

Montgomery County Public Schools Grade 7 Physical Education Curriculum Framework

Standard I: Exercise Physiology
Students will demonstrate the 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 in a variety of academic, recreational, and life tasks.
1.7.1 Analyze the effects of physical activity on the body systems.
a. Explain and discuss how the muscular, skeletal, and nervous systems respond and adapt to the specificity principle. Clarifying Example: <i>The students will perform four leg stretches targeting all four major leg muscles. Students are then asked to crosscheck their stretches with teacher-identified muscles (quadriceps, hamstring, calf, and glutes) as means to understanding specificity of exercise.</i>
1.7.2 Analyze and adapt components of the FITT principle to adjust levels of physical activity.
a. Conduct a self-assessment that includes elements of the FITT principle. Clarifying Example: <i>The student will record frequency, intensity, time, and type of exercise in a physical activity journal over a three-week period to recognize the strengths and weaknesses in the balance of their personal, out-of-school activities, compared to recommended guidelines.</i>
1.7.3 Analyze the components necessary to design a fitness plan.
a. Compare and contrast activities that improve or maintain specific health related fitness components. Clarifying Example: <i>The students will create a Venn diagram comparing two sports, such as football and soccer, to identify the fitness components involved in each.</i>
1.7.4 Investigate the benefits of physical activity.
a. Examine the personal benefits derived from physical activity. Clarifying Example: <i>The student will answer the question, “What personal benefits do I get from physical activity?”</i>
1.7.5 Analyze the relationship between nutrition and physical activity.
a. Explain current nutrition practices related to aerobic and anaerobic physical performance. Clarifying Example: <i>The student will compare the training diet of a competitive long-distance runner to that of a discus thrower.</i>
1.7.6 Examine the factors influencing exercise adherence.
a. Develop strategies that maintain and improve physical activity. b. Develop strategies that overcome limitations of physical activity. Clarifying Example: <i>The student will identify a support group(s) to assist them in achieving fitness goals.</i>
1.7.7 Investigate the impact of cultural and media perceptions on physical activity.
a. Describe how culture influences physical activity. Clarifying Example: <i>The student will do a “Then and Now Piece” depicting the cultural changes in sport.</i>

Standard II: Biomechanical Principles

Students will demonstrate an ability to use the principles of biomechanics to generate and control force to improve their movement effectiveness and safety.

II.7.1

Apply Newton's Laws of Motion to optimize movement and minimize injury.

- a. Demonstrate and explain Newton's Laws of Motion as they relate to movement patterns and skills.
Clarifying Example: *The students will experiment with sprint starts (no starting blocks, elongated stance with blocks, and bunched starts) to discover that for every action there is an equal and opposite reaction.*
- b. Demonstrate and explain how internal and external forces affect movement.
- c. Explain and demonstrate absorption of force in specific sports skills

II.7.2

Identify and use levers which increase the effect of a force exerted on a body or increase the distance a body moves by increasing speed.

- a. Explain how levers affect movement when force is applied or speed is increased.
- b. Demonstrate how levers affect movement when force is applied or speed is increased
Clarifying Example: *The student will experiment with different softball batting grips (regular, choked up, and bunting) to discover how lever length affects hitting distance (force production).*

Standard III: Social Psychological Principles
Students will demonstrate the ability to use skills essential for developing self-efficacy, fostering a sense of community, and working effectively with others in physical activity settings.
<p>III.7.1 Recognize the relationship between <i>effort</i> and improvement.</p> <p>a. Examine the relationship between <i>effort</i>, persistence, and improvement as they relate to the development of self-confidence. Clarifying Example: <i>The student will be introduced to an athlete who has had to overcome some adversity through effort and persistence.</i></p>
<p>III.7.2 Work effectively with others in physical activity settings.</p> <p>a. Create strategies to improve group/self-regulation in challenging physical activity settings. Clarifying Example: <i>The student will work with group members to come to a consensus about the rules guiding the pro-social behaviors involved in participation.</i></p>
<p>III.7.3 Build and maintain relationships which develop a sense of community and a peaceful, healthy environment for all.</p> <p>a. Identify conflict resolution skills and negotiation tactics which promote a peaceful and healthy environment for all. Clarifying Example: <i>The student will identify a situation that resulted in a conflict and list two ways the conflict could have been avoided and one way the conflict could have been successfully mediated.</i></p>
<p>III.7.4 Establish and modify personal physical activity goals while monitoring progress towards achievement.</p> <p>a. Develop a long-term physical activity goal for the school year. Clarifying Example: <i>The student will analyze their personal Fitnessgram scores in the first marking period and set goals to improve or to show progress throughout the school year. Students will reflect in their journals the progress as noted in their monitoring systems</i></p> <p>b. Establish a monitoring system to assess progress as information and abilities change.</p>
<p>III.7.5 Apply effective time management strategies.</p> <p>a. Develop a plan to allow an opportunity for daily physical activity. Clarifying Example: <i>The student will complete a worksheet describing their daily activities for five days. Students will identify if changes are needed in their daily plans to include 30 minutes of physical activity (not including Physical Education class).</i></p>

Standard IV: Motor Learning Principles

Students will demonstrate the ability to use motor skill principles to learn and develop proficiency through frequent practice opportunities in which skills are repeatedly performed correctly in a variety of situations.

