Physical Education: Content Knowledge (0091/5091)

Test at a Glance

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<td>0091 5091</td>
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<tr>
<td>Time</td>
<td>2 hours 2 hours</td>
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<td>Number of Questions</td>
<td>120 multiple-choice questions</td>
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About This Test

The Physical Education: Content Knowledge test is designed to measure the professional knowledge of prospective teachers of physical education in elementary through senior high schools. The test assesses whether an examinee has the knowledge and competencies necessary for a beginning teacher of physical education.

The 120 multiple-choice questions cover knowledge of fitness, fundamental movements, and sports that comprise the content of physical education classes; knowledge of areas in the natural and social sciences that provide the foundation for teaching these activities; and knowledge of crucial topics in health and safety. Knowledge of these subject areas enables teachers to understand the nature and purpose of the activities in the physical education curriculum, to evaluate and interpret the physical characteristics and performances of students in physical education classes, and to make decisions about the ongoing conduct of physical education classes and the needs of students in those classes. Questions will test knowledge of essential facts, including the meaning of terms and placement of content elements in proper categories, understanding of relationships between and among areas of content, and the ability to apply concepts appropriately.

This test may contain some questions that will not count toward your score.
Topics Covered

Representative descriptions of topics covered in each category are provided below.

I. Content Knowledge and Student Growth and Development

- Core Concepts
  1. Terminology, principles, concepts, and applications of the basic sciences as related to motor skills and movement activities (e.g., anatomy and physiology, exercise physiology, biomechanics and kinesiology, motor development and motor learning)
  2. Principles of biomechanics and kinesiology as they relate to motor skills and movement patterns (e.g., summation of forces, center of gravity, force/speed relations, torque)
  3. Movement concepts (e.g., body awareness, spatial awareness, effort, relationship)
  4. Exercise physiology (e.g., components of health-related fitness; components of skill-related fitness; fitness guidelines, such as frequency, intensity, time/duration, type/mode; principles of exercise, such as specificity, overload, progression; roles of body systems in exercise; short- and long-term effects of physical training; nutrition as related to exercise; fitness; metabolic response to exercise)
  5. Anatomy and physiology (e.g., skeletal, muscular, nervous, circulatory, and respiratory systems)
  6. Current and historical trends, issues, and developments in physical education (e.g., laws, teaching methods, theories, concepts, techniques)
  7. Understanding of the rules, strategies, skills, techniques, and concepts associated with a variety of movement activities and games across the age and grade spectra; emphasis predominantly on softball, soccer, swimming, tennis, track and field, and volleyball, with questions based possibly on other sports and activities commonly used in physical education settings
  8. Liability and legal considerations pertaining to the use of equipment, class organization, supervision, and program selection
  9. Effects of substance abuse on student performance, health, and behavior

- Student Growth and Development
  1. Sequential and developmentally appropriate learning and practice opportunities based on growth and motor development stages, individual characteristics and individual needs of students, learning environment, and task
  2. Monitoring of individual performance and group performance in order to design safe instruction that meets students’ developmental needs in the psychomotor, cognitive, and affective domains
  3. Developmental readiness to learn and refine motor skills and movement patterns (e.g., biological, psychological, sociological, experiential, environmental)
  4. Perception in motor development
  5. Appropriate and effective instruction related to students’ cultures and ethnicities, personal values, family structures, home environments, and community values
  6. Use of appropriate professional support services and resources to meet students’ needs
II. Management, Motivation, and Communication

- Management and Motivation
  1. Principles of classroom management practices that create effective learning experiences in physical education settings
  2. Psychological and social factors that affect individual learning and group learning, participation, cooperation, and performance in physical education settings
  3. Organization, allocation, and management of resources to provide active and equitable learning experiences (e.g., time, space, equipment, activities, teacher attention, students)
  4. Motivation of students to participate in physical activity both in school and outside of school
  5. Promotion of positive relationships, encouragement of responsible personal and social behaviors among students, and establishment of a productive learning environment
  6. Development and use of an effective behavior management plan

