Unit 9- General Medical and Health Conditions

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

Transfer Skills

Additional Concerns: General Medical and Health Conditions

Enduring Understandings

Participation in physical activity can place a great deal of mechanical force on the body, which can lead to a variety of problems.

Bacterial, viral, and fungal infections can cause serious health problems for the athlete.

The immune system is a collection of disease-fighting cells that recognize the presence of foreign substances in the body and act to neutralize or destroy them.

Essential Questions

What are the major concerns when dealing with open skin wounds?

What steps can the athlete take to reduce the physical stress caused by competition?

What are the major categories of muscular disorders?

What types of respiratory problems are common in athletes?

Content

Vocabulary:
Cellulitis, sebaceous cyst, macerated skin, staphyloccus, tetanus, bacillus, malaise, thrombi, embolus, epilepsy

Skills

Explain the structure and function of the skin and identify the lesions that result from skin abnormalities.

Describe the correct hygiene practices to use to avoid infections.

Explain what causes heart conditions and how they may be controlled.

Identify additional risks that are more prevalent in female athletes.

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

SEP.1.a	Ask questions
SEP.1.a.3	to determine relationships, including quantitative relationships, between independent and dependent variables.
CCC.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.
SEP.4.c	Consider limitations of data analysis (e.g., measurement error, sample selection) when analyzing and interpreting data.
SEP.6.b	Construct and revise an explanation based on valid and reliable evidence obtained from a variety of sources (including students' own investigations, models, theories, simulations, peer review) and the assumption that theories and laws that describe the natural world operate today as they did in the past and will continue to do so in the future.
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.B.CS1	Applying basic nutritional and fitness concepts to lifestyle behaviors impacts wellness.
HPE.2.1.12.C.1	Determine diseases and health conditions that may occur during one's lifespan and identify prevention and treatment strategies.
HPE.2.1.12.C.4	Relate advances in medicine and technology to the diagnosis and treatment of mental illness.
HPE.2.1.12.C.CS1	Personal health is impacted by family, community, national, and international efforts to prevent and control diseases and health conditions.
SCI.9-12.1.5	Empirical evidence is needed to identify patterns.
SCI.9-12.2.4	Changes in systems may have various causes that may not have equal effects.
SCI.9-12.3.2	Some systems can only be studied indirectly as they are too small, too large, too fast, or too slow to observe directly.
9-12.HS-LS1-2.2.1	Develop and use a model based on evidence to illustrate the relationships between systems or between components of a system.
9-12.HS-LS1-1.LS1.A.1	Systems of specialized cells within organisms help them perform the essential functions of life.
9-12.HS-LS1-3.LS1.A.1	Feedback mechanisms maintain a living system's internal conditions within certain limits and mediate behaviors, allowing it to remain alive and functional even as external conditions change within some range. Feedback mechanisms can encourage (through positive feedback) or discourage (negative feedback) what is going on inside the living system.
9-12.HS-LS1-1.LS1.A.2	All cells contain genetic information in the form of DNA molecules. Genes are regions in the DNA that contain the instructions that code for the formation of proteins, which carry out most of the work of cells.