

The Advanced System for Educator Certification

PHYSICAL EDUCATION

Test Framework

	Content Domain	Range of Competencies	Approximate Percentage of Test Score
Ι.	Growth and Motor Development	0001–0003	25%
П.	Movement Activities	0004–0006	25%
Ш.	Lifelong Physical Fitness	0007–0009	25%
IV.	The Physical Education Program	0010–0012	25%

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I. GROWTH AND MOTOR DEVELOPMENT

0001		Understand stages and characteristics of human growth and development.
		Demonstrate knowledge of stages and characteristics of physical, cognitive, social, and emotional development during infancy, childhood, adolescence, and adulthood.
	•	Recognize factors that influence physical, cognitive, social, and emotional growth and development.
	•	Analyze significant developmental and gender-specific issues during childhood and adolescence.
	•	Analyze the influence of peers, family, media, society, and culture on personal growth and development and health and fitness practices.
	•	Demonstrate knowledge of major physical development milestones and changes and their impact on motor development and a physically active lifestyle.
	•	Analyze how physical activity patterns are likely to change throughout the life span, implications of these changes, and strategies to address these changes.
		Demonstrate knowledge of components of wellness and principles and techniques for maintaining wellness throughout the life span.
0002		
0002	•	techniques for maintaining wellness throughout the life span. Understand concepts and principles of anatomy and physiology as they relate to movement and physical fitness.
0002		techniques for maintaining wellness throughout the life span. Understand concepts and principles of anatomy and physiology as they relate to movement and physical fitness. Demonstrate knowledge of the general organization and components of the skeletal, muscular, circulatory, respiratory, nervous, and digestive systems.
0002	•	techniques for maintaining wellness throughout the life span. Understand concepts and principles of anatomy and physiology as they relate to movement and physical fitness. Demonstrate knowledge of the general organization and components of the skeletal, muscular, circulatory, respiratory, nervous, and digestive systems. Distinguish between functions, actions, and physiological processes of the major body systems.
0002	•	techniques for maintaining wellness throughout the life span. Understand concepts and principles of anatomy and physiology as they relate to movement and physical fitness. Demonstrate knowledge of the general organization and components of the skeletal, muscular, circulatory, respiratory, nervous, and digestive systems. Distinguish between functions, actions, and physiological processes of the major body systems. Recognize the interactions between body systems in producing movement and ways in which energy systems are utilized during physical activity.
0002	•	techniques for maintaining wellness throughout the life span. Understand concepts and principles of anatomy and physiology as they relate to movement and physical fitness. Demonstrate knowledge of the general organization and components of the skeletal, muscular, circulatory, respiratory, nervous, and digestive systems. Distinguish between functions, actions, and physiological processes of the major body systems. Recognize the interactions between body systems in producing movement and ways in which energy systems are utilized during physical activity. Identify physiological changes and adaptations that result from regular physical activity.

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Understand principles, sequences, and characteristics of motor development and motor learning.

- Recognize typical sequences and characteristics of motor development during infancy, childhood, adolescence, and adulthood.
- Demonstrate knowledge of components of perceptual-motor development (e.g., visual, auditory, tactile, and kinesthetic discrimination) and how they relate to motor skill acquisition and performance.
- Apply knowledge of theories, concepts, and typical progressions of motor learning.
- Analyze factors that influence motor development, motor learning, and motor control.
- Recognize motor learning principles related to readiness, practice, retention, observational learning, feedback, transfer, and motor-task analysis as they relate to skill acquisition and performance.
- Recognize principles and techniques for modifying activities, sports, and games to promote motor learning and control and the use and integration of particular motor behaviors, patterns, and skills.

