

COLUMBIA BOROUGH SCHOOL DISTRICT  
SPORTS MEDICINE CURRICULUM  
SUBMITTED FOR BOARD APPROVAL

DATE:

As of July 1999 and thereafter, all new and/or updated curriculum guides will be written according to this revised format which conforms with Chapter 4 Regulations of the Pennsylvania State Board of Education.

Cover Sheet

A. Identification Data:

Course/Subject Title Sports Medicine Length of Course : 1 Semester

Department: Health and PE Hours per Week: 3.5 Grade Level: SH

Number of Credits: .5

Required or Elective? Elective Final Examination Required: YES

B: Course Description/Rationale:

This course familiarizes the students with the care, treatment, and management of sports injuries. They will learn about the role of the athletic trainer, how to develop proper conditioning programs, how to apply protective taping, and to use sound judgment in emergency situations.

C. Educational Goals and Relationship to Standards. This course of study is designed to provide students with an overview of the basics of athletic training; including the care, prevention, management, treatment, and rehabilitation of athletic injuries. This curriculum is aligned with the Academic Standards for Health, Safety, and Physical Education adopted by the PDE as of July 18, 2003.

**COLUMBIA BOROUGH SCHOOL DISTRICT  
CURRICULUM**

**Course/Subject Title: Sports Medicine  
Grade Level: Senior High**

**Content Area: Health Education**

**State Standard Correlation: Healthful Living**

Student Learning Objectives	Specific Content	Priority/Time	Suggested Learning Activities, Materials, and Resources	Expected Level of Achievement and Procedures for Evaluation
Identify and describe health care services that impact adolescent health practices.	<p>A. Identify the members of the sports medicine team and describe their duties. - chapt. 28</p> <ul style="list-style-type: none"> <li>• The athlete</li> <li>• The athlete's parents</li> <li>• Team physician</li> <li>• Certified athletic trainer</li> <li>• The coach</li> <li>• Other peripheral members               <ul style="list-style-type: none"> <li>○ Primary care MD</li> <li>○ Dentist</li> <li>○ Physical therapist</li> <li>○ Student</li> </ul> </li> </ul>	E	<ol style="list-style-type: none"> <li>1. Sports medicine textbook</li> <li>2. Speaker – CHS athletic trainer</li> <li>3. Questions for Review – page 278</li> <li>4. Slides or Video -- history of athletic training</li> <li>5. Vocabulary Activity – page 277</li> </ol>	<p>Advanced: The student will be able to analyze the duties and the working relationships between the members of the sports medicine team.</p> <p>Proficient: The student will be able to identify and describe the duties and the working relationships between the members of the sports medicine team.</p> <p>Basic: The student will be able to list the members of the sports medicine team and identify their duties.</p>

<p>assistants</p>	<p>B. Investigate the roles of the Athletic Trainer. – chapt. 28</p> <ul style="list-style-type: none"> <li>• Injury prevention</li> <li>• Recognition, evaluation, and immediate care of athletic injuries</li> <li>• Rehabilitation and reconditioning of athletic injuries</li> <li>• Health care administration</li> <li>• Professional development and responsibility</li> </ul>	<p>E</p>	<p>Written Test which includes a section where the students need to diagram the relationships between team members and discuss their duties.</p>
	<p>C. Discuss how to become an Athletic Trainer. – chapt. 28</p> <ul style="list-style-type: none"> <li>• Areas of study</li> <li>• Work settings</li> <li>• Certification process</li> </ul>	<p>I</p>	
	<p>D. Define these vocabulary terms: - chapt. 28</p> <ul style="list-style-type: none"> <li>• Athletic training</li> <li>• Biomechanics</li> <li>• Certification</li> <li>• Certified athletic trainer</li> <li>• Kinesiology</li> <li>• National Athletic Trainers'</li> </ul>	<p>E</p>	

	<ul style="list-style-type: none"><li>• Association (NATA)</li><li>• Physical therapist</li><li>• Physics</li><li>• Physiology</li><li>• Rehabilitations</li><li>• School nurse</li><li>• Sports medicine</li><li>• Student assistant</li></ul>			
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**COLUMBIA BOROUGH SCHOOL DISTRICT  
CURRICULUM**

**Course/Subject Title: Sports Medicine**  
**Grade Level: Senior High**  
**Content Area: Health Education**

**State Standard Correlation: Concepts of Health**

<b>Student Learning Objectives</b>	<b>Specific Content</b>	<b>Priority/Time</b>	<b>Suggested Learning Activities, Materials, and Resources</b>	<b>Expected Level of Achievement and Procedures for Evaluation</b>
Define the anatomical planes and describe the anatomical position.	<p>A. Discuss the importance of studying anatomy. -- chapt. 1</p> <p>B. Describe the anatomical position. -- chapt. 1</p> <ul style="list-style-type: none"> <li>• Erect stance</li> <li>• Arms at sides</li> <li>• Palms facing forward</li> </ul> <p>C. Describe the three planes of movement. -- chapt. 1</p> <ul style="list-style-type: none"> <li>• Frontal</li> <li>• Sagittal</li> <li>• Transverse</li> </ul> <p>D. Discuss the following medical terms of location. -- chapt. 1</p>	<p align="center">I</p> <p align="center">E</p> <p align="center">E</p>	<ol style="list-style-type: none"> <li>1. Sports medicine textbook</li> <li>2. Define the terms found on page 11.</li> <li>3. Draw a diagram of the body in correct anatomical position. Draw and label each of the three planes of movement of the body.</li> <li>4. With a partner, practice the terms of location and movement. One partner points to</li> </ol>	<p>Advanced: The student will be able to draw a diagram of a body in correct anatomical position and will be able to label each plane neatly and accurately. The diagram will reflect a great attention to detail. There will be no errors on the diagram.</p> <p>Proficient: The student will be able to draw a diagram of a body in correct anatomical position. The diagram will be neat and will include all of the anatomical planes.</p> <p>Basic: The student will be able to draw a body that may not be perfect, but resembles</p>

