

Voluntary State Curriculum – Physical Education

1.0 **Exercise Physiology** – Students will demonstrate the ability to use scientific principles to design and participate regularly, in a 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.

High School

A. **Exercise Physiology**

1. Investigate the benefits of physical activity.

- a. Enhance the benefits previously identified in personalized physical activity selections through application of action plans.
- b. Examine the connection between physical activity and improved cognitive function.

2. Analyze the effects of physical activity on the body systems.

- a. Apply the training principles of overload, progression, and specificity to fitness plans.
- b. Apply the training principles of overload, progression, and specificity to individualized activity opportunities.

3. Analyze the Relationship between nutrition and physical activity.

- a. Investigate the energy sources available in various food items.
- b. Differentiate between caloric intake and expenditure.

4. Examine the factors influencing exercise adherence.

- a. Refine and implement strategies to maintain or improve personal fitness plans.
- b. Analyze the motivating factors for adhering to a physically active lifestyle.

5. Investigate the impact of cultural and media perceptions on physical activity.

- a. Identify, compare, and, analyze marketing practices of the health and fitness industry.
- b. Analyze the benefits of current fitness trends.

6. Analyze the components necessary to design a fitness plan.

- a. Isolate and dissect personal activity sources necessary to maintain or improve health and skill related fitness components.
- b. Construct an individual physical fitness plan that supports lifelong benefits of fitness.

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2.0 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.

A. Biomechanical Principles**1. Apply Newton's Laws of Motion to optimize movement and minimize injury during lifelong fitness activities.**

- a. Interpret Newton's Laws of Motion as they relate to lifelong fitness activities.
- b. Apply internal and external factors to modify techniques and optimize movement for lifelong fitness activities.
- c. Apply the absorption of force principle when receiving a moving object during lifelong fitness activities.
- d. Apply biomechanics of a specific fitness skill to lifelong fitness activities.

2. Apply how the use of levers, during fitness activities, increases the effect of a force exerted on a body or increases the distance a body moves by increasing speed.

- a. Apply the increased effect when force is applied while using a lever during fitness activities.
- b. Apply how distance using levers is affected by changes in speed on the body during physical activity.

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3.0 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.

High School

A. Social Psychological Principles

1. Initiate responsible personal and social behavior.

- a. Follow safe practices, rules, procedures and etiquette in a physical activity setting.
- b. Participate in fitness or lifelong and/or leisure activities for personal enjoyment.

2. Demonstrate leadership qualities.

- a. Model a mature and positive attitude while participating in lifelong activities.
- b. Assist and resolve in diffusing conflict during competition.

3. Synthesize and evaluate knowledge regarding the role of physical activity in a culturally diverse society.

- a. Model compassion that reflects concern and well-being for others.
- b. Participate successfully in a group with a wide range of diverse members.

4. Build and maintain relationships which develop a sense of community and a safe, healthy environment for all.

- a. Employ strategies to resolve conflict and make healthy, responsible decisions.
- b. Display respect for others.

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4.0 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.

High School**A. Motor Learning Principles****1. Master advanced skills**

- a. Analyze performance of skills using self and peer assessments.
- b. Demonstrate the skills to participate in a variety of lifelong activities.

2. Develop and implement an appropriate practice plan for skill proficiency.

- a. Demonstrate a plan to combine skills for effective performance.
- b. Demonstrate competence in performing motor skills required for lifelong fitness.

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5.0 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.

High School

A. Physical Activity

1. Assess personal levels of health related fitness components using a standardized tool, such as Fitnessgram.*

- a. Administer a battery of fitness tests.
- b. Establish a baseline level of Health related fitness through a fitness pre-test.
- c. Record and analyze individual data.

2. Develop personal goals to enhance health related components of fitness.

- a. Identify fitness levels based on “healthy fitness zones” criteria.
- b. Create short term goals to maintain and/or improve health related fitness components.
- c. Create long term goals to maintain and/or improve health related fitness components.

3. Design and implement personal fitness plan based on assessment results and previously established personal goals.

- a. Identify activities that promote maintenance and/of improvements in all areas.
- b. Formulate and execute a plan of action that meets the needs of all personal goals.

4. Reassess personal fitness plan

- a. Analyze the effectiveness of the personal fitness plan through a fitness post-test.
- b. Analyze data and examine goals based on fitness assessments.
- c. Modify personal fitness plan based on personal goals and data.

*Pre/Post assessment implementation is available with fitnessgram

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6.0 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.

High School**A. Skillfulness****1. Demonstrate the mastery of fundamental movement skills while applying them in a variety of lifelong fitness activities.**

- a. Perform and modify fundamental movement skills automatically while participating in a lifelong fitness activity.
- b. Create and justify the selection of activities that improve or maintain skill related fitness.

2. Demonstrate the mastery of using creative skill combinations while applying them to a variety of lifelong fitness activities.

- a. Incorporate creative skill combinations in lifelong fitness activities.
- b. Apply creative skill combinations to demonstrate self expression.

3. Record and evaluate movement skills to maintain or improve personal motor performance and/or fitness levels.

- a. Justify the personal selection of lifelong fitness activities.
- b. Formulate a movement plan using personal data that enhances motor performance while maintaining or improving fitness levels.