- Communication
  1. Effective verbal and nonverbal communication skills in a variety of physical activity settings
  2. Specific appropriate instructional feedback in skill acquisition, student learning, and motivation
  3. Communication of classroom management and instructional information in a variety of ways (e.g., verbally and nonverbally and via bulletin boards, music, task cards, posters, technology)
  4. Communication in ways that show respect and consideration for students, colleagues, and parents

III. Planning, Instruction, and Student Assessment

- Planning and Instruction
  1. Teaching of skillful movement, physical activity, and fitness via pedagogy, sociology, psychology, anatomy and physiology, exercise physiology, biomechanics and kinesiology, motor development and motor learning
  2. Sequencing of motor skill activities and use of movement concepts and effective strategies to improve learning in physical education activities and to improve skill development
  3. Provision of feedback to enhance skill development
  4. Activities designed to improve health-related and skill-related fitness
  5. Current issues, trends, and laws affecting the choice of appropriate physical education activities
  6. Identification, development, and implementation of appropriate program and instructional goals and objectives
  7. Development of unit and lesson plans based on local, state, and national standards; program goals; instructional goals; and students’ needs
  8. Appropriate instructional strategies to facilitate learning in the physical activity setting based on selected content, students’ needs, safety concerns, facilities and equipment, and instructional models
  9. Use of teaching resources and curriculum materials to design learning experiences
  10. Explanations, demonstrations, and appropriate instructional cues and prompts to link physical activity concepts to learning experiences and to facilitate motor skill performance
  11. General and specific safety and injury prevention guidelines for planning of movement and fitness activities (e.g., first aid, cardiopulmonary resuscitation)
• Student Assessment
  1. Assessment of student skill performance and fitness via a variety of tools (e.g., observations, data, charts, graphs, rating scales)
  2. Gathering of data and assessment of student learning in the cognitive and affective domains by a variety of techniques (e.g., written assessments, rating scales, observations)
  3. Understanding of fitness assessments such as President’s Challenge and Fitnessgram
  4. Types of assessments and assessment methods (e.g., formative, summative, authentic, portfolio, standardized, rubric, criterion referenced, norm referenced)
  5. Validity, reliability, bias, and ways of interpreting assessment results
  6. Appropriate assessment techniques to assess and improve students’ understanding and performance, provide feedback, communicate students’ progress, guide students’ personal goal setting, and guide curricular and instructional decisions
  7. Involvement of students in self-assessment and peer assessment
  8. Appropriate assessment of individuals with disabilities
  9. Referral procedures under the Individuals with Disabilities Education Act and Section 504 of the Vocational Rehabilitation Act

• Collaboration, Reflection, and Technology

• Collaboration
  1. Current educational issues that cross subject matter boundaries
  2. Integration of knowledge and skills from multiple subject areas in physical education
  3. Establishment of productive relationships to support student growth and well-being with school colleagues and administrators, parents and guardians, community members, and organizations
  4. Promotion of a variety of opportunities for physical activity in the school and the community

• Reflection
  1. Use of the reflective cycle to facilitate change in teacher performance, student learning, and instructional goals and decisions (e.g., planning, teaching, assessment, reflection)
  2. Use of available resources to develop and grow as a reflective professional (e.g., students, colleagues, literature, professional organization memberships, professional development opportunities)

• Technology
  1. Design, development, and implementation of student learning activities that integrate information technology
  2. Use of technologies to communicate, instruct, assess, keep records, network, locate resources, present information, and enhance professional development
This test is available via paper delivery or computer delivery; other than the delivery method, there is no difference between the tests. The test content is the same for both test codes.

To illustrate what the computer-delivered test looks like, the following sample question shows an actual screen used in a computer-delivered test.

Here is the same sample question as it would appear on a paper-delivered test:

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Which of the following is the capital of the United States?

(A) New York, NY
(B) Washington, DC
(C) Chicago, IL
(D) Los Angeles, CA
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For the purposes of this guide, sample questions are provided as they would appear in a paper-delivered test.
Sample Test Questions

The sample questions that follow illustrate the kinds of questions in the test. They are not, however, representative of the entire scope of the test in either content or difficulty. Answers with explanations follow the questions.

