

Glendale Unified School District

High School

August 13, 2019

Department: Career Technical Education

Course Title: Advanced Sports Medicine Honors (*Previously Advanced Sports Medicine*)

Course Code: 5164V/5165V CBED code 4260, CDE Course # 3686

Grade Level(s): 11, 12

School(s)  
Course Offered: Crescenta Valley High School

UC/CSU Approved  
(Y/N, Subject): Yes, College-Preparatory Elective (G) / Laboratory Science – Biology / Life Sciences and honors designation

Course Credits: 10

Length of Course: Full Year

Recommended  
Prerequisite: Completion of Sports Medicine

Recommended  
Textbook: Foundations of Athletic Training - Prevention, Assessment, and Management / Marcia K, Anderson

Course Overview: Advanced Sports Medicine Honors is the capstone course for the Health Science and Medical Technology industry sector, patient care pathway. This advanced course is a one-year, lecture-laboratory science elective designed to provide a challenging academic experience and hands-on field experience involved with the rapidly growing field of Sports Medicine. Sports Medicine is a multidisciplinary approach for those involved in sports, involving a variety of professionals, such as physicians, physical therapist, certified athletic trainers, strength and conditioning specialist, and nutritionists.

Technical instruction includes orientation, safety and infection control, communication and interpersonal skills, academic proficiency, and employability skills. Emphasis is placed on: ethical and legal

considerations, pharmacology, sports and therapeutic equipment, nutrition and weight management, infection control, assessment of vital signs, basic life support (including AED and CPR), soft tissue injuries, injuries to the lower and upper extremities, injuries to the head and spine, injuries to the chest and abdomen, environmental conditions, medical conditions, taping and bracing, therapeutic modalities, and physical rehabilitation.

All components consist of classroom instruction and on-the-job training hours. The competencies in this course are aligned with the California Common Core State Standards and the California Career Technical Education Model Curriculum Standards.

### **First Semester-Course Content**

#### **Unit 1: Advanced Medical Terminology**

*(2 weeks)*

#### **STANDARDS**

Health Science and Medical Technology

Anchor Standard 2.5, 2.7, 2.8, 5.1 10.1, 10.3

Patient Care Pathway

Standard B4.1, B4.3, B5.1, B5.2

CCSS LS 11-12.1, 11-12.4, 11-12.6, WHSST 11-12.2, 11-12.4, RRLST 11-12.1, LS1.B, PS1.A, PS1.B

- A. Throughout the course, students will take basic medical terminology they have learned in Biology, Physiology, Sports Medicine and begin applying the concepts with an increased knowledge as well as start introducing higher medical terminology. Students will demonstrate knowledge of medical terminology pertaining to Athletic Training and Sports Medicine; Advanced anatomy and physiology; Injury terminology and descriptions
- B. Key Assignment: Injury write up. Students will be required to write 4 in-depth injury reports that relate to their internship/observation experience. They will choose an injury which occurred and do a complete 1-3 page write up. They will use the two main texts as well as find 1-2 scientific/medical journals to expand upon their knowledge of the injury and include common mechanisms of injury, initial treatment, full treatment to return to play, and long term implications. This writing assignment will allow the students to analyze the injury and treatment provided and then reflect on how they feel this aligns with the methods and information they found within the journals and text about the most appropriate treatment.

Objectives: Students will create injury write ups using proper medical terminology based off real life experience seen within their internship and learn more from scientific journals.

Unit 2: Sport Coverage

(4 weeks)

STANDARDS

Health Science and Medical Technology

Anchor Standard 2.5, 5.1, 9.3, 9.4, 11.1

Patient Care Pathway

Standard B7.1, B7.2, B7.3, B12.1, B12.2, B12.3, B12.4

CCSS LS 11-12.1, 11-12.4, 11-12.6, WHSST 11-12.2, 11-12.4, LS1.B, PS1.A, PS1.B

A. In previous courses, students have been taught about common administrative practices, ethical decision making, and game coverage. In this unit, we will expand upon this information and students will create their own rules and regulations for a sports medicine facility.

