

# Sports Medicine 2 (7662)

## Understanding Exercise Physiology SM2.1

- 1 Identify the components of fitness. SM2.1.1
- 2 Explain the metabolic energy systems. SM2.1.2
- 3 Explain various methods to analyze body composition. SM2.1.3
- 4 Perform body composition analysis using a variety of methods, including anthropometric measurements. SM2.1.4
- 5 Assess vital signs. SM2.1.5
- 6 Differentiate between acute and chronic adaptations to exercise. SM2.1.6
- 7 Explain the body's response to exercise throughout the lifespan. SM2.1.7

## Application of Biomechanical Principles SM2.2

- 1 Explain lever systems associated with the human body. SM2.2.1
- 2 Demonstrate movement in the planes of motion and related to the axes of human movement. SM2.2.2
- 3 Explain how force, mass, and gravity relate to human body mechanics. SM2.2.3

## Exploring Exercise Program Design SM2.3

- 1 Describe acute training variables and phases within exercise program design. SM2.3.1
- 2 Explain the health-related fitness factors. SM2.3.2
- 3 Design programs for each phase of training. SM2.3.3

## Preventing Injuries SM2.4

- 2 Explain the criteria used to determine readiness to participate in physical activities. SM2.4.2
- 1 Describe the relationship between pre-existing conditions and injury prevention. SM2.4.1
- 3 Perform a fitness assessment. SM2.4.3
- 4 Demonstrate safe exercise progression for healthy individuals, explaining when progression is appropriate. SM2.4.4

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- 5 Explain safe training principles to include frequency, intensity, duration, and mode.** SM2.4.5

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  - 6 Apply the principles of strength training to various case study scenarios.** SM2.4.6

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  - 7 Explain safe techniques to enhance strength of major muscle groups.** SM2.4.7

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  - 8 Demonstrate safe lifting and spotting techniques as it relates to strengthening.** SM2.4.8

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  - 9 Develop a safe strengthening program for healthy individuals.** SM2.4.9

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  - 10 Explain the basic principles and importance of flexibility training.** SM2.4.10

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  - 11 Explain safe techniques to enhance joint range of motion of major muscle groups.** SM2.4.11

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  - 12 Develop a safe flexibility program for healthy individuals.** SM2.4.12

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  - 13 Explain the basic principles and importance of proprioception.** SM2.4.13

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  - 14 Demonstrate safe techniques to enhance proprioception for self and others, explaining each technique.** SM2.4.14

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  - 15 Implement a safe proprioception program for healthy individuals, assessing for effectiveness over time.** SM2.4.15

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  - 16 Identify environmental factors related to injury prevention.** SM2.4.16

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  - 17 Identify procedures for reporting potential environmental hazards to appropriate personnel.** SM2.4.17

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  - 18 Identify factors related to equipment safety.** SM2.4.18

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  - 19 Identify procedures for reporting potential equipment safety hazards to appropriate personnel.** SM2.4.19
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## **Assessing Injuries and Illnesses** SM2.5

- 1 Explain the role of the secondary school student aide (SA) in recognizing an injury.** SM2.5.1

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  - 2 Explain the scope and limitations of the secondary school student aide (SA) when providing first aid.** SM2.5.2

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  - 3 Explain the scope and limitations of the secondary school student aide (SA) when assessing injury/illness.** SM2.5.3
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## **Treating and Managing Injuries and Conditions** SM2.6

- 1 Explain the purpose of goal setting in the treatment of injuries.** SM2.6.1

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  - 2 Manage an injury within the scope of first aid.** SM2.6.2
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- 3 Explain factors to consider in creating a progressive return-to-activity programs following injury/illness.** SM2.6.3
  - 4 Identify appropriate referral sources based on scope of practice of healthcare professionals.** SM2.6.4
  - 5 Explain the theory and application of common therapeutic interventions to treat and manage injuries and conditions based on professional scope of practice.** SM2.6.5
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## **Preparing for a Career** SM2.7

- 1 Research various sports medicine-related professions.** SM2.7.1
  - 2 Draft a résumé reflecting the student's career objective.** SM2.7.2
  - 3 Practice interviewing skills.** SM2.7.3
  - 4 Explain the basic legalities related to employment hiring practices in the sports medicine field.** SM2.7.4
  - 5 Explain the relationship between ethics and employment skills.** SM2.7.5
  - 6 Complete an internship in a sports medicine-related field.** SM2.7.6
  - 7 Describe educational opportunities for advancement in various sports medicine professions.** SM2.7.7
  - 8 Describe the impact of technology in various fields of sports medicine.** SM2.7.8
  - 9 Explain the NASM-CPT credential.** SM2.7.9
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## **Opioid Abuse Prevention Education** SM2.8

- 1 Opioid Abuse Prevention Education PPT.pdf** SM2.8.1
  - 2 Opioid Resources for Teachers** SM2.8.2
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## **Describing the Opioid Crisis** SM2.9

- 1 Describe the history and current state of the opioid crisis in the United States.** SM2.9.1
  - 2 Describe the history and current state of the opioid crisis in Virginia.** SM2.9.2
  - 3 Define the pharmacological components and common uses of opioids.** SM2.9.3
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## **Examining the Key Factors of Drug Addiction** SM2.10

- 1 Examine the science of addiction.** SM2.10.1
- 2 Explain prevention and early intervention strategies.** SM2.10.2
- 3 Identify addiction and its behavioral elements, as defined by the Diagnostic and Statistical Manual of Mental Disorders (DSM-5).** SM2.10.3

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**4 Describe the treatment models of addiction therapy.** SM2.10.4

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**5 Describe the medication management antidote used to prevent fatal opioid overdoses.** SM2.10.5

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**Understanding Pain Management Protocols** SM2.11

**1 Explain the science of physiological and mental pain.** SM2.11.1

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**2 Describe the diagnostic tools used in developing pain management plans.** SM2.11.2

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**3 Describe pain treatment options available to various populations of patients.** SM2.11.3

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**4 Describe the effects of opioid dependency on the human body systems.** SM2.11.4

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**5 Explain the mechanism and physical effects of opioids on the human body.** SM2.11.5

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**6 Explain the use of opioids in practice settings, the role of opioids in pain management, and risk factors associated with the use of the medication.** SM2.11.6

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**7 Describe the withdrawal and tapering side effects of opioid use.** SM2.11.7

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**8 Describe storage and disposal options for opioids.** SM2.11.8

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**9 Explain community resources for education about opioid use.** SM2.11.9

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**Working with Patients and Caregivers** SM2.12

**1 Describe key communication topics involving opioids for patients.** SM2.12.1

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**2 Describe communication topics for caregivers and family members.** SM2.12.2

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