Directions: Each of the questions or statements below is followed by four suggested answers or completions. Select the one that is best in each case.

1. In which of the following locomotor skills does each foot have two tasks to complete before the weight is transferred to the other foot?
   - (A) Galloping
   - (B) Running
   - (C) Walking
   - (D) Skipping

2. Which of the following is a problem most characteristic of the primitive stage of forward rolling?
   - (A) Keeping the chin tucked
   - (B) Keeping the knees and hips flexed
   - (C) Losing the curl
   - (D) Using the hands to cushion the head contact

3. All of the following are characteristics of a correct mature form for striking a ball with a racquet EXCEPT
   - (A) taking a forward step with the foot opposite to the striking arm
   - (B) coiling and rotating the body forward as the racquet is swung
   - (C) putting weight on the back foot and then shifting to the front foot as the racquet is swung
   - (D) stopping the racquet at the point of contact with the ball

4. When dribbling a soccer ball in a restricted space, the player should attempt to do all of the following EXCEPT
   - (A) keep the ball close to the feet
   - (B) stay in a slightly crouched position
   - (C) use body feints and changes of speed
   - (D) use only the dominant foot for better control

5. It is reputed that Milo of Greece lifted a newborn bull onto his shoulders each day until the bull became fully mature. Milo followed what two principles of modern muscle strength and endurance conditioning?
   - (A) Progression and overload
   - (B) Variable resistance and overload
   - (C) Frequency and progression
   - (D) Intensity and retention

6. In which of the following lists is each physiological factor linearly (proportionately) related to oxygen consumption?
   - (A) Cardiac output, diastolic blood pressure, heart rate
   - (B) Cardiac output, heart rate, work rate
   - (C) Core temperature, red blood cell count, work rate
   - (D) Minute ventilation, red blood cell count, respiration rate

7. In the late 1800s, the greatest influence on the direction of physical education came from individuals with a background in which of the following?
   - (A) Medicine
   - (B) Professional sport
   - (C) Intercollegiate sport
   - (D) The military

8. According to most sport sociologists, a sport is primarily described as what kind of activity?
   - (A) idealized
   - (B) institutionalized
   - (C) masculinized
   - (D) professionalized
9. Angular motion is represented by which of the following?
   I. The knees of a cyclist
   II. The legs of a runner
   III. The arms of a swimmer
   (A) I only
   (B) III only
   (C) I and II only
   (D) I, II, and III

10. The correct racing posture of a swimmer, a cyclist, or a downhill skier minimizes the effect of
   (A) lift
   (B) propulsion
   (C) turbulence
   (D) gravity

11. Which of the following practice alternatives would best promote motor learning and safety for potentially injurious sports such as pole vaulting and downhill skiing?
   (A) Whole
   (B) Part
   (C) Progressive-part
   (D) Distributed

12. All of the following are direct physiological consequences of warm-down (cool-down) activities following vigorous physical activity EXCEPT
   (A) preventing blood from pooling in the legs
   (B) increasing the rate of lactic acid removal from the blood and skeletal muscle
   (C) promoting the reduction of cholesterol in the blood
   (D) reducing the risk of cardiac irregularities

13. Which of the following is NOT an example of static balance?
   (A) Standing in place on a balance beam
   (B) Maintaining a handstand position
   (C)Skipping across a gymnasium
   (D) Placing three body parts within a hula hoop for five seconds

14. Which of the following is the best example of a target game?
   (A) Basketball
   (B) Lacrosse
   (C) Bocce
   (D) Badminton

15. In teaching a closed skill, a teacher initially should provide which of the following?
   (A) A stable environment with varying rates of skill performance
   (B) A stable environment with a stable rate of skill performance
   (C) A varying environment with varying rates of skill performance
   (D) A varying environment with a stable rate of skill performance