1. Documentation Procedure

1. Injury Reports
2. Insurance Forms
3. Inventory
4. Medical Kit Distribution
5. Budget and ordering

2. Professionalism

1. Proper Attire
2. Responsibility
3. Duties
4. Requirements/Time Commitment
5. Liability

B. Key Assignments/Labs

- Lab 1 Budgeting, Inventory, and Ordering  
Objective: Students will be able to create a list of necessary supplies and quantity orders based off a **set patient need and budget**
- Lab 2 Creating a medical facility  
Objectives: Students will be able to create a medical facility based off **current laws and regulations**. Students will provide justification and develop a cost analysis and upkeep quote
- Key Assignment 1 resume and cover letter  
Objectives: Students will modify their resume created in sports medicine 2 and a cover letter for either a medical job or program application
- Key Assignment 2 College Research  
Objectives: Students will understand what college, courses, and requirements to attain their desired medical degree or certification

Unit 3: **Emergency Procedures-Recertification**

(4 weeks)

STANDARDS

Health Science and Medical Technology

Anchor Standard 2.5, 5.1 6.2, 6.8

Patient Care Pathway

Standard B10.2, B10.3, B10.4, B10.5, B11.2, B11.4

CCSS LS 11-12.1, 11-12.4, 11-12.6, WHSST 11-12.2, 11-12.4, LS1.B, PS1.A, PS1.B

A. In Sports Medicine, students are certified in First Aid, CPR, and AED use. These certifications expire every 2 years. In this course, students will learn about;

1. Vital Signs

- Monitor vital signs
- Demonstrate proper technique for taking vital signs

2. Adult, Child and Infant CPR with AED

- Employ basic life-saving techniques
- Activate E.M.S.

3. First Aid

- Demonstrate proper injury care
- Recall life threatening emergencies
- Apply proper splinting procedures
- Understand protocols for blood-borne pathogens

B. Key Assignments/Labs

- Lab 1 Homeostatic Mechanisms / body temperature regulation  
Objectives: Students will be able to
  - 1) determine what variables affect blood pressure and pulse rate.
  - 2) how substance abuse affects blood pressure and pulse rates.
  - 3) what nutritional considerations affect blood pressure and pulse rates.
  - 4) specific selected medical conditions in Sport.
  - 5) Blood-borne and airborne pathogens
- Lab 2 CPR, First aid, and AED Lab and Practicums  
Objectives: Students will be able to
  - 1) Perform primary and secondary evaluations
  - 2) Determine what treatment is needed
  - 3) Perform CPR using BLS standards
  - 4) Demonstrate knowledge and apply the following: Epi Pen, Splinting, Blood control, Glove removal, and blood borne pathogen techniques
- Key Assignment: Student in this unit will complete a 1-2 page descriptive piece on an emergency management/ scenario and using the text identify proper treatment and create a step by step protocol for this injury which can be placed in an emergency action plan. This assignment will relate to the class and unit as it is allowing them to fully describe the scenario, who it would happen to, and how

they themselves can prevent the person from further injury and potentially save their life.

Unit 4: **Review and Expand: Foot, Ankle and Lower Leg**

(2 weeks)

STANDARDS

Health Science and Medical Technology

Anchor Standard 2.5, 5.1, 10.1, 10.3

Patient Care Pathway

Standard B2.1, B2.2, B2.3, B2.4

CCSS LS 11-12.1, 11-12.4, 11-12.6, WHSST 11-12.2, 11-12.4, RRLST 11-12.1, LS1.B, PS1.A, PS1.B

A. In previous sports medicine courses, the students learned the basic anatomy, injuries and their assessment, treatment, and background. In this course, the students will expand upon that knowledge and apply it to real world scenarios, injury workups, and discussions.