<ul style="list-style-type: none"> <li>• Anterior</li> <li>• Posterior</li> <li>• Medial</li> <li>• Lateral</li> <li>• Proximal</li> <li>• Distal</li> </ul>	<p>E. Describe the three classifications of joints. – chapt. 1</p> <ul style="list-style-type: none"> <li>• Diarthrodial – hinge and multiaxial</li> <li>• Amphiarthrodial – bones attached with cartilage</li> </ul>	<p>I</p>	<p>different body parts and the other must describe each of the parts locations using correct terminology. Next, a partner moves several body parts different ways. The other partner must identify each movement using the correct terms.</p>	<p>the anatomical position. The three planes are labeled but are not very neat.</p>
	<p>F. Discuss the directional terms for describing movement of the body segments. – chapt. 1</p> <ul style="list-style-type: none"> <li>• Flexion</li> <li>• Extension</li> <li>• Abduction</li> <li>• Adduction</li> <li>• Pronation</li> <li>• Supination</li> <li>• Inversion</li> <li>• Eversion</li> <li>• Protraction</li> <li>• Retraction</li> <li>• Rotation</li> <li>• Circumduction</li> </ul>	<p>E</p>		

**COLUMBIA BOROUGH SCHOOL DISTRICT  
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**Course/Subject Title: Sports Medicine**  
**Grade Level: Senior High**  
**Content Area: Health Education**

**State Standard Correlation: Concepts of Health**

<b>Student Learning Objectives</b>	<b>Specific Content</b>	<b>Priority/Time</b>	<b>Suggested Learning Activities, Materials, and Resources</b>	<b>Expected Level of Achievement and Procedures for Evaluation</b>
<p>Analyze the functions of bones, ligaments, tendons, muscles, and cartilage and examine the types of injuries that can occur in each.</p>	<p>A. Describe the various types of soft tissues. –                      chapt. 1</p> <ul style="list-style-type: none"> <li>• Muscles</li> <li>• Ligaments</li> <li>• Tendons</li> <li>• Cartilage</li> </ul> <p>B. Describe soft tissue injuries. – chapt. 2</p> <ul style="list-style-type: none"> <li>• Sprains and strains</li> <li>• Incisions</li> <li>• Abrasions</li> <li>• Contusions</li> <li>• Lacerations</li> <li>• Avulsions</li> <li>• Amputations</li> <li>• Punctures</li> <li>• Contrecoup brain</li> </ul>	<p align="center">E</p>	<p>1. Sports medicine textbook</p> <p>2. Vocabulary Activity – page 19</p> <p>3. Draw a diagram depicting the different types of bone or soft tissue injuries and the healing process of bone or soft tissue.</p> <p>4. Discuss “The Real World” situation on page 19.</p>	<p>Advanced: The student will be able to examine the functions of bones, ligaments, tendons, muscles, and cartilage and be able to compare the different types of injuries that can occur in each.</p> <p>Proficient: The student will be able to analyze the functions of bones, ligaments, tendons, muscles, and cartilage and be able to describe the injuries that can occur in each.</p> <p>Basic: The student will be able to describe the functions of the bones,</p>

<p>injuries</p>	<p>B. Discuss the stages of soft tissue healing: - chapt. 2</p> <ul style="list-style-type: none"> <li>• Stage 1: acute inflammatory</li> <li>• Stage 2: repair</li> <li>• Stage 3: remodeling</li> </ul> <p>C. Describe the different types of bone injuries: – chapt. 2</p> <ul style="list-style-type: none"> <li>• Dislocations</li> <li>• Types of fractures</li> </ul> <p>D. Discuss bone fracture healing: – chapt. 2</p> <ul style="list-style-type: none"> <li>• Stage 1: acute</li> <li>• Stage 2: repair</li> <li>• Stage 3: remodeling</li> </ul> <p>E. Define these vocabulary terms: - chapt. 2</p> <ul style="list-style-type: none"> <li>• Articular</li> <li>• Callus</li> <li>• Dislocation</li> <li>• Fibroblasts</li> <li>• Fracture</li> <li>• Leukocytes</li> <li>• Nonunion</li> <li>• Phagocytes</li> <li>• Platelets</li> <li>• Sprain</li> <li>• Strain</li> </ul>	<p>E</p>	<p>ligaments, tendons, muscles, and cartilage and will be able to identify the types of injuries that can occur in each.</p> <p>Written test – The test will include an essay asking the student to discuss various types of injuries in different types of body tissues.</p> <p>Diagram Rubric:      Excellent – The diagram will be outstanding and will include each of the types of injuries for the bone or soft tissues. The healing process will be drawn and labeled without errors.</p> <p>Good – The diagram will be neat and will include each of the types of injuries for the bone or soft tissues. The healing process will be drawn and labeled correctly with few errors.</p> <p>Weak – The diagram does not include each of the types of injuries and shows a lack of effort. There are several errors present on the diagram.</p>
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**COLUMBIA BOROUGH SCHOOL DISTRICT  
CURRICULUM**