16. Which of the following would be LEAST appropriate to include in a manual of safety procedures for a physical education program?
   (A) Teachers must personally inspect playing fields before soccer classes.
   (B) Teachers must clearly mark appropriate traffic patterns around the throwing area in javelin classes.
   (C) Students must read and sign a copy of the rules for archery classes.
   (D) Students must exercise at or below 50 percent of their maximal heart rate during aerobic fitness activities.
17. During a physical education unit that focuses on the development of health-related fitness, a teacher asks students to keep a journal about their individual responses to three different types of cardiovascular activities—such as heart rate, perceived rate of exertion, and motivation—and write a journal entry on how they personally felt about each activity. This journaling is an example of

(A) criterion-referenced grading
(B) differentiated instruction
(C) identification and recall of information
(D) standards-based instruction

18. Learning about sport rules, traditions, history, and etiquette falls under which of the following domains of learning?

(A) Affective
(B) Cognitive
(C) Psychomotor
(D) Associative

19. Which of the following technology applications would best support a wrestler's learning a new takedown technique?

(A) Reading about the proper technique and procedure on the Internet
(B) Recording the wrestler's performance and having the wrestler view it on a video screen
(C) Viewing a series of pictures of proper execution on a video screen
(D) Exchanging e-mail messages with other wrestlers about their experience of learning the technique

20. The National Association for Sport and Physical Education (NASPE) is an important resource for beginning physical educators because

(A) it provides liability insurance for physical educators in case of a problem
(B) its Web site contains all the lesson plans a physical education teacher needs
(C) its mission is to enhance knowledge, improve practice, and disseminate current information
(D) it is a key resource for health education teachers

21. The best choice of available fitness tests for a teacher to use to assess students with disabilities is the

(A) Brockport Physical Fitness Test (BPFT)
(B) Fitnessgram
(C) President’s Challenge
(D) Activitygram

22. Which of the following sets of tasks would be the best for a physical education teacher to complete and adhere to in the beginning of the school year in an effort to establish good classroom management?

(A) Establishing rules and reviewing them with students, creating a record-keeping system, and teaching students a predetermined signal to stop activity
(B) Posting rules on the wall, not smiling until November, and learning students’ names
(C) Learning students’ names, teaching the class how to do warm-ups, and playing a fun game
(D) Having an open gym period, posting rules on the wall, and creating a record-keeping system

23. Which of the following would be the best example of authentic assessment for a basketball skills unit?

(A) Using standardized instruments on basketball skills at the end of the unit
(B) Using district-devised assessments of skills at the end of the unit
(C) Developing a rubric to assess learners as they move through the unit
(D) Counting the number of baskets made in a class game

24. Which of the following best expresses the percentage of maximum heart rate that should characterize students’ exercise for health-related fitness in physical education class?

(A) 25–40% of maximum heart rate
(B) 40–60% of maximum heart rate
(C) 60–85% of maximum heart rate
(D) 85–100% of maximum heart rate
**Answers**

1. In walking and running, each foot performs a single task before the other foot takes over. In galloping, each foot performs a single task, but one foot “walks” while the other foot “leaps.” In skipping, each foot both “walks” and “hops” before the other foot takes over. Therefore, (D) is the correct answer.

2. Choices (A), (B), and (D) are all characteristic of intermediate or advanced levels of performing the forward roll. Choice (C) is characteristic of early or primitive stages of performing the forward roll and is the correct answer.

3. Choices (A), (B), and (C) are all generally accepted as essential elements of mature striking form. “Following through” with the swing is also an essential element, and thus (D) is the correct answer.

4. Although most players, even at fairly advanced levels, will have better control with the dominant foot than with the nondominant foot, it is still essential that practice in dribbling at every level emphasize use of both feet. (D) is the correct answer.

5. Choice (A) is the correct answer because progression and overload are the terms used in discussions of fitness that refer to adjusting the amount of exercise to a person’s present capacity (overload) and gradually increasing the amount of exercise over time to improve the level of fitness (progression).

6. Choice (B) is the correct answer because it is the only option that does not include at least one item that does not increase in a linear fashion as oxygen consumption increases.

7. The primary role in the development of physical education in the nineteenth century was played by physicians interested in anthropometric measurement and other medically related subjects. (A) is the correct answer.