- Anatomical structures- Palpate ligaments, bones, tendons, muscles
- Differentiate the mechanism of injury
  1. Sprains/strains
  2. Tendonitis
  3. Fractures
  4. Compartment syndrome
- Employ proper techniques of immediate injury care
- Understand proper injury prevention techniques
- Demonstrate functional methods for preventive taping and wrapping
- Design and monitor rehabilitation programs

B. Key Assignments/Labs

- Lab 1 ROM and Functional Assessment; Students will be able to identify, locate and test
  1. bony anatomy
  2. muscular anatomy
  3. ligamentous anatomy
  4. range of motion normal versus abnormal
- Lab 2 Special Test and SOAP Assessment; Students will be able to perform
  1. Special tests
  2. Finding pertinent medical history
  3. Finding pertinent signs/Symptoms
  4. Develop a differential diagnosis and provide reasoning
  5. Create a plan based off the assessment
- Key Assignment: Students will choose a special test that applies to this unit and complete a 1-3 page write up on the special test. The students will fully describe

the patient position, clinician position, evaluation procedure, positive signs, implications, modifications, and special considerations. After describing the test, the student will then find 1-2 scientific journals or articles describing the test's specificity, sensitivity, and inter-tester reliability. The students will then provide a paragraph analyzing whether they believe the test should be implemented in their sideline injury assessment/doctor's office and fully explain their reasoning. The students will be using mathematical CCSS standards when they look at the articles and review the statistics about their special tests. The students will need to construct viable arguments for the recommendation of use or not use for their special test based on their critique of the articles and information. Some special tests also integrate the use of a goniometer for measuring the angles of the joint.

### Unit 5: **Review and Expand: Knee, Thigh, and Hip**

(3 weeks)

#### STANDARDS

Health Science and Medical Technology

Anchor Standard 2.5, 5.1, 10.1, 10.3

Patient Care Pathway

Standard B2.1, B2.2, B2.3, B2.4

CCSS LS 11-12.1, 11-12.4, 11-12.6, WHSST 11-12.2, 11-12.4, RRLST 11-12.1, LS1.B, PS1.A, PS1.B

A. In previous sports medicine courses, the students learned the basic anatomy, injuries and their assessment, treatment, and background. In this course, the students will expand upon that knowledge and apply it to real world scenarios, injury workups, and discussions.

1. Anatomical Structure - Palpate ligaments, bones, muscles, tendons and meniscus
2. Differentiate the mechanism of injury
  - Sprains/strains
  - Tendonitis
  - Chondromalacia
  - Fractures/ dislocations
  - Osgood Schlatter disease
  - Patella Femoral syndrome
  - Quad contusion
  - Hip pointer
  - Groin strains
3. Employ proper techniques of immediate injury care
4. Understand proper injury prevention techniques
5. Demonstrate functional methods of preventive taping and wrapping
6. Design and monitor rehabilitation programs

#### B. Key Assignments/Labs

- Lab 1 ROM and Functional Assessment; Students will be able to identify, locate and test
  1. bony anatomy

2. muscular anatomy
  3. ligamentous anatomy
  4. range of motion normal versus abnormal
- Lab 2 Special Test and SOAP Assessment; Students will be able to perform
    1. Special tests
    2. Finding pertinent medical history
    3. Finding pertinent signs/Symptoms
    4. Develop a differential diagnosis and provide reasoning
    5. Create a plan based off the assessment
  - Key Assignment: Students will choose an injury and create an thorough 1-3 page SOAP note. They will need to include all the subjective findings, Objective findings, Assessment techniques, and Plan of treatment. The students will need to use a variety of resources from the two primary textbooks, Internet research, scientific/medical journals, etc. This will be a summative writing response in which they will need to incorporate everything we have learned from anatomy, mechanism of injuries, rehabilitation, special tests, etc.

