

Physical Education 10

Semester A Summary:

In this course, the student will study physical fitness and a variety of health-related topics. The student will gain an understanding of the proper ways to exercise and diet, and will learn how to assess his own fitness level. The student will learn what fitness can do and how to attain the highest possible fitness level.

Semester A Outline

1. Fitness Awareness and Understanding

- 1. The Importance of Fitness
 - Identify the five health-related factors of fitness
 - Identify the six skill-related factors of fitness
 - Compare health-related fitness and skill-related fitness
- 2. Fitness Testing
 - Identify the factors to be considered before engaging in a physical fitness program
 - Describe the health-related benefits of your own exercise program
- 3. Components of Fitness
 - Define the principles of overload, progression, and specificity
 - Calculate your working heart rate
- 4. Guidelines for the Exercise Session
 - Explain the importance of warming up and cooling down during your exercise session
 - Plan your own exercise sessions, including warm-up and cool-down
 - Describe examples and exercises that may be harmful or unsafe when warming up and cooling down
- 5. Practice Plans
 - Evaluate a practice plan
- 6. Designing Your Practice Plan
 - Design a practice plan for a self-selected skill

2. The Science of Movement

- 1. Types of Motor Skills
 - Participate in locomotor, non-locomotor, and manipulative skills through appropriate activities
- 2. Using Motor Skills Portfolio
 - Demonstrate proficiency and refinement in locomotor, non-locomotor, and manipulative skills
- 3. Forces and Motion
 - Apply the concepts and principles of levers, force, motion, and rotation in a variety of activities
- 4. Understanding How Joints Move

- Define flexibility
- Describe the importance of flexibility to health and fitness
- Explain how flexibility is developed
- Describe how flexibility is increased through the application of general principles of training
- 5. Applying Fitness Principles to Flexibility
 - Define overload, specificity, and progression as they relate to flexibility
 - Demonstrate various types of stretches
 - Explain the difference between dynamic and static stretches
- 6. Stretching Exercises
 - Describe which exercises increase range of motion in specific joints
 - Provide criteria for correctly performing flexibility exercises

3. Cardiovascular Fitness

- 1. Anatomical Structure of the Heart and How It Works
 - Define cardiovascular fitness
 - Describe how the cardiovascular system works
 - Recognize the major structural features of the heart
 - Evaluate a website regarding exercise
- 2. Respiratory System Functions
 - Describe the respiratory process and its relationship to fitness
 - Identify the major structural features of the lungs
 - Determine your target heart rate
- 3. Muscle Fibers
 - Learn to identify two types of muscle fibers
 - Describe the functions of the two types of muscle fibers
 - Identify the differences among skeletal, smooth, and cardiac muscles
- 4. Types of Muscles
 - Identify voluntary and involuntary muscles
- 5. Developing Muscular Endurance
 - Learn the methods of developing cardiovascular fitness, muscular strength, and endurance
 - Learn the effects of exercise on the muscular system
 - Identify different types of aerobic exercises and their benefits
- 6. Demonstrating Strength Training Exercises
 - Apply principles of muscle contractions to a variety of activities
- 7. Diseases Associated With Poor Aerobic Conditioning
 - Discuss the importance of attaining an optimal cardiovascular level
 - Identify the benefits of muscular endurance
 - Name the diseases associated with poor aerobic conditioning
- 8. Aerobic Training Benefits
 - Explain how aerobic training impacts the respiratory system
 - Explain how aerobic training impacts the cardiovascular system
 - Explain how aerobic training impacts the muscular system
 - Explain the role of perseverance and tenacity in achieving lifelong energy balance
 - Apply rate of perceived exertion and pacing to a conditioning plan that meets the needs of lifetime activities
- 9. Oxygen Transport
 - Describe systemic circulation and oxygen transport
 - Identify blood vessels, arteries, veins, and capillaries
 - Explain the difference between systemic and pulmonary circulation

- 10. Body Fat and Obesity
 - List possible reasons for obesity
 - Discuss the benefits of low body fat percentage
 - Identify the health hazards of high body fat percentage

4. Nutrition

- 1. Understanding Nutrients
 - Identify the six major nutrients
 - Identify the best food sources for each one
 - Identify the basic food groups
 - Analyze your own eating habits to meet your goals for RDAs
 - Learn to select foods that will provide the optimal nutrition benefits
- 2. Sports Nutrition Myths
 - Learn the facts about the most common myths about nutrition
 - Learn to identify the myths associated with sports drinks, protein supplements, and salt tablets
- 3. Hydration
 - Discuss the importance of hydration and re-hydration
 - Describe the hazards and effects of dehydration
 - Identify associated symptoms
 - Discuss the negative side-effects of the use of diuretics
- 4. Weight Control
 - Discuss the causes of obesity and how it develops
 - Learn the terms related to body composition
 - Describe the guidelines for weight control and methods of determining your ideal body weight
- 5. Fad Diets
 - Identify the importance of maintaining a well-balanced diet
 - Identify the health risks as a result of fad dieting
- 6. Anorexia Nervosa and Bulimia
 - Describe the hazards of eating disorders
 - Discuss the psychological and physiological effects of eating disorders
 - Identify the symptoms of an eating disorder
- 7. Stress
 - Discuss the body's reaction to stress and the three stages of stress
 - Identify symptoms and prevention of stress
 - Define terms related to stress

5. **Designing Your Personal Exercise Program**

- 1. Exercising Safely/Designing Your Exercise Program
 - Describe common exercises and injuries
 - Discuss how to prevent problems before they occur by avoiding certain exercises
 - Design a form to keep track of your progress and to individualize your goals
 - Design goals to improve your cardiovascular endurance, muscular strength and endurance, and promote positive changes in your flexibility
- 2. Final Exam