Unit 6- On the Sidelines

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

Transfer Skills

On the Sidelines: Recognition of Specific Sports Injuries

Enduring Understandings

The function of the foot is critical to athletic competition.

The most important consideration in the rehabilitation of injuries to the lower leg is to use a gradual progression program.

The knee is one of the most traumatized joints in the human body.

Early detection and avoidance of internal bleeding are of major importance in acute thigh and hip injuries.

Essential Questions

What are the major anatomical and functional features of the foot?

What are the major anatomical components of the ankle and lower leg that are commonly injured?

What are the major symptoms and etiological factors pertaining to knee injuries?

How do you conduct an assessment of the injured thigh and hip?

Content

Vocabulary:
Neuroma, exostosis, ankle mortise, proximal, distal, medial, lateral, hemarthrosis

Skills

Design rehabilitation techniques for the injured foot.

Accurately assess ankle and lower leg injuries.

Design appropriate rehabilitation protocols for the injured knee.

Accurately evaluate injuries that occur in and around the hip, groin, and pelvic areas.

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.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.
HPE.2.2.12.E.1	Analyze a variety of health products and services based on cost, availability, accessibility, benefits, and accreditation.

HPE.2.2.12.E.CS1	Potential solutions to health issues are dependent on health literacy and available resources.
SCI.9-12.1.3	Patterns of performance of designed systems can be analyzed and interpreted to reengineer and improve the system.
SCI.9-12.2.3	Systems can be designed to cause a desired effect.
SCI.9-12.7.3	Feedback (negative or positive) can stabilize or destabilize a system.
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.3.b	Plan and conduct an investigation individually and collaboratively to produce data to serve as the basis for evidence, and in the design: decide on types, how much, and accuracy of data needed to produce reliable measurements and consider limitations on the precision of the data (e.g., number of trials, cost, risk, time), and refine the design accordingly.
9-12.HS-LS4-6.2.1	students understand that empirical evidence is required to differentiate between cause and correlation and to make claims about specific causes and effects. They suggest cause and effect relationships to explain and predict behaviors in complex natural and designed systems. They also propose causal relationships by examining what is known about smaller scale mechanisms within the system. They recognize changes in systems may have various causes that may not have equal effects.
9-12.HS-LS4-5.2.1	students understand that empirical evidence is required to differentiate between cause and correlation and to make claims about specific causes and effects. They suggest cause and effect relationships to explain and predict behaviors in complex natural and designed systems. They also propose causal relationships by examining what is known about smaller scale mechanisms within the system. They recognize changes in systems may have various causes that may not have equal effects.
9-12.HS-LS4-6.ETS1.B.2	Both physical models and computers can be used in various ways to aid in the engineering design process. Computers are useful for a variety of purposes, such as running simulations to test different ways of solving a problem or to see which one is most efficient or economical; and in making a persuasive presentation to a client about how a given design will meet his or her needs.