Unit 9: **Review and Expand: Head, Neck, and Internal Injuries**

*(3 weeks)*

STANDARDS

Health Science and Medical Technology

Anchor Standard 2.5, 5.1, 10.1, 10.3

Patient Care Pathway

Standard B2.1, B2.2, B2.3, B2.4

CCSS LS 11-12.1, 11-12.4, 11-12.6, WHSST 11-12.2, 11-12.4, RRLST 11-12.1, LS1.B, PS1.A, PS1.B

- A. In previous sports medicine courses, the students learned the basic anatomy, injuries and their assessment, treatment, and background. In this course, the students will expand upon that knowledge and apply it to real world scenarios, injury workups, and discussions.
1. Anatomical structures 1. Palpate ligaments, bones, tendons, muscles
  2. Differentiate the mechanism of injury
    1. Concussion
    2. Fractures
    3. Stinger/burner
    4. Strains
    5. Ruptures, lacerations, punctures
  3. Employ proper techniques of immediate injury care
  4. Understand proper injury prevention techniques
  5. Demonstrate functional methods for preventive taping and wrapping
  6. Design and monitor rehabilitation programs

B. Key Assignments/Labs

- Lab 1 ROM and Functional Assessment; Students will be able to identify, locate and test
  1. bony anatomy
  2. muscular anatomy
  3. ligamentous anatomy
  4. range of motion normal versus abnormal
- Lab 2 Special Test and SOAP Assessment; Students will be able to perform
  1. Special tests
  2. Finding pertinent medical history
  3. Finding pertinent signs/Symptoms
  4. Develop a differential diagnosis and provide reasoning
  5. Create a plan based off the assessment
- Key Assignment: Students will create a 1-2 page informative piece on a head, neck, or internal injury. Students will use scientific/medical journals and research to fully describe the injury, treatment, population base, and long term effects. This assignment is particularly relevant as students are subjected to so much new research about concussions and chronic traumatic encephalopathy.

**Course Content-Second Semester**

Unit 6: **Review and Expand: Shoulder**

*(3 weeks)*

STANDARDS

Health Science and Medical Technology

Anchor Standard 2.5, 5.1, 10.1, 10.3

Patient Care Pathway

Standard B2.1, B2.2, B2.3, B2.4

CCSS LS 11-12.1, 11-12.4, 11-12.6, WHSST 11-12.2, 11-12.4, RRLST 11-12.1, LS1.B, PS1.A, PS1.B

- A. In previous sports medicine courses, the students learned the basic anatomy, injuries and their assessment, treatment, and background. In this course, the students will expand upon that knowledge and apply it to real world scenarios, injury workups, and discussions.
1. Anatomical structures - Palpate ligaments, bones, tendons, muscles
  2. Differentiate the mechanism of injury
    - Sprains/strains
    - Tendonitis
    - Fractures/dislocations/separations
  3. Employ proper techniques of immediate injury care
  4. Understand proper injury prevention techniques
  5. Demonstrate functional methods for preventive taping and wrapping



6. Design and monitor rehabilitation programs

B. Key Assignments/Labs

- Lab 1 ROM and Functional Assessment; Students will be able to identify, locate and test
  1. bony anatomy
  2. muscular anatomy
  3. ligamentous anatomy
  4. range of motion normal versus abnormal
  
- Lab 2 Special Test and SOAP Assessment; Students will be able to perform
  1. Special tests
  2. Finding pertinent medical history
  3. Finding pertinent signs/Symptoms
  4. Develop a differential diagnosis and provide reasoning
  5. Create a plan based off the assessment
  
- Key Assignment 1: Surgical Write Up  
Students will complete an informative piece on a shoulder surgery. Students will pick one injury that requires surgical intervention and do a 1-4 page research paper using scientific journals and medical research. Students will have to find up to date articles that relate to their topic and come to a conclusion of which surgical intervention was the most appropriate for the injury.  
Objective: Students will understand the connection between common surgical interventions and injuries they see on a regular basis in their internship rotations.
  
- Key assessment 2: Pitching analysis  
Students will write up pitching analysis of 5 pitchers utilizing ubersense application.  
Students will have to find up to date articles that relate to pitching techniques and common injuries result from the improper pitching techniques.