8. The best answer is (B). A sport is described by most sociologists as an institutionalized activity. An activity becomes a sport after undergoing a process through which behaviors and organization become standardized over time. As a sport, the activity takes on fundamental characteristics, such as official rule enforcement, equipment regulations, and formalized skills (see Jay J. Coakley, Sport in Society: Issues and Controversies).

9. The definition of angular motion clearly covers all three of the movements listed; therefore, (D) is the correct answer.

10. All three activities require that their participants maintain a compact arrangement of the body so that it can move smoothly through the medium (air or water) that is involved. (C) is the correct answer, because the failure to observe this compact bodily arrangement would hinder movement by creating turbulence.

11. Choice (C) describes a method of practice that involves working on specific elements of a skill in isolation. Because this method allows those elements of a skill that present the greatest risk of injury to be mastered under controlled conditions before the skill is attempted “whole” and under real conditions, (C) is the correct answer.

12. This question is based on a standard textbook discussion of the rationale for warm-down following vigorous physical activity, which clearly establishes (A), (B), and (D) as real effects of proper warm-down procedures. (C) is not such an effect and is thus the correct answer.

13. The correct answer is (C). Static balance means to hold the position in place. A student who is skipping across a gymnasium is using movement to propel themselves from one place to another. All of the other choices have the person holding the position in place.

14. The correct answer is (C). Bocce is a game that is truly a target game. Basketball and Lacrosse both involve shooting the ball at a target or goal, but because of the nature of offensive and defensive play they are considered invasion games. Badminton is a net/wall game in the same class as tennis, volleyball, racquetball, and handball.

15. The correct answer is (B). A closed skill is one in which the environment remains stable and predictable, and the performer knows what to do and when to do it. Choice (B) allows the performer to practice the skill at a stable rate, moving to varying rates as mastery is attained. Closed skills are habitual and follow set patterns from beginning to end. Choices (C) and (D) are incorrect because they call for a varying environment.

16. The correct answer is (D). The least appropriate among the choices would be to have students exercise at or below 50 percent of maximal heart rate. The way to maintain or increase fitness is to exercise in the target heart zone. Students in physical education classes should be exercising in this way. Safety procedures for a physical education program would include inspection of facilities, marking areas for safety, and having students read and know rules for activities.

17. The correct answer is (B). Differentiated instruction allows students to access information using different avenues. It addresses the multiple learning styles that students have. In physical education, a writing assignment would integrate writing skills into the lessons instead of only using physical ability and effort to assess students. In this activity there is no set criterion to compare to, there is no recall of information, and this activity, as is, would not be characterized as standards-based.
18. The correct answer is (B). The cognitive domain deals with the acquisition of knowledge and the development of intellectual skills. Affective deals with people’s feelings, Psychomotor deals with physical manipulations, and Associative is not a domain within Bloom’s Taxonomy.

19. The correct answer is (B). By using a video camera, students are able to check their technique against a properly executed technique, detect the differences, and make corrections.

20. The correct answer is (C). NASPE is an association of the American Alliance for Health, Physical education, Recreation, and Dance (AAHPERD). NASPE’s mission is to enhance knowledge; improve professional practice; and increase support for high quality physical education, sport, and physical activity programs through research, the development of standards, and the dissemination of information.

21. The correct answer is (A). The Brockport Physical Fitness Test (BPFT) is a criterion-referenced, health-related test of physical fitness appropriate for students with disabilities. The BPFT is customized to meet the needs of all students with varying abilities.

22. The correct answer is (A). All three items in choice (A) are critical when implementing a classroom management plan. All of the other different strategies listed in choices (B), (C), and (D) are either not critical or have nothing to do with classroom management.

23. The correct answer is (C). Authentic assessment uses a rubric. Choices (A) and (B) are incorrect because neither mentions the use of a rubric, while choice (D) is not a recommended best practice in physical education.

24. The correct answer is (C). Training at a level between about 60% and 85% of maximal heart rate increases the benefit of the exercise and decreases the chances of developing cardiac diseases if the exercise is done on a regular basis.