IV.7.1

Evaluate stages of learning.

- a. Evaluate one's own combination of motor skills using a rubric.
- b. Evaluate a peer's combination of motor skills using a rubric.

Clarifying Example: *The student will assess a partner's ability to field and throw a softball using a rubric design for that skill combination.*

IV.7.2

Develop and implement an appropriate practice plan for skill proficiency.

- a. Formulate ideas to improve combinations of motor skills.
- b. Modify and perform a combination of motor skills based on feedback and their ideas.

Clarifying Example: *The student will design methods for successful completion of a combination of motor skills (e.g., give and go, catch and shoot, field and throw) using an assortment of athletic equipment.*

Standard V: Physical Activity

Students will demonstrate the ability to use the principles of exercise physiology, social psychology, and biomechanics to design and adhere to a regular, personalized, purposeful program of physical activity consistent with their health, performance, and fitness goals in order to gain health and cognitive/academic benefits.

V.7.1

Assess and analyze individual aerobic capacity/cardio/respiratory fitness).

- a. Perform a series of activities to enhance circulatory fitness.
- b. Use technology to monitor individual heart rate.
- c. Calculate target heart rate to reflect personal activity goals.
- d. Explain the importance of and monitor heart rate recovery time in aerobic activity.
- e. Use technology to compare and contrast individual heart rates among various activities.
- f. Assess personal level of aerobic capacity/cardio/respiratory fitness using a standardized test.

Clarifying Example: The student will perform a criterion referenced cardio respiratory test. (Fitnessgram)

Clarifying Example: The student will use a computer to graph their results of heart rate after engaging in a variety of activities. The student will compare the results.

Clarifying Example: The student will monitor recovery time during the cool down stage of aerobic activity. Using a 10 second heart rate check every minute for three minutes, the student will develop an awareness of how long it takes heart to return to resting heart rate.

V.7.2

Assess and analyze individual muscular strength and muscular endurance.

- a. Perform a variety of activities to enhance muscular strength and muscular endurance.

Clarifying Example: Perform a criterion referenced curl-up, modified push-up/push-up and bent-arm hang/pull-up test. (Fitnessgram)

- b. Apply the principles of overload, specificity, and, progression in relation to muscular strength and muscular endurance.

Clarifying Example: The student will apply the principles of overload, progression, and specificity by using dynabands or dumbbells to increase muscular strength when performing bicep curls. For example, using the dynaband palm up, palm down, and thumb up changes the specificity of the exercise.

- c. Assess your personal level of muscular strength and muscular endurance using a standardized test.

V.7.3

Assess and analyze individual flexibility.

- a. Perform a variety of activities to enhance **flexibility** for various muscle groups.

Clarifying Example: The student will perform a criterion referenced flexibility test for shoulder, hamstring, and trunk flexibility. (Fitnessgram)

- b. Assess personal level of **flexibility** using a standardized test.

- c. Explain the importance of maintaining a healthy body.

Clarifying Example: The student will write a paragraph (BCR) recognizing the short-term effects and the long-term benefits of maintaining flexibility throughout their lifespan.

Standard VI: Skillfulness
Students will demonstrate the ability to enhance their performance of a variety of physical skills by developing fundamental movement skills, creating original skill combinations, combining skills effectively in skill themes, and applying skills.
VI.7.1 Develop fundamental movement skills and apply them to a variety of recreational and daily life experiences.
<ul style="list-style-type: none"> a. Compare and contrast activities that improve or maintain specific skill related fitness components. b. Extend fundamental movement that will enhance physical skills and skill themes. <p>Clarifying Example: <i>The student will demonstrate the ability to use two contacts before playing the ball over the net in a modified volleyball activity.</i></p>
VI.7.2 Develop creative skill combinations and apply them to a variety of recreational and daily life experiences.
<ul style="list-style-type: none"> a. Extend creative performance sequences that exhibit quality movement based on self-expression. <p>Clarifying Example: <i>The student will perform several sequential dance moves to create a one-minute routine.</i></p>
VI.7.3 Record and evaluate skillful movements to maintain and or improve personal motor ability and fitness levels.
<ul style="list-style-type: none"> a. Evaluate recorded data of skillful activities and modify to improve personal motor ability and fitness levels. <p>Clarifying Example: <i>The student will maintain a portfolio of motor ability and fitness levels and evaluate performance at the end of each unit while developing a plan for improvement to meet personal goals.</i></p>
VI.7.4 Develop the ability to solve tactical game problems (scoring and preventing scoring) using on-the-ball skills and off-the-ball movements
<ul style="list-style-type: none"> a. Explain different concepts/ strategies for each game category. b. Recognize the importance of utilizing movement strategies in game-like situations. c. Practice movement concepts that add to student success during participation in net/wall, invasion, fielding/run scoring, and target activities. <p>Clarifying Example: <i>The students will participate in a activity that highlights a offensive or defensive concept. (Example – 1 vs. 1 on tennis court with tennis ball only. The object is to score a point by having the ball not caught by the opponent before the second bounce. The ball must be thrown at least six feet high. This highlights the offensive concept of placing the ball where the opponent is not and the defensive concept of returning to the center of the court.</i></p>