Unit 7: **Review and Expand: Elbow and Forearm**

*(2 weeks)*

STANDARDS

Health Science and Medical Technology

Anchor Standard 2.5, 5.1, 10.1, 10.3

Patient Care Pathway

Standard B2.1, B2.2, B2.3, B2.4

CCSS LS 11-12.1, 11-12.4, 11-12.6, WHSST 11-12.2, 11-12.4, RRLST 11-12.1, LS1.B, PS1.A, PS1.B

- A. In previous sports medicine courses, the students learned the basic anatomy, injuries and their assessment, treatment, and background. In this course, the students will expand upon that knowledge and apply it to real world scenarios, injury workups, and discussions.

1. Anatomical structures - Palpate ligaments, bones, tendons, muscles
2. Differentiate the mechanism of injury
  1. Sprains/strains
  2. Tendonitis
  3. Fractures/dislocations
  4. Tennis elbow, little league elbow
3. Employ proper techniques of immediate injury care
4. Understand proper injury prevention techniques
5. Demonstrate functional methods for preventive taping and wrapping
6. Design and monitor rehabilitation programs

#### B. Key Assignments/Labs

- Lab 1 ROM and Functional Assessment; Students will be able to identify, locate and test
  1. bony anatomy
  2. muscular anatomy
  3. ligamentous anatomy
  4. range of motion normal versus abnormal
- Lab 2 Special Test and SOAP Assessment; Students will be able to perform
  1. Special tests
  2. Finding pertinent medical history
  3. Finding pertinent signs/Symptoms
  4. Develop a differential diagnosis and provide reasoning
  5. Create a plan based off the assessment
- Key Assignment: Rehabilitation Protocol  
The students will create a descriptive writing piece on the elbow/forearm. The students will create a brochure on an injury of the elbow/forearm and create a rehabilitation program. The students will use the text "Principles of Athletic Training" as well as scientific/medical journals and articles to get the most up to date rehabilitation technique for their injuries.

#### Unit 8: **Review and Expand: Wrist, Hand, and Fingers**

*(2 weeks)*

#### STANDARDS

Health Science and Medical Technology

Anchor Standard 2.5, 5.1, 10.1, 10.3

Patient Care Pathway

Standard B2.1, B2.2, B2.3, B2.4

CCSS LS 11-12.1, 11-12.4, 11-12.6, WHSST 11-12.2, 11-12.4, RRLST 11-12.1, LS1.B, PS1.A, PS1.B

- A. In previous sports medicine courses, the students learned the basic anatomy, injuries and their assessment, treatment, and background. In this course, the students will expand

upon that knowledge and apply it to real world scenarios, injury workups, and discussions.

1. Anatomical structures - Palpate ligaments, bones, tendons, muscles
2. Differentiate the mechanism of injury
  1. Sprains/strains
  2. Fractures/dislocations
  3. Carpal tunnel syndrome
  4. De Quervain's
  5. Boutonniere deformity
  6. Baseball finger
  7. Gamekeeper thumb
3. Employ proper techniques of immediate injury care
4. Understand proper injury prevention techniques
5. Demonstrate functional methods for preventive taping and wrapping
6. Design and monitor rehabilitation programs

#### B. Key Assignments/Labs

- Anatomical structures:
  1. Palpate ligaments, bones, tendons, muscles
  2. Differentiate the mechanism of injury
    - Sprains/strains
    - Tendonitis
    - Fractures
  3. Employ proper techniques of immediate injury care
  4. Understand proper injury prevention techniques
  5. Demonstrate functional methods for preventive taping and wrapping
  6. Design and monitor rehabilitation programs
- Lab 1 ROM and Functional Assessment; Students will be able to identify, locate and test
  1. bony anatomy
  2. muscular anatomy
  3. ligamentous anatomy
  4. range of motion normal versus abnormal
- Lab 2 Special Test and SOAP Assessment; Students will be able to perform
  1. Special tests
  2. Finding pertinent medical history
  3. Finding pertinent signs/Symptoms
  4. Develop a differential diagnosis and provide reasoning
  5. Create a plan based off the assessment

