

Unit 7- On the Sidelines II

Content Area: **Science**
Course(s): **Sports Medicine**
Time Period: **March**
Length: **8 Blocks**
Status: **Published**

Transfer Skills

On the Sidelines: Recognition of Specific Sports Injuries

Enduring Understandings

The shoulder complex has a great deal of mobility that requires some compromise in stability, and thus is highly susceptible to injury.

The elbow is anatomically one of the more complex joints in the human body.

Sports injuries to the forearm region commonly consist of contusions, strains, and fractures.

Acute traumatic injuries to the spine can be life threatening.

Essential Questions

What steps can be taken to minimize the chances of injury to the shoulder complex?

What is the proper process for assessing the injured elbow?

What management techniques are used for dealing with injuries to the forearm, wrist, and, and fingers?

What protocols are used to assess injuries to the spine?

Content

Vocabulary:

External rotation gain, glenohumeral internal rotation, deficit, axillary, cephalic, tuberosity, olecranon, neuropraxia

Skills

Point out the critical anatomical features of the articulations in the shoulder complex.

Formulate a general plan that may be incorporated in the rehabilitation of the shoulder.

Recall the structural and functional anatomy of the elbow and relate it to overuse and traumatic injuries.

Review the structural and functional anatomy of the forearm, wrist, hand, and fingers.

Describe the anatomy of the cervical, thoracic, and lumbar spine.

Resources

Text: Essentials of Athletic Injury Management Copyright: 2010

[PBS LearningMedia](#)

[National Federation of State High School Associations: Sports Medicine Resources](#)

Assessments

Assessments:

Class Discussions

Q&A

Vocabulary Quiz

Unit Test

Standards

HPE.2.1.12.A.CS1

Developing and maintaining wellness requires ongoing evaluation of factors impacting health and modifying lifestyle behaviors accordingly.

HPE.2.1.12.C.1

Determine diseases and health conditions that may occur during one's lifespan and identify prevention and treatment strategies.

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| HPE.2.1.12.C.4 | Relate advances in medicine and technology to the diagnosis and treatment of mental illness. |
| HPE.2.1.12.D.1 | Determine the causes and outcomes of intentional and unintentional injuries in adolescents and young adults and propose prevention strategies. |
| HPE.2.1.12.D.CS1 | Evaluating the potential for injury prior to engaging in unhealthy/risky behaviors impacts choices. |
| SCI.9-12.7.4 | Systems can be designed for greater or lesser stability. |
| SCI.9-12.SEP.1.a | Ask questions |
| SCI.9-12.SEP.1.a.1 | that arise from careful observation of phenomena, or unexpected results, to clarify and/or seek additional information. |
| SCI.9-12.SEP.1.e | Define a design problem that involves the development of a process or system with interacting components and criteria and constraints that may include social, technical, and/or environmental considerations. |
| SCI.9-12.SEP.2.b | Design a test of a model to ascertain its reliability. |
| 9-12.HS-LS1-3 | Plan and conduct an investigation to provide evidence that feedback mechanisms maintain homeostasis. |
| 9-12.HS-LS1-2.4.1 | Models (e.g., physical, mathematical, computer models) can be used to simulate systems and interactions— including energy, matter, and information flows—within and between systems at different scales. |
| 9-12.HS-LS1-3.7.1 | <p>Feedback (negative or positive) can stabilize or destabilize a system.</p> <p>The way in which an object or living thing is shaped and its substructure determine many of its properties and functions.</p> <p>Observed patterns in nature guide organization and classification and prompt questions about relationships and causes underlying them.</p> |