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II. MOVEMENT ACTIVITIES

0004		Understand fundamental movement concepts and skills and principles of biomechanics.
		Demonstrate knowledge of how to promote understanding of fundamental movement concepts related to body awareness, spatial awareness, force, direction, time, level, pathway, energy, and speed.
	•	Recognize biomechanical principles related to motion, stability and balance, center of gravity, force production and absorption, buoyancy, rotation, torque, speed, accuracy, acceleration, equilibrium, and velocity.
	•	Apply knowledge of biomechanical principles in the context of various movement activities and individual body mechanics for safe and efficient movement.
	►	Identify characteristics and critical elements of locomotor skills.
	►	Identify characteristics and critical elements of nonlocomotor skills.
	►	Identify characteristics and critical elements of object control/manipulative skills
		Demonstrate knowledge of principles and activities for developing locomotor,
0005		nonlocomotor, and object control/manipulative skills and for using these skills in
0005		nonlocomotor, and object control/manipulative skills and for using these skills in combination. Understand principles, techniques, skills, activities, organizational
0005	•	nonlocomotor, and object control/manipulative skills and for using these skills in combination. Understand principles, techniques, skills, activities, organizational strategies, and safety practices for sports and recreational activities. Demonstrate knowledge of rules, activities, skills, strategies, etiquette, types and uses of equipment, organizational strategies, and safety practices for sport and recreational activities.
0005	•	nonlocomotor, and object control/manipulative skills and for using these skills in combination. Understand principles, techniques, skills, activities, organizational strategies, and safety practices for sports and recreational activities. Demonstrate knowledge of rules, activities, skills, strategies, etiquette, types and uses of equipment, organizational strategies, and safety practices for sport and recreational activities. Identify critical elements, techniques, and proper form for executing a variety of
0005	•	nonlocomotor, and object control/manipulative skills and for using these skills in combination. Understand principles, techniques, skills, activities, organizational strategies, and safety practices for sports and recreational activities. Demonstrate knowledge of rules, activities, skills, strategies, etiquette, types and uses of equipment, organizational strategies, and safety practices for sport and recreational activities. Identify critical elements, techniques, and proper form for executing a variety of movements in fundamental and complex sports skills. Distinguish between sports and recreational activities appropriate for various

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0006	Understand principles, techniques, skills, activities, organizational strategies, and safety practices for rhythmic movement and dance; stunts, tumbling, and educational gymnastics; and cooperative, group, and adventure activities.
Þ	Recognize elements of rhythm; types of rhythmic movement activities; and skills and strategies for integrating locomotor patterns, nonlocomotor skills, and transitions into rhythmic movement.
	Recognize principles, techniques, elements, sequences, activities, organizational strategies, safety practices, and types of music for promoting development of creative movement and dance skills.
	Demonstrate knowledge of principles, techniques, skills, activities, organizational strategies, safety practices, and equipment for promoting development of stunts, tumbling, and educational gymnastics skills.
•	Apply knowledge of rules, techniques, skills, activities, types and uses of equipment, safety practices, and organizational strategies for cooperative games and group challenges.
•	Demonstrate knowledge of principles, techniques, skills, activities, organizational strategies, safety practices, and equipment for adventure activities.
•	Recognize the benefits of participation in rhythmic and dance activities; stunts, tumbling, and educational gymnastics; and cooperative, group, and adventure activities.
•	Identify strategies for helping individuals overcome barriers to participation in dance; educational gymnastics; and cooperative, group, and adventure activities and for modifying activities to promote maximum participation and inclusion.

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III. LIFELONG PHYSICAL FITNESS

0007		Understand principles and components of health-related physical fitness, including activities for promoting cardiorespiratory endurance, flexibility, muscular strength and endurance, and body composition.
		Demonstrate knowledge of the major health-related components of physical fitness and types of physical fitness training used to address each component.
	•	Apply developmentally appropriate knowledge of conditioning and training principles and ways in which they are used and adjusted to improve physical fitness.
	•	Recognize principles, skills, techniques, activities, safety practices, and resources for developing, monitoring, and assessing cardiorespiratory endurance.
		Recognize principles, skills, techniques, activities, and safety practices for developing and improving flexibility of the major joints and areas of the body.
	•	Recognize principles, skills, techniques, activities, and safety practices for developing and improving strength and endurance of the major muscle groups of the body.
	•	Recognize principles, skills, techniques, activities, and safety practices for developing and improving body composition.
	•	Distinguish between types of endurance, flexibility, and strengthening activities and developmentally appropriate equipment, practices, and considerations for these activities.
	►	Analyze the safety and effectiveness of various types of fitness exercises.
0008		Understand principles, procedures, and resources for developing and maintaining physical activity/fitness and weight management plans.
	•	Identify principles, criteria, and methods for designing and implementing individualized fitness plans (e.g., evaluating the need for lifestyle changes, including activities to address major fitness components).
		Apply knowledge of physical fitness tests and techniques for using fitness assessment results to determine health-related needs and goals.
	•	Demonstrate knowledge of techniques for establishing personal fitness, physical activity, and nutritional goals and monitoring progress toward these goals.
	•	Analyze the relationships between diet, physical activity, health, and body composition.
		Recognize sound weight management principles and practices and strategies for integrating them into daily life.
	•	Apply knowledge of principles and procedures for analyzing time, cost, accessibility, and resources in relation to participation in physical fitness activities and personal fitness or weight management plans.
	•	Recognize strategies for integrating fitness activities into daily life and the benefits of a physically active lifestyle (e.g., reduced stress, enjoyment, challenge, social interaction, reduced health care costs).