- Key Assignment: Students will choose an injury and create a thorough 1-3 page SOAP note. They will need to include all the subjective findings, Objective findings, Assessment techniques, and Plan of treatment. The students will need to use a variety of resources from the two primary textbooks, Internet research, scientific/medical journals, etc. This will be a summative writing response in which they will need to incorporate everything we have learned from anatomy, mechanism of injuries, rehabilitation, special tests, etc.

Unit 10: **Review and Expand: Spinal Injuries**

*(3 weeks)*

STANDARDS

Health Science and Medical Technology

Anchor Standard 2.5, 5.1, 10.1, 10.3

Patient Care Pathway

Standard B2.1, B2.2, B2.3, B2.4

CCSS LS 11-12.1, 11-12.4, 11-12.6, WHSST 11-12.2, 11-12.4, RRLST 11-12.1, LS1.B, PS1.A, PS1.B

- A. In previous sports medicine courses, the students learned the basic anatomy, injuries and their assessment, treatment, and background. In this course, the students will expand upon that knowledge and apply it to real world scenarios, injury workups, and discussions.
1. Anatomical structures - Palpate ligaments, bones, tendons, muscles
  2. Differentiate the mechanism of injury
    - Sprains/strains
    - Spinal stenosis
    - Sciatica
    - Conditions of the cervical/lumbar disk
    - Fractures/dislocation
  3. Employ proper techniques of immediate injury care
  4. Understand proper injury prevention techniques
  5. Demonstrate functional methods for preventive taping and wrapping
  6. Design and monitor rehabilitation programs

B. Key Assignments/Labs

- Lab 1 ROM and Functional Assessment; Students will be able to identify, locate and test
  1. bony anatomy
  2. muscular anatomy
  3. ligamentous anatomy
  4. range of motion normal versus abnormal
- Lab 2 Special Test and SOAP Assessment; Students will be able to perform
  1. Special tests
  2. Finding pertinent medical history

3. Finding pertinent signs/Symptoms
4. Develop a differential diagnosis and provide reasoning
5. Create a plan based off the assessment

- Key Assignment: Students will create a 1-2 page informative piece on a head, neck, or internal injury. Students will use scientific/medical journals and research to fully describe the injury, treatment, population base, and long term effects. This assignment is particularly relevant as students are subjected to so much new research about concussions and chronic traumatic encephalopathy.

Unit 11: **Modalities**

(2 weeks)

STANDARDS

Health Science and Medical Technology

Anchor Standard 2.5, 5.1, 10.1, 10.3, 11.1

Patient Care Pathway

Standard B12.1, B12.2, B12.3, B12.4

CCSS LS 11-12.1, 11-12.4, 11-12.6, WHSST 11-12.2, 11-12.4, RRLST 11-12.1, LS1.B, PS1.A, PS1.B

A. In previous courses students have learned about modalities, basic application, and reasoning for their use. Throughout the course, students will utilize this information to create proper rehabilitation protocols and decision making with the following therapeutic tools.

1. Cryotherapy: Ice Packs, Ice Cups, Contrast Baths
2. Heat Therapy: Hydrocollator Packs, Contrast Baths
3. Light Therapy
4. Ultrasound 1. Phonophoresis
5. Electrical Stimulation: IFC, Premod, High Volt, Russian, COMBO
6. Iontophoresis

B. Key Assignments/Labs

- LAB 1 Cold therapies versus Heat therapies; Students will be able to describe the differences in
  - 1) Tissue responses to cold versus heat therapies.
  - 2) Neurologic responses to cold and heat therapies.
- Key Assignment: Modality Brochure  
Students will use the texts and create an informative brochure on a modality. The students will have to research the best uses for the modalities and the medical research behind that modality. The students will have to discuss the advancements and misconceptions related to their modality.  
Objective: This assignment's objective is to ensure students can connect the skills they will be using in their internship with the research and reasoning for their use.