**Course/Subject Title: Sports Medicine**  
**Grade Level: Senior High**  
**Content Area: Health**

**State Standard Correlation: Safety and Injury Prevention**

Student Learning Objectives	Specific Content	Priority/Time	Suggested Learning Activities, Materials, and Resources	Expected Level of Achievement and Procedures for Evaluation
<p>Analyze the role of individual responsibility for safe practices and injury prevention in the home, school, and community.</p>	<p>A. Describe the crisis plan. – chapt. 3</p> <ul style="list-style-type: none"> <li>• Who is in charge and begins first aid until the proper help arrives?</li> <li>• Are emergency numbers available?</li> <li>• Who will call 911?</li> <li>• Who will control the crowd?</li> <li>• Who will bring supplies and equipment and decide what is needed?</li> <li>• Who will transport or assist the athlete from the field of play?</li> </ul>	<p>E</p>	<ol style="list-style-type: none"> <li>1. Sports medicine textbook</li> <li>2. Cooperative Activity on page 28. Design a crisis plan for an athletic facility on the day of an event. Be sure to include all parts of the plan with detailed answers. Be prepared to share and discuss with the class.</li> <li>3. The Columbia Borough School District's</li> </ol>	<p>Advanced: The student will be able to assess the roles of each member of the sports medicine team in a crisis situation and will be able to construct a complete, detailed crisis plan depicting these roles in an emergency situation.</p> <p>Proficient: The student will be able to analyze the roles of each member of the sports medicine team in a crisis situation and will be able to design a complete crisis plan depicting these roles in an emergency situation.</p>

	<ul style="list-style-type: none"> <li>• What is the safest and easiest access to the area of the injured athlete for EMS to use?</li> <li>• Who will direct EMS to the injured athlete?</li> <li>• Who will notify the athlete's parents?</li> <li>• What area will be used for triage if more than one athlete is injured?</li> <li>• What personnel are available in the event of a mass casualty?</li> <li>• Who will make out the accident report?</li> <li>• How will EMS work around known obstacles?</li> <li>• How will the crisis plan change for each facility?</li> <li>• How will facilities be evacuated?</li> <li>• Who should talk to the press?</li> <li>• Who will give counseling to those who need it?</li> </ul>	I	<p style="text-align: center;">Emergency Policy Manual</p>	<p>Basic: The student will be able to describe the roles of each member of the sports medicine team in a crisis situation and will be able to design a crisis plan for an emergency situation.</p> <p>Crisis Plan Rubric:  Excellent - The crisis plan is detailed, specific, organized, realistic, and logical. Each of the parts of the plan is included. The sentence structure must be complete and grammatically correct.</p> <p>Good – The crisis plan is complete, but will not include the same amount of detail as in the excellent category. The sentence structure is good and most of the grammar is correct.</p> <p>Weak: The crisis plan is not complete and it lacks detail and organized thought. The written work shows poor sentence structure and grammatical errors.</p>
<p>B. Examine the school's emergency policy manual.</p>				

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**Content Area: Health**

**State Standard Correlation: Safety and Injury Prevention**

<b>Student Learning Objectives</b>	<b>Specific Content</b>	<b>Priority/Time</b>	<b>Suggested Learning Activities, Materials, and Resources</b>	<b>Expected Level of Achievement and Procedures for Evaluation</b>
Analyze and apply strategies for the management of injuries.	<p>A. Explain the difference between primary and secondary assessment. – chapt. 4</p> <p>B. Discuss life-threatening injuries. – chapt. 4</p> <ul style="list-style-type: none"> <li>• Breathing emergencies</li> <li>• Cardiopulmonary emergencies</li> <li>• Hemorrhage</li> </ul> <p>C. Describe what to do for life-threatening injuries. – chapt. 4</p> <ul style="list-style-type: none"> <li>• Determine responsiveness</li> <li>• Mouth-to-mouth breathing</li> </ul>	E	<ol style="list-style-type: none"> <li>1. Sport medicine textbook</li> <li>2. American Red Cross Adult and Child CPR Course Manual</li> <li>3. American Red Cross Sport Safety Training Course Manual</li> <li>4. Partner Activity – Perform a secondary and primary survey on your partner.</li> <li>5. Complete the</li> </ol>	<p>Advanced: The student will be able to appraise the emergency situation and perform the correct emergency procedure for that situation with no mistakes.</p> <p>Proficient: The student will be able to analyze the emergency situation and be able to perform the correct emergency procedure for that situation with few errors and no life-threatening mistakes.</p> <p>Basic: The student will be able to describe the emergency situation and will</p>

	<ul style="list-style-type: none"> <li>• Cardiopulmonary resuscitation</li> <li>• Direct pressure and pressure points</li> </ul> <p>D. Discuss communicable disease transmission. – chap. 4</p> <p>E. Define these terms: - chap. 4</p> <ul style="list-style-type: none"> <li>• Cardiac arrest</li> <li>• CPR</li> <li>• Direct pressure</li> <li>• Pressure point</li> <li>• Primary assessment</li> <li>• Sign</li> <li>• Symptom</li> <li>• Universal choking sign</li> <li>• Universal precautions</li> </ul>	<p style="text-align: center;">I</p> <p style="text-align: center;">E</p>	<p style="text-align: center;">vocabulary and the questions for review on page 37.</p>	<p>be able to identify the correct procedure for that situation with some errors, but no life-threatening mistakes.</p> <p>American Red Cross Adult and Child CPR Written Exam – must score 80% in each test section to become certified.</p> <p>American Red Cross Sport Safety Written Exam – must score 80% in each section to become certified.</p>
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**Course/Subject Title: Sports Medicine  
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**State Standard Correlation: Safety and Injury Prevention**

