

# SPORTS MEDICINE

## INDUSTRY SECTOR | Health Science and Medical Technology PATHWAY | Therapeutic Services

### COURSE ESSENTIAL QUESTION:

Enter Course Essential Question (Single Space, not to exceed xx words.)

### COURSE OVERVIEW:

Have you or any one you know ever been injured? Are you an athlete? Do you have an interest in the medical field? Well Sports Medicine is for you! Students will learn functional anatomy of the human body, sports injuries/illness, injury evaluation and treatment, such as, taping, wrapping and follow-up care. This course will teach you how to respond to emergency situations and include First Aid, CPR/AED certification. All of these skills are required to become a Certified Athletic Trainer as well as helpful skills for various other medical professions. Intergrated throughout the course are Common Core State Standards and Career Technical Education Standards, which include safety, communication, technology, ethics, career planning and other employability skills. Sports Medicine has been UC a-g approved to meet the elective ("g"-science-biology) requirement.

### INFORMATION:

- A. **Pre-requisite:** No
- B. **Abilities Required:** N/A
- C. **Dress Requirement and Grooming:** No
- D. **Students must master 80% of the certificate competencies to receive a certificate.**
- E. **Fee:** N/A
- F. **Course Length:** 180 Hours
- G. **Textbook:** PRINCIPLES OF ATHLETIC TRAINING, 16<sup>TH</sup> EDITION
- H. **UC a-g Approved:** Yes
- I. **Industry Certification:** No
- J. **Sequencing to Include a Capstone:** No
- K. **Community College Articulation:** Yes
- L. **Common Core Alignment:** Yes
- M. **Community Classroom:** No
- N. **Career Technical Student Organization:** Yes
- O. **Work-Based Learning:** Yes

IDEA/THEME: UNIT 1 The Team Approach

ENGAGING TITLE:

ESSENTIAL QUESTION: *So you work in a gym?*

INSTRUCTIONAL HOURS: 10.0 Hours (Covered Throughout the Course)

### Common Core Unit Objective

Utilizing lecture notes, internet resources and the course textbook, students will identify rolls and responsibilities of the sports medicine team and present the findings in essay form.

### Key Assignments

- 1-page essay on sports medicine career of interest

### Anchor Standards

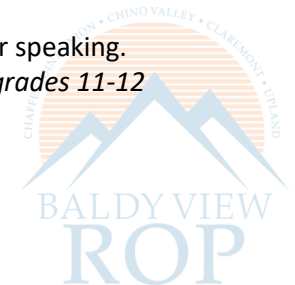
- 3.0 Integrate multiple sources of career information from diverse formats to make informed career decisions, solve problems, and manage personal career plans. (Direct alignment with SLS 11-12.2)
- 3.1 Identify personal interests, aptitudes, information, and skills necessary for informed career decision making.
- 3.2 Evaluate personal character traits such as trust, respect, and responsibility and understand the impact they can have on career success.

### Pathway Standards

- B1.0. Recognize the integrated systems approach to health care delivery services: prevention, diagnosis, pathology, and treatment
  - B1.1 Know relationship and use of an integrated health care delivery system.
- B12.2 Describe the various roles and responsibilities of health care workers as team members in an integrated health care delivery system.

### Common Core Standards

- LS 11-12.1. Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.
- WS 11-12.4. Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on *grades 11-12 reading and content*, choosing flexibly from a range of strategies.



## RESOURCES:

### Resources

1. Article about Sports Medicine Team and their contributions – NFHS – Development of Sports Medicine Team
2. Videos about various work environments (YouTube) – Cirque du Soleil – Athletic Trainer
3. Use of experiences that involve communication aspects and team work -
4. Textbook:
  - a) Principles of Athletic Training,
  - b) Introduction to Sports Medicine and Athletic Training (Chapter 1 & 2)
5. Internet:
  - a) NATA.org
  - b) ACSM.org
  - c) BOC.org
  - d) BOCATC.org
  - e) Brentbrookbash.com
  - f) School Safety Initiative.Gov
6. Industry Professional Speakers (DO, PT, ATC, CSCS)



IDEA/THEME: UNIT 2. Know Your Legal Limits

ENGAGING TITLE:

ESSENTIAL QUESTION: *Is it okay to do this?*

INSTRUCTIONAL HOURS: 10.00 hours

### Common Core Unit Objective

Referencing court documents, internet resources and lecture notes, students will research a sports medicine related legal case in order to discuss the facts of the case , legal wrong doings , and how litigation could have been avoided by engaging in correct practices.

### Key Assignments

- Sports medicine case study review – discussion
- Soap notes
- Records

### Anchor Standards

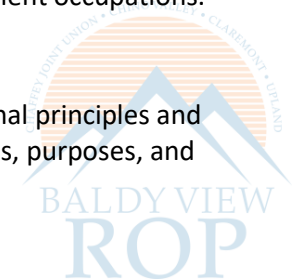
- 8.0 **Ethics and Legal Responsibilities:** Practice professional, ethical, and legal behavior, responding thoughtfully to diverse perspectives and resolving contradictions when possible, consistent with applicable laws, regulations, and organizational norms.
- 8.2 Demonstrate ethical and legal practices consistent with Health Science and Medical Technology sector workplace standards.
- 8.3 Explain the importance of personal integrity, confidentiality, and ethical behavior in the workplace.