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Understand the relationship between physical activity and the development of responsible personal and social behaviors and traits.

- Analyze the relationship between physical activity and the development of positive self-concept, mental and emotional well-being, and enhanced selfmanagement skills.
- Recognize how sports, games, and fitness activities should promote positive personal behaviors and traits (e.g., civility, self-control, responsibility, confidence, honesty, appropriate attitudes about winning and losing).
- Analyze ways in which sports, games, and fitness activities should promote positive social behaviors and traits (e.g., leadership, teamwork, cooperation, fairness, support and consideration of others).
- Recognize the roles of sports, games, and fitness activities in promoting respect, acceptance, and inclusion of peers and in developing understanding and appreciation of diversity.
- Demonstrate knowledge of the sociocultural benefits of participation in physical activities (e.g., advantages of diverse talent to team membership, awareness of how various cultures view and value physical activity).
- Identify ways in which physical activities offer opportunities for personal challenge, satisfaction, competition, achievement, positive social interactions, and healthy alternatives to risky behaviors.

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IV. THE PHYSICAL EDUCATION PROGRAM

0010		Understand how children and adolescents learn and how to provide them with physical education opportunities that support their physical cognitive, social, and emotional development.
		Recognize key concepts, issues, trends, goals, and purposes associated with student-centered physical education programs.
	•	Demonstrate knowledge of age-appropriate and developmentally appropriate activities and instructional strategies that support students' physical, cognitive, social, and emotional development.
	•	Demonstrate knowledge of the cognitive dimensions of physical activity and ways to foster critical-thinking, decision-making, problem-solving, and analytical skills in the context of physical activities.
	•	Demonstrate knowledge of social and emotional influences on student learning in the physical education setting.
	•	Apply knowledge of effective communication techniques that demonstrate sensitivity to student differences, encourage student communication, and foster engagement in the physical education environment.
	•	Recognize ways in which students differ in their approaches to learning and appropriate physical education strategies and resources that address diverse learning styles.
		Identify general principles and teaching strategies for managing and motivating
		students in physical education settings (e.g., supervision, active learning, discipline practices, effective transitions, feedback).
0011		discipline practices, effective transitions, feedback). Understand how to plan, implement, and evaluate physical education instructional activities, including how to adapt activities for diverse learning needs. Demonstrate knowledge of how to design and implement physical education
0011		discipline practices, effective transitions, feedback). Understand how to plan, implement, and evaluate physical education instructional activities, including how to adapt activities for diverse learning needs.
0011	•	 discipline practices, effective transitions, feedback). Understand how to plan, implement, and evaluate physical education instructional activities, including how to adapt activities for diverse learning needs. Demonstrate knowledge of how to design and implement physical education activities that are based on principles of effective instruction and governing
0011	•	discipline practices, effective transitions, feedback). Understand how to plan, implement, and evaluate physical education instructional activities, including how to adapt activities for diverse learning needs. Demonstrate knowledge of how to design and implement physical education activities that are based on principles of effective instruction and governing standards. Analyze activities, lesson plans, instructional resources, and curriculum materials in terms of developmental appropriateness, comprehensiveness,
0011	•	discipline practices, effective transitions, feedback). Understand how to plan, implement, and evaluate physical education instructional activities, including how to adapt activities for diverse learning needs. Demonstrate knowledge of how to design and implement physical education activities that are based on principles of effective instruction and governing standards. Analyze activities, lesson plans, instructional resources, and curriculum materials in terms of developmental appropriateness, comprehensiveness, usefulness, and safety. Recognize appropriate activities for students with special needs and for students from diverse cultural or linguistic backgrounds; and techniques for

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Understand ethical, legal, professional, and safety guidelines and practices related to physical education.

- Demonstrate familiarity with professional codes of conduct, ethical standards, and legal requirements and responsibilities associated with physical education.
- Demonstrate knowledge of state and federal laws and guidelines related to special education, equity, inclusion, privacy, and other aspects of students' rights in relation to physical activity.
- Apply knowledge of strategies and resources for communicating and collaborating with parents/guardians, community members, school personnel, and organizations to promote, enhance, and advocate for physical education opportunities for students and self.
- Recognize appropriate principles and practices related to the selection, care, maintenance, and use of physical education equipment, facilities, materials, media, staff, and technological resources.
- Analyze principles, techniques, issues, and considerations related to establishing and maintaining a safe physical education environment.
- Recognize types and characteristics of injuries common to physical activities and principles of injury management and emergency first aid.

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