<b>Student Learning Objectives</b>	<b>Specific Content</b>	<b>Priority/Time</b>	<b>Suggested Learning Activities, Materials, and Resources</b>	<b>Expected Level of Achievement and Procedures for Evaluation</b>
Describe and apply strategies of emergency and long-term management of injuries.	<p>A. Discuss the basic questions for obtaining the history of an injury or illness. – chapt. 5</p> <p>B. Describe the vital signs. – chapt. 5</p> <ul style="list-style-type: none"> <li>• Body temperature</li> <li>• Skin color</li> <li>• Breathing rate</li> <li>• Heart rate</li> <li>• Response to pain</li> <li>• Pupillary reaction</li> <li>• Ability to move</li> <li>• Capillary refill</li> </ul> <p>C. Discuss what is included in an inspection. – chapt. 5</p> <ul style="list-style-type: none"> <li>• Mechanism of injury</li> </ul>	<p style="text-align: center;">E</p> <p style="text-align: center;">E</p>	<ol style="list-style-type: none"> <li>1. Sports medicine textbook</li> <li>2. Use a Stethoscope and sphygmomanometer to take vital signs on a partner.</li> <li>3. Define the terms on page 49.</li> <li>4. Complete the Questions for Review on page 49.</li> </ol>	<p>Advanced: The student will be able to demonstrate and apply the appropriate strategies for performing a secondary assessment on an athlete.</p> <p>Proficient: The student will be able to describe and apply the appropriate strategies for performing a secondary assessment on an athlete.</p> <p>Basic: The student will be able to identify the appropriate strategies for performing a secondary assessment on an athlete.</p>

	<ul style="list-style-type: none"> <li>• Deformity</li> <li>• Objects out of place</li> <li>• Witnesses</li> </ul> <p>D. Describe testing. – chapt. 5</p> <ul style="list-style-type: none"> <li>• Palpation</li> <li>• Range-of-motion testing (ROM)</li> <li>• Strength testing</li> <li>• Testing to rule out neurological problems</li> </ul> <p>E. Describe how to recognize and treat for shock. – chapt. 5</p> <p>F. Discuss assessing and managing a fracture. – chapt. 5</p> <p>G. Discuss PRICE. – chapt. 5</p> <ul style="list-style-type: none"> <li>• Protection</li> <li>• Rest</li> <li>• Ice</li> <li>• Compression</li> <li>• Elevation</li> </ul> <p>H. Define these terms: - chapt. 5</p> <ul style="list-style-type: none"> <li>• Breathing rate</li> <li>• Capillary refill</li> <li>• Constrict</li> </ul>	E	E	E
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	<ul style="list-style-type: none"><li>• Diastolic pressure</li><li>• Dilate</li><li>• Dyspnea</li><li>• History</li><li>• HIT</li><li>• Palpation</li><li>• RICE</li><li>• Pulse points</li><li>• Systolic pressure</li><li>• Vital signs</li></ul>			
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**COLUMBIA BOROUGH SCHOOL DISTRICT  
CURRICULUM**

**Course/Subject Title: Sports Medicine**  
**Grade Level: Senior High**  
**Content Area: Health**

**State Standard Correlation: Safety and Injury Prevention**

<b>Student Learning Objectives</b>	<b>Specific Content</b>	<b>Priority/Time</b>	<b>Suggested Learning Activities, Materials, and Resources</b>	<b>Expected Level of Achievement and Procedures for Evaluation</b>
<p>Explain how to care and prevent environmental injuries.</p>	<p>A. Explain how to care for heat-related illnesses. – chapt. 6</p> <ul style="list-style-type: none"> <li>• Hyperthermia</li> <li>• Heat cramps</li> <li>• Heat exhaustion</li> <li>• Heatstroke</li> </ul> <p>B. Discuss how to prevent heat-related illnesses. – chapt. 6</p> <ul style="list-style-type: none"> <li>• Clothing and equipment</li> <li>• Acclimatize</li> <li>• Water breaks</li> <li>• Eat properly</li> <li>• Weigh-in before</li> <li>• Get plenty of rest</li> <li>• Replace fluids</li> </ul>	<p align="center">E</p>	<ol style="list-style-type: none"> <li>1. Sports medicine textbook</li> <li>2. Define the terms on page 57.</li> <li>3. Video: "Fueling Athletic Performance"</li> <li>4. Cooperative Group Activity: The students will design a severe-weather drill for athletes and coaches. The group must determine the environmental</li> </ol>	<p>Advanced: The student will be able to assess the dangers of certain environmental conditions and be able to apply strategies for the prevention of environmental injuries.</p> <p>Proficient: The student will be able to explain the dangers of certain environmental conditions and be able to apply strategies for the prevention of environmental injuries.</p> <p>Basic: The student will be able to describe the dangers of certain environmental conditions and be able to</p>

<p>C. Discuss cold-related problems. --chapt. 6</p> <ul style="list-style-type: none"> <li>• Hypothermia</li> <li>• Frostbite</li> </ul>	<p>D. Discuss how to prevent cold-related injuries. - chapt. 6</p> <ul style="list-style-type: none"> <li>• Wear dry clothing</li> <li>• Acclimatize</li> <li>• Avoid extreme cold</li> <li>• Avoid getting wet</li> <li>• Wear wind-resistant clothing</li> </ul>	<p>E</p>	<p>dangers and identify a safe place to relocate. In addition, they must decide who will be responsible for doing what job.</p>	<p>discuss strategies for the prevention of environmental injuries.</p> <p>Rubric for Group Work: Excellent: The students will analyze an environmental danger and design a drill to practice an appropriate way for coaches and athletic administrators to deal with the environmental danger. The drill will include all of the recommendations covered in class and will be logical, complete, and written in a very neat manner.</p>
<p>E. Discuss safety precautions for severe weather. -- chapt. 6</p> <ul style="list-style-type: none"> <li>• Tornadoes</li> <li>• Thunder and lightning</li> </ul>	<p>F. Describe how to manage bites and stings. -- chapt. 6</p> <ul style="list-style-type: none"> <li>• Lyme disease</li> <li>• Allergies</li> <li>• Epipens</li> </ul>	<p>E</p>		<p>Good: The students will describe the environmental danger and will design a drill for coaches and athletic administrators to deal with the environmental danger. The drill will include most of the recommendations covered in class and will be written in a neat manner.</p>
<p>G. Define these terms: - chapt. 6</p> <ul style="list-style-type: none"> <li>• Heat cramps</li> <li>• Heat exhaustion</li> <li>• Heat index</li> <li>• Heatstroke</li> </ul>		<p>I</p>		<p>Weak: The students are not able to describe the dangers in a given environmental situation and therefore, the drill they design is not appropriate for a given environmental situation. The</p>

