance of goal setting while creating individualized workouts. The goal of the Strength & Conditioning course is to prepare all students for a physically active lifestyle. |
| **Unit 5 Guiding & Essential Questions** | How will physical activity help us now and in the future? |
| **Unit 5 Learning Goal(s)** | Students will choose physical activity for health, enjoyment, challenge, self-expression, and/or social interaction to sustain a physically active lifestyle. |
| **Unit 5 MO GLEs** | • Use the concepts of health-related and skill-related fitness to connect the benefits each offers to the development of total lifetime fitness. Analyze present fitness levels to create a long-term personal fitness plan which meets current and future needs necessary for the maintenance of health and fitness. (1.A.HPE4)<br>• Show personal etiquette, respect, and safety skills during physical activities. Identify strategies for including persons of diverse backgrounds and abilities in physical activities. (2.A.HPE2) |
| **Unit 5 National Standards SHAPE America** | The physically literate individual recognizes the value of physical activity for health, enjoyment, challenge, self-expression, and/or social interaction.<br>• Analyzes the health benefits of a self-selected physical activity. (S5.H1.L1)<br>• Selects and participates in physical activities or dance that meet the need for self-expression and enjoyment. (S5.H3.L1)<br>• Identifies the opportunity for social support in a self-selected physical activity or dance. (S5.H4.L1) |

| | |
|---|---|
| **Unit 5 Assessments** | Observational<br>Summative<br>Formative<br>Performance assessment |