# Davison Community Schools ADVISORY CURRICULUM COUNCIL Phase II, April 23, 2018 Shane Alderson, Matt Lobban

# Sports Medicine – Semester Course

#### **Course Essential Questions:**

1. What are the responsibilities of an athletic trainer?

# Unit 1: Foundations of Athletic Training (Chapters 1 and 2)

#### **Essential Questions:**

- What are the domains of athletic training?
- What are the work conditions, job description, education, and earnings of an athletic trainer?
- Who makes up the sports medicine team?

# **Essential Understanding:**

- The domains of athletic training are: prevention, recognition, evaluation, immediate care, rehabilitation, and reconditioning of athletic injuries, health care administration, and professional development.
- Athletic trainers endure long hours, responsible for upholding the domains of athletic training, earn bachelors degree and pass certification exam, with a mean salary of \$35,000.
- The team physician, coach, athlete, and athletic trainer make up the sports medicine team.

## **Curriculum Standards**

Michigan Merit Curriculum - Biology

• B1.2E Evaluate the future career and occupational process of science fields Michigan CTE Standards- Health Care Section #2

IV.C Career Decision-making

Knowledge/Content	Skills/Processes
I Know	l Can
The responsibilities of an athletic trainer	Identify domains and tasks of athletic training
<ul> <li>The career aspects of an athletic trainer (work conditions, job description, education, and earnings)</li> </ul>	Research a career (athletic trainer) using the Internet
<ul> <li>The members of the sports medicine team and who decides when an athlete can return</li> </ul>	

# Unit 2: Prevention of Injuries (Chapter 4, 5 and 7)

## **Essential Questions:**

- How can training and conditioning prevent injuries?
- How can your diet/nutrition prevent injuries?
- How can protective sports equipment prevent injuries?

## **Essential Understanding:**

- Improving cardiorespiratory endurance, flexibility, and muscle strength can prevent injuries.
- The new food pyramid contains six food groups (grains, meats and beans, fruits, vegetables, milk, and oils).
- Eating variety of foods and the correct servings provides the necessary nutrients for sports performances.
- Sports require various pieces of equipment to protect areas of the body from injury.

## **Curriculum Standards**

Michigan CTE Standards- Health Care Section #2 IX.A Healthy Behaviors

Disease and injury prevention

Knowledge/Content	Skills/Processes
I Know	I Can
<ul> <li>How to improve one's flexibility</li> <li>How to improve one's cardio respiratory fitness</li> <li>How to improve one's muscle strength and endurance</li> <li>How important proper training and conditioning is to prevent injuries</li> <li>Different types of training and conditioning exercises</li> <li>How a balanced diet can prevent injuries.</li> </ul>	<ul> <li>Develop a training and conditioning program that prevents injury for a specific sport</li> <li>Identify types of muscle contracts for a given exercise</li> <li>Identify the type of stretch for a given exercise</li> <li>Identify the (6) Nutrients</li> <li>Develop a balanced nutrition (Meal) plan</li> <li>Identify foods to their nutritional group</li> <li>Identify different protective sports equipment and the area they protect</li> </ul>

# Unit 3: Mechanisms of Sports Injuries (Chapter 9 and 10)

#### **Essential Questions:**

- What are the common mechanisms of sports injuries?
- What common injuries result from shearing?
- What common injuries result from a compression force?
- What common injuries result from overstretching/tension?
- What common injuries result from torsion?
- What common injuries result from bending?

## **Essential Understanding:**

- The common mechanisms of sports injuries are shearing, compression force, and overstretching/tension.
- Blisters, lacerations, and avulsions are results of the shearing.
- Contusions, fractures, and inflammation are results of a compression force.
- Strains and sprains are the most common injuries that result from overstretching/tension.

# **Curriculum Standards**

Michigan CTE Standards – Health Care Section #2

• 1.A Human Structure and Function

Knowledge/Content	Skills/Processes
I Know	l Can
<ul> <li>The mechanisms behind sports injuries (how the injuries occur)</li> <li>How contusions, fractures, blisters, lacerations, avulsions, strains, sprains, and inflammation occurs</li> </ul>	<ul> <li>Identify the mechanism for common skeletal, skin, and muscular injuries</li> <li>Create informational poster about a specific skin, skeletal, and muscular injury</li> </ul>

# Unit 4: Common Sports Injuries and Assessment & Treatments (Ch.11,12,13,15,18,19)

#### **Essential Questions:**

- What are common sports injuries of the foot?
- What are common sports injuries of the ankle, lower leg, and knee?
- What are common sports injuries of arm and shoulder?
- What are common sports injuries of the neck and head?
- What major anatomy is involved in common sports injuries?
- What are the steps involved in assessing a sports injury?
- How are sports injury assessments documented?
- What are common treatments related to sports injuries?
- What are some psychological problems after injuries?
- What is role of the athletic trainer with these psychological issues?

### **Essential Understanding:**

- Fractures, turf toe, and planar fasciitis are common foot injuries.
- Sprains, strains, and fractures are common ankle, knee and lower leg injuries.
- Fractures, dislocations, and tendinitis are common arm and shoulder injuries.
- Whiplash and concussions are common neck and head injuries.
- Bones, muscles, tendons, and ligaments are the common anatomy involved in sports injuries.
- The acronym HOPS (History, Observation, Physical exam, Specialized tests) is used to assess sports injuries.
- Information gathered for assessing sports injuries is documented using SOAP (Subjective, Observation, Assessment, Plan) notes format.
- Common treatments for injuries include NSAIDS, RICE, and physical therapy.
- Psychological reactions/assessments and Treatments with injured Athletes.

#### **Curriculum Standards**

Michigan Merit Curriculum - Biology

• B2. 3e Describe how human body systems maintain relatively constant internal conditions.

Michigan CTE Standards - Health Care Section #2

• 1.B Diseases and Disorders- prevention, causes, and treatment

Michigan CTE Standards - Health Care Section #2

• 1.B Diseases and Disorders- treatment, therapies, and rehabilitation

Knowledge/Content	Skills/Processes
I Know	I Can
<ul> <li>How common sports injuries occur (etiology)</li> </ul>	<ul> <li>Identify various sports injuries based on signs</li> </ul>
<ul> <li>The major anatomy involved in common sports</li> </ul>	and symptoms
injuries	Correctly tape an ankle
<ul> <li>The signs and symptoms of common sports</li> </ul>	Correctly tape for turf toe
injuries	<ul> <li>Correctly tape for planar fasciitis</li> </ul>
<ul> <li>The common injuries that occur in sports</li> </ul>	Properly use the Internet to gather information
<ul> <li>How to tape for turf toe, planar fasciitis, and</li> </ul>	about an athletic injury
<mark>ankle</mark>	<ul> <li>Identify the major muscles, bones, ligaments,</li> </ul>
<ul> <li>The steps involved in injury assessment</li> </ul>	and tendons involved in common sports injuries
<ul> <li>What HOPS and SOAPs stands for and how</li> </ul>	Demonstrate proper assessment technique for
they are used in assessing sports injuries	a sports injury
<ul> <li>How injuries are assessed</li> </ul>	<ul> <li>Use HOPS and SOAPs notes for injury</li> </ul>
<ul> <li>Treatments that are used for various sports</li> </ul>	assessment
related injuries	<ul> <li>Identify proper treatment(s) for injuries</li> </ul>