	<ul style="list-style-type: none"><li>• Hyperthermia</li><li>• Hypothermia</li></ul>			written work is not neat and is illogical and incomplete.
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<p>C. Define these terms. – chapt. 7</p> <ul style="list-style-type: none"> <li>• Ambulatory</li> <li>• Extrication</li> <li>• Neck roll</li> </ul> <p>D. Discuss the importance of correct tackling techniques and the reasons for rules such as spearing. – chapt. 7</p>	<p>I</p>	<p>assigned a job and the team will need to place a victim on a long board in a safe and efficient manner.</p> <p>Equipment needed:</p> <ul style="list-style-type: none"> <li>• Long board</li> <li>• Cervical collar</li> <li>• Belt straps</li> <li>• Straps to stabilize head and hands</li> </ul>	<p>play.</p> <p>Team Extrication Practice: Check List Rubric – Each of the items on the rubric need to be completed to receive the highest grade. Excellent: Each of these items are completed by the team.</p> <ol style="list-style-type: none"> <li>1. log roll athlete</li> <li>2. call 911</li> <li>3. place cervical on athlete</li> <li>4. prepare the backboard</li> <li>5. roll athlete onto board under direction of leader</li> <li>6. place cross-straps on athlete</li> <li>7. place head straps on athlete</li> <li>8. place hip strap</li> <li>9. place foot strap</li> <li>10. use at least four people to transport</li> </ol> <p>Good: Most of the check listed items are completed. Weak: Most of the check listed items are not completed.</p>
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**COLUMBIA BOROUGH SCHOOL DISTRICT  
CURRICULUM**

**Course/Subject Title: Sports Medicine  
Grade Level: Senior High  
Content Area: Health Education**

**State Standard Correlation: Safety and Injury Prevention**

<b>Student Learning Objectives</b>	<b>Specific Content</b>	<b>Priority/Time</b>	<b>Suggested Learning Activities, Materials, and Resources</b>	<b>Expected Level of Achievement and Procedures for Evaluation</b>
Describe and apply strategies for the management of injuries to the lower quadrant.	<p>A Discuss the basic anatomy of the foot, ankle, and lower leg. – chapt. 8</p> <ul style="list-style-type: none"> <li>• Bones</li> <li>• Arches</li> <li>• Muscles</li> <li>• Ligaments</li> </ul> <p>B Describe how to prevent and treat injuries to the foot, ankle, and lower leg. – chapt. 8</p> <ul style="list-style-type: none"> <li>• Ligament injuries</li> <li>• Ankle dislocation</li> <li>• Achilles tendonitis</li> <li>• Bone injuries</li> <li>• Stress fractures</li> <li>• Shin splints</li> <li>• Anterior</li> </ul>	E	<ol style="list-style-type: none"> <li>1. Sports medicine textbook</li> <li>2. Video taping series for the ankle, foot, lower leg, and knee</li> <li>3. Anatomy Coloring Book pages for the foot, lower leg, knee, thigh, pelvis, and hip</li> <li>4. Taping and Evaluation labs: The students will work with a partner and evaluate a body part for an injury and then</li> </ol>	<p>Advanced: The student will be able to evaluate a specific area of the body and determine what type of injuries may occur to that area. The student will then be able to neatly apply the appropriate tape job to that area of the body to minimize stress.</p> <p>Proficient: The student will be able to describe the types of injuries that may occur in a specific area of the body and then be able to apply the appropriate tape job to that area of the body to minimize stress.</p>

<p>compartment syndrome</p> <ul style="list-style-type: none"> <li>• Contusions</li> </ul>	<p>C. Define these terms: - chapt. 8</p> <ul style="list-style-type: none"> <li>• Achilles tendon</li> <li>• Calcaneus</li> <li>• Gastrocnemius</li> <li>• Jones fracture</li> <li>• Lateral malleolus</li> <li>• Medial malleolus</li> <li>• Metatarsals</li> <li>• Phalanges</li> <li>• Plantar surface</li> <li>• Shinsplints</li> <li>• Talus</li> <li>• Tendonitis</li> </ul>	<p>I</p>	<p>apply the appropriate tape job to support the injury. The students will take turns being the model and the taper/evaluator.</p> <p>The tape jobs to be practiced include...</p> <ol style="list-style-type: none"> <li>1. ankle wrap</li> <li>2. ankle tape</li> <li>3. Achilles tendon tape</li> <li>4. arch support</li> <li>5. great toe tape</li> <li>6. shinsplint tape</li> <li>7. knee wrap</li> <li>8. hip spica</li> <li>9. thigh wrap</li> </ol>	<p>Basic: The student will be able to describe the types of injuries that may occur in a specific area of the body and then be able to identify which tape job would help to minimize stress to that area of the body.</p> <p>Taping Lab Rubric: Check-off Lists. Each pair will complete a peer check-off evaluation and a self-check evaluation form.</p>
<p>D. Describe the basic anatomy of the knee. -- chapt. 9</p> <ul style="list-style-type: none"> <li>• Bones</li> <li>• Cartilage</li> <li>• Ligaments</li> <li>• Muscles</li> </ul>	<p>E</p>			
<p>E. Discuss how to prevent and treat knee injuries. -- chapt. 9</p> <ul style="list-style-type: none"> <li>• Cruciate injuries</li> <li>• Collateral injuries</li> <li>• Muscle and tendon injuries</li> <li>• Bone injuries</li> <li>• Dislocation of the</li> </ul>	<p>E</p>			