Unit 12: **Advanced Taping and Wrapping**

(4 weeks)

STANDARDS

Health Science and Medical Technology

Anchor Standard 2.5, 5.1, 10.1, 10.3, 11.1

Patient Care Pathway

Standard B12.1, B12.2, B12.3, B12.4

CCSS LS 11-12.1, 11-12.4, 11-12.6, LS1.B, PS1.A, PS1.B

A. Students have learned basic taping and wrapping skills in previous courses. In this course, they will master these skills, define the anatomical landmarks and methods of the tape jobs, as well as the reasoning and expected outcome behind each tape job.

1. Various taping, wrapping, and stretching techniques.

- Ankle Taping
- Simple wrist, Res. Hyperextension
- Thumb spica, complex thumb
- Shoulder spica
- shin splint taping
- Achilles
- MCL knee tape
- LCL knee tape
- McConnell taping
- Finger LCL/MCL tape, Buddy tape
- Arch taping
- AC joint taping

B. Key Assignments/Labs

- Lab 1 Taping and Wrapping; Students will be able to evaluate for necessity and apply various wrapping techniques. Students will be able to identify landmarks for application and reasoning for each tape job.
- Key assignment: Taping write ups  
Students will need to use their texts to identify the structures and background related to each tape job. They will need to list the injuries related to all tape jobs and what the tape jobs purpose is. The students will then reflect on if their background and experience with the tape jobs correlate with the research and information they acquired.  
Objective: The students will understand not only the clinical application and skills related to taping but can provide evidence and reasoning for their use.

Unit 13: **Rehabilitation Techniques**

(4 weeks)

STANDARDS

Health Science and Medical Technology

Anchor Standard 2.5, 5.1, 10.1, 10.3, 11.1

Patient Care Pathway

Standard B2.1, B2.2, B2.3, B2.4

CCSS LS 11-12.1, 11-12.4, 11-12.6, WHSST 11-12.2, 11-12.4, RRLST 11-12.1, LS1.B, PS1.A, PS1.B

A. Students have learned basic rehabilitation skills in previous sports medicine courses. In this course, students will expand on this knowledge and create rehabilitation plans specific to different injuries, healing phases, and attain data based on their implementation of the rehabilitation protocols.

1. Stretching Techniques
  - Calf stretching
  - Hamstring stretching
  - Hip stretching
  - Quadriceps stretching
  - Back stretching
2. Modality Use
3. Exercises

B. Key Assignments/Labs

- Lab1 Closed Kinetic Chain versus Open Kinetic Chain exercises  
Objective : Student will be able to describe and define the differences in
  - 1) open kinetic chain versus closed kinetic chain exercises
  - 2) passive versus active exercises.
  - 3) assistive or resistive exercises.
- Lab 2 Range of Motion (ROM) Assessment via Goniometry; Students will be able to
  - 1) demonstrate the proper usage of a goniometer.
  - 2) Compare normal to abnormal range of motion
- Lab 3 flexibility, agility and proprioception; Students will be able to measure
  - 1) Flexibility using the sit and reach measuring device
  - 2) Agility using the 20 yard agility course
  - 3) Proprioception using various techniques
- Lab 4 Strength, Power Endurance; Students will be able to measure
  - 1) Strength using two(2) repetition maximum with specific free weight exercises
  - 2) Power using ten (10) repetition maximum with specific free weight exercises
  - 3) Endurance using fifteen(15) repetition maximum with specific free weight exercises

- Key Assignment: Rehabilitation Protocol  
The students will create a descriptive writing piece on an injury. The students will create a brochure on the injury and create a rehabilitation program. The students will use the text "Principles of Athletic Training" as well as scientific/medical journals and articles to get the most up to date rehabilitation technique for their injuries.