	<ul style="list-style-type: none"> <li>• patella</li> <li>• Meniscal injuries</li> <li>• Osgood-Schlatter Disorder</li> </ul>			
	<p>F. Define these terms: - chapt. 9</p> <ul style="list-style-type: none"> <li>• Anterior cruciate ligament</li> <li>• Arthroscopic surgery</li> <li>• Chondromalacia</li> <li>• Hamstrings</li> <li>• Meniscectomy</li> <li>• Menisci</li> <li>• Osgood-Schlatter disorder</li> <li>• Posterior cruciate ligament</li> </ul>	I		
	<p>G. Describe the basic anatomy of the hip, pelvis, and thigh – chapt. 10</p> <ul style="list-style-type: none"> <li>• Muscles</li> <li>• Acetabulum</li> <li>• Ligaments</li> <li>• Bones</li> </ul>	E		
	<p>H. Identify common signs and symptoms of hip, pelvis, and thigh injuries that occur with athletic competition – chapt. 10</p> <ul style="list-style-type: none"> <li>• Muscle injuries</li> <li>• Bone injuries</li> <li>• Stress fractures</li> </ul>	E		

	<ul style="list-style-type: none"><li>• Hip dislocations</li><li>• Contusions</li></ul> <p>I. Define these terms:</p> <ul style="list-style-type: none"><li>• Acetabulum</li><li>• Capital femoral epiphysis</li><li>• Myositis ossificans</li></ul>	I		
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**COLUMBIA BOROUGH SCHOOL DISTRICT  
CURRICULUM**

**Course/Subject Title: Sports Medicine  
Grade Level: Senior High  
Content Area: Health Education**

**State Standard Correlation: Safety and Injury Prevention**

<b>Student Learning Objectives</b>	<b>Specific Content</b>	<b>Priority/Time</b>	<b>Suggested Learning Activities, Materials, and Resources</b>	<b>Expected Level of Achievement and Procedures for Evaluation</b>
Describe and apply strategies for the management of injuries to the axial region.	<p>A. Describe the basic anatomy of the spine. – chapt. 11</p> <ul style="list-style-type: none"> <li>• Bones – cervical, lumbar, sacrum, thoracic</li> <li>• Disks</li> <li>• Muscles</li> </ul> <p>B. Discuss postural consideration. – chapt. 11</p> <ul style="list-style-type: none"> <li>• Normal</li> <li>• Abnormal – scoliosis, kyphosis, lordosis</li> </ul> <p>B. Discuss how to prevent and treat spine injuries and conditions. – chapt. 11</p> <ul style="list-style-type: none"> <li>• Ligament injuries</li> </ul>	I	<ol style="list-style-type: none"> <li>1. Sports medicine textbook</li> <li>2. Anatomy Coloring Book – pages for the abdominal cavity</li> <li>3. Complete the definitions for the terms on page 127 and 140.</li> <li>4. Complete the Questions for Review on page 110, 119, 127, and 140.</li> <li>5. Draw a picture of</li> </ol>	<p>Advanced: The student will be able to analyze and apply strategies for the treatment and management of injuries to the axial region of the body.</p> <p>Proficient: The student will be able to describe and apply strategies for the treatment and management of injuries to the axial region of the body.</p> <p>Basic: The student will be able to identify and list strategies for the treatment and management of injuries to the axial region.</p>

<ul style="list-style-type: none"> <li>• Muscle and tendon injuries</li> <li>• Bone injuries</li> <li>• Brachial plexus injuries</li> <li>• Disk injuries</li> </ul>	<p>C. Define these terms: - chapt. 11</p> <ul style="list-style-type: none"> <li>• Annulus fibrosus</li> <li>• Burner or stinger</li> <li>• Cervical</li> <li>• Forward head posture</li> <li>• Intervertebral disk</li> <li>• Kyphosis</li> <li>• Lordosis</li> <li>• Lumbar</li> <li>• Neutral spine</li> <li>• Nucleus pulposus</li> <li>• Sacrum</li> <li>• Scoliosis</li> <li>• Thoracic</li> </ul> <p>D. Describe the different types of abdominal injuries. - chapt. 12</p> <ul style="list-style-type: none"> <li>• Anatomy and quadrants</li> <li>• Digestive organs</li> <li>• Urinary organs</li> <li>• Reproductive organs</li> <li>• Abdominal muscles</li> </ul>	<p>I</p>	<p>6. Group Work: Each group is to read about a type of injury to the abdominal area and will report the following to the class...</p> <ul style="list-style-type: none"> <li>• Location of injury</li> <li>• How does it happen?</li> <li>• How can it be prevented?</li> <li>• What is the prognosis of this type of injury?</li> </ul>	<p>Rubric for the Picture of the abdominal cavity.</p> <p>Excellent: The student will draw a picture of the abdominal cavity and will include each of the organs listed in the notes. In addition, the quadrants will be drawn in an accurate and neat manner.</p> <p>Good: The student will draw a picture of the abdominal cavity and will include most of the organs listed in the notes. In addition, the quadrants will be drawn in the vicinity of the proper position. The picture will be fairly neat.</p> <p>Weak: The student will draw a picture that does not include most of the organs of the abdominal cavity as listed in the notes. The quadrants will not be drawn or will be completely in the wrong areas. The picture will demonstrate a lack of effort.</p>
	<p>E</p>	<p>7. Look at the types of equipment available to protect the throat and chest from injury during sporting events.</p> <ul style="list-style-type: none"> <li>• Throat protector</li> </ul>		

	<p>E. Describe how to prevent and treat abdominal injuries and conditions. – chapt. 12</p> <ul style="list-style-type: none"> <li>• Rupture of the spleen</li> <li>• Pancreas injury</li> <li>• Kidney Injury</li> <li>• Hernias</li> <li>• Liver contusions</li> <li>• Bladder injuries</li> <li>• Side stitch</li> </ul>	E	<ul style="list-style-type: none"> <li>• Chest protector</li> <li>• Rib pads</li> </ul>	
	<p>F. Define these terms: - chapt. 12</p> <ul style="list-style-type: none"> <li>• Bile</li> <li>• Kehr's sign</li> </ul>	I		
	<p>G. Understand the basic anatomy of the throat and thorax. – chapt. 13</p> <ul style="list-style-type: none"> <li>• Esophagus</li> <li>• Jugular vein</li> <li>• Carotid artery</li> <li>• Larynx</li> <li>• Heart lungs</li> <li>• Diaphragm</li> </ul>	C		
	<p>H. Describe how to prevent and treat throat and thorax injuries. – chapt. 13</p> <ul style="list-style-type: none"> <li>• Throat lacerations</li> <li>• Cartilage fractures</li> <li>• Rib fracture</li> <li>• Sternal fracture</li> <li>• Pneumothorax</li> <li>• Flail chest</li> </ul>	E		

	<ul style="list-style-type: none"> <li>• Pulmonary contusions</li> <li>• Hemothorax</li> <li>• Sucking chest wound</li> <li>• Hyperventilation</li> </ul>	I		
	<p>I. Describe the anatomy of the head. – chapt. 14</p> <ul style="list-style-type: none"> <li>• The brain</li> <li>• Cerebrospinal fluid</li> <li>• The scalp</li> <li>• The skull</li> </ul>	I		
	<p>J. Describe how to prevent and treat head injuries. – chapt. 14</p> <ul style="list-style-type: none"> <li>• Skull fractures</li> <li>• Concussions</li> <li>• Intracranial hematoma</li> <li>• Second impact syndrome</li> </ul>	E		
	<p>K. Define these terms: - chapt. 14</p> <ul style="list-style-type: none"> <li>• Amnesia</li> <li>• Battle sign</li> <li>• Cerebrospinal fluid</li> <li>• Concussion</li> <li>• Contrecoup</li> <li>• Second impact syndrome</li> <li>• Tinnitus</li> </ul>	I		
	<p>L. Describe the basic</p>	I		

	<p>anatomy of the face. —        chapl. 15</p> <ul style="list-style-type: none"> <li>• Eyes</li> <li>• Ears</li> <li>• Nose</li> <li>• Mouth</li> </ul> <p>M. Describe how to prevent and treat injuries to the face.        — chapl. 15</p> <ul style="list-style-type: none"> <li>• Corneal abrasions</li> <li>• Detached retina</li> <li>• Black eye</li> <li>• Foreign bodies</li> <li>• Embedded object</li> <li>• Subconjunctival hemorrhage</li> <li>• Blowout fracture</li> <li>• Sinus fracture</li> <li>• Eyelid laceration</li> <li>• Ruptured globe</li> <li>• Laceration of the pinna</li> <li>• Cauliflower ear</li> <li>• Otitis externa</li> <li>• Epistaxis</li> <li>• Deviated septum</li> <li>• Nasal fractures</li> <li>• Fracture of the jaw</li> <li>• Dislocation of the jaw</li> <li>• Tooth dislocation</li> <li>• Fractured tooth</li> </ul>	E		
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**COLUMBIA BOROUGH SCHOOL DISTRICT  
CURRICULUM**

**Course/Subject Title: Sports Medicine**

**Grade Level: Senior High**

**Content Area: Health Education**

**State Standard Correlation: Safety and Injury Prevention**

<b>Student Learning Objectives</b>	<b>Specific Content</b>	<b>Priority/Time</b>	<b>Suggested Learning Activities, Materials, and Resources</b>	<b>Expected Level of Achievement and Procedures for Evaluation</b>
Describe and apply strategies for the management of injuries to the upper quarter.	<p>A. Discuss the basic anatomy of the shoulder. -- chap. 16</p> <ul style="list-style-type: none"> <li>• Bones</li> <li>• Muscles</li> <li>• Joints</li> <li>• Ligaments</li> </ul> <p>B. Describe how to prevent and treat injuries to the shoulder region. -- chap. 16</p> <ul style="list-style-type: none"> <li>• Acromioclavicular ligament sprain</li> <li>• Glenohumeral ligament sprain</li> <li>• Rotator cuff strain</li> <li>• Impingement syndrome</li> <li>• Bicipital tendinitis</li> <li>• Addressing muscle</li> </ul>	I	<ol style="list-style-type: none"> <li>1. Sports medicine textbook</li> <li>2. Anatomy Coloring Book -- pages for the shoulder, elbow, wrist, and hand</li> <li>3. Complete the questions for review and define the terms on pages 149, 157, and 163.</li> <li>4. Video taping series for the elbow, shoulder, wrist, hand, and finger taping.</li> </ol>	<p>Advanced: The student will be able to evaluate a specific area of the body and determine what type of injuries may occur to that area. The student will then be able to neatly apply the appropriate tape job to that area of the body to minimize stress.</p> <p>Proficient: The student will be able to describe the types of injuries that may occur in a specific area of the body and then be able to apply the appropriate tape job to that area of the body to minimize stress.</p>

<p>weakness</p> <ul style="list-style-type: none"> <li>• Bone injuries</li> <li>• Dislocations</li> </ul>	<p>C. Define these terms: - chapt. 16</p> <ul style="list-style-type: none"> <li>• Impingement syndrome</li> <li>• Rotator cuff</li> <li>• Shoulder separation</li> </ul>	<p>I</p>	<p>5. Taping and Evaluation labs: The students will work with a partner and evaluate a body part for an injury and then apply the appropriate tape job to support the injury. The students will take turns being the model and the taper/evaluator. The tape jobs to be practiced include...</p> <ol style="list-style-type: none"> <li>1. shoulder spica</li> <li>2. elbow hyperextension</li> <li>3. wrist tape</li> <li>4. buddy tape</li> <li>5. thumb tape</li> <li>6. sling</li> </ol>	<p>Basic: The student will be able to describe the types of injuries that may occur in a specific area of the body and then be able to identify which tape job would help to minimize stress to that area of the body.</p> <p>Taping Lab Rubric: Check-off Lists. Each pair will complete a peer check-off evaluation and a self-check evaluation form.</p>
<p>D. Describe the basic anatomy of the elbow. - chapt. 17</p> <ul style="list-style-type: none"> <li>• Ligaments</li> <li>• Bones</li> <li>• Muscles</li> </ul>	<p>E. Discuss how to treat and prevent injuries to the elbow. - chapt. 17</p> <ul style="list-style-type: none"> <li>• Collateral ligament sprain</li> <li>• muscle strains</li> <li>• fractures</li> <li>• dislocations</li> <li>• tendonitis</li> </ul>	<p>E</p>		
<p>F. Describe the basic anatomy of the wrist and hand. -chapt. 18</p> <ul style="list-style-type: none"> <li>• bones and joints</li> <li>• muscles</li> </ul>	<p>G. Discuss how to prevent</p>	<p>I</p>		
		<p>E</p>		

	<p>and treat injuries to the wrist and hand – chapt. 18</p> <ul style="list-style-type: none"> <li>• ligament injuries</li> <li>• dislocations</li> <li>• tendonitis</li> <li>• mallet finger</li> <li>• jersey finger</li> <li>• bone injuries</li> </ul> <p>H. Define these terms: - chapt. 18</p> <ul style="list-style-type: none"> <li>• avascular necrosis</li> <li>• gamekeeper's thumb</li> <li>• jersey finger</li> </ul>	1		
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**COLUMBIA BOROUGH SCHOOL DISTRICT  
CURRICULUM**

**Course/Subject Title: Sports Medicine**  
**Grade Level: Senior High**  
**Content Area: Health Education**

**State Standard Correlation: Safety and Injury Prevention**

Student Learning Objectives	Specific Content	Priority/Time	Suggested Learning Activities, Materials, and Resources	Expected Level of Achievement and Procedures for Evaluation
<p>Explain the concepts of rehabilitation and treatment.</p>	<p>A. Discuss the phases of treatment: - chapt. 21</p> <ul style="list-style-type: none"> <li>• Range-of-motion</li> <li>• Proprioception</li> <li>• Resistance training</li> <li>• Endurance training</li> <li>• Sport-specific function</li> </ul> <p>B. Describe the different types of therapeutic modalities available for the treatment of athletic injuries. – chapt. 21</p> <ul style="list-style-type: none"> <li>• Heat modalities</li> <li>• Whirlpool</li> <li>• Cryotherapy</li> <li>• Ultrasound</li> <li>• Traction</li> </ul>	<p style="text-align: center;">E</p>	<ol style="list-style-type: none"> <li>1. Sports medicine textbook</li> <li>2. Complete the Questions for Review and define the terms on page 206.</li> <li>3. Therapeutic Modalities Lab. -- visit the training room and experience some of the heat and cold modalities. Look at the ultrasound and the high volt units.</li> </ol>	<p>Advanced: The student will be able to compare and contrast the different types of therapeutic modalities and correctly demonstrate how they are used.</p> <p>Proficient: The student will be able to explain the different types of therapeutic modalities and correctly demonstrate how they are used.</p> <p>Basic: The student will be able to describe the different types of therapeutic modalities and explain how they are used.</p>

	<ul style="list-style-type: none"> <li>• Massage</li> <li>• Transcutaneous electrical stimulation (TENS)</li> </ul> <p>C. Define these terms: - chapt. 21</p> <ul style="list-style-type: none"> <li>• Active-assistive</li> <li>• Range-of-motion</li> <li>• Cryotherapy</li> <li>• Edema</li> <li>• Effleurage</li> <li>• Endurance</li> <li>• Flexibility</li> <li>• Passive range of motion</li> <li>• Progression</li> <li>• Proprioception</li> <li>• Sport-specific training</li> <li>• Transcutaneous electrical stimulation</li> </ul>	I		
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	<ul style="list-style-type: none"> <li>• DMSO</li> <li>• Drug</li> <li>• Leukoplakia</li> <li>• Local steroid</li> <li>• Therapeutic drug</li> <li>• Recreational drug</li> </ul>		<p>use of drugs by athletes. The student will participate and will encourage active participation by others.</p> <p>Good: The student demonstrates an understanding of the issues and concerns regarding the use of drugs by athletes. The student participates in the debate.</p> <p>Weak: The student does not participate in the debate.</p>
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	<p>disorders. – chapt. 27</p> <ul style="list-style-type: none"> <li>• Anorexia nervosa</li> <li>• Bulimia</li> <li>• Obesity</li> </ul> <p>E. Discuss the recommendations for the pregame and the postgame meals. – chapt. 27</p> <p>F. Discuss the different types of nutritional supplements used by athletes. – chapt. 27</p> <ul style="list-style-type: none"> <li>• Amino acids</li> <li>• Creatine</li> <li>• Protein supplements</li> </ul>	E		
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