### Pathway Standards

- B12.0 Adhere to the roles and responsibilities, within the scope of practice, that contribute to the design and implementation of treatment planning.
- B12.1 Understand scope of practice and related skills within prevention, diagnosis, pathology, and treatment occupations.

### Common Core Standards

- RSIT 11-12.8. Delineate and evaluate the reasoning in seminal U.S. texts, including the application of constitutional principles and use of legal reasoning (e.g., in U.S. Supreme Court majority opinions and dissents) and the premises, purposes, and arguments in works of public advocacy (e.g., *The Federalist*, presidential addresses).



## RESOURCES:

### Resources

1. Example of negligence or related case to discuss. Video or articles.
2. Cases study on Nata.org definitions – Secondary School Case Studies
3. Rules and regulations/definitions from text
4. YouTube – What is Negligence?  
Negligence: Duty of Care
5. Book - Principles of Athletic Training, chapter 3, pages 74-84



IDEA/THEME: UNIT 3. EXPECT THE UNEXPECTED (EMERGENCY CARE)

ENGAGING TITLE:

ESSENTIAL QUESTION: *Are we ever truly prepared?*

INSTRUCTIONAL HOURS: 25.00 hours

### Common Core Unit Objective

Utilizing internet sources, lecture notes, videos and text books students will be able to differentiate between normal and abnormal patient health status and demonstrate skills necessary for proper patient care.

### Key Assignments

- CPR, First Aid and AED Certification

### Anchor Standards

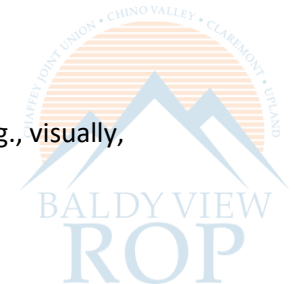
- 5.0 **Problem Solving and Critical Thinking:** Conduct short, as well as more sustained, research to create alternative solutions to answer a question or solve a problem unique to the Health Science and Medical Technology sector using critical and creative thinking, logical reasoning, analysis, inquiry, and problem-solving techniques.
- 5.4 Interpret information and draw conclusions, based on the best analysis, to make informed decisions.
- 10.0 **Technical Knowledge and Skills:** Apply essential technical knowledge and skills common to all pathways in the Health Science and Medical Technology sector, following procedures when carrying out experiments or performing technical tasks.
- 10.5 Complete certification in emergency care as appropriate (cardiopulmonary resuscitation [CPR], automated external defibrillator [AED], first aid).

### Pathway Standards

- B7.0 Apply observation techniques to detect changes in the health status of patients.
- B7.1 Differentiate between normal and abnormal patient health status.
- B7.2 Demonstrate observation techniques.

### Common Core Standards

- RSIT 11-12.7. Integrate and evaluate multiple sources of information presented in different media or formats (e.g., visually, quantitatively) as well as in words in order to address a question or solve a problem.



## RESOURCES:

### Resources

1. AHA – CPR/FA Videos
2. Principles of Athletic Training, chapter 12, pages 306-314, 324-336
3. AHA – CPR/FA Student Workbook



IDEA/THEME: UNIT 4.

ENGAGING TITLE: I've Got a Bone to Pick with you

ESSENTIAL QUESTION: How do we get from here to there?

INSTRUCTIONAL HOURS: 20.00 hours

### Common Core Unit Objective

Students will utilize text books, lecture notes and internet sources to demonstrate the location and to palpate anatomical landmarks and to define, spell, announce and use appropriate medical terminology in the health care setting.

### Key Assignments

- Identify bone types, bone injuries, muscle types, and medical terminology

### Anchor Standard

- 2.0 **Communications:** Acquire and accurately use Health Science and Medical Technology sector terminology and protocols at the career and college readiness level for communicating effectively in oral, written, and multimedia formats.
- 2.7. Recognize major word parts of medical terminology including roots, prefixes and suffixes.

### Pathway Standards

- B2.0 Understand the basic structure and function of the human body and relate normal function to common disorders.
- B5.0 Know the definition, spelling, pronunciation, and use of appropriate terminology in the health care setting.
- B5.2 Accurately spell and define occupationally specific terms related to health care.
- B5.5 Know the basic structure of medical terms.
- B5.6 Demonstrate the correct pronunciation of medical terms.

### Common Core Standards

- LS 11-12.1. Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.





## RESOURCES:

### Resources

1. [Musclesinmotion.com](http://Musclesinmotion.com)
2. [Innerbody.com](http://Innerbody.com)
3. *Introduction to Sports Medicine and Athletic Training, chapter 14 and chapter 16*
4. [Anatomyarcade.com](http://Anatomyarcade.com)



IDEA/THEME: UNIT 5. ALL HANDS ON DECK (UPPER EXTREMITY INJURY)

ENGAGING TITLE:

ESSENTIAL QUESTION: Is the arm bone connected to the shoulder?

INSTRUCTIONAL HOURS: 20.00 hours

### Common Core Unit Objective

At the completion of this unit, students will analyze and apply the concepts of this unit using lecture notes, internet resources, and discussions/demonstrations to produce poster board presentations that demonstrates their understanding of basic structure and function of the upper extremities as it relates to prevention, pathology, and treatment of injury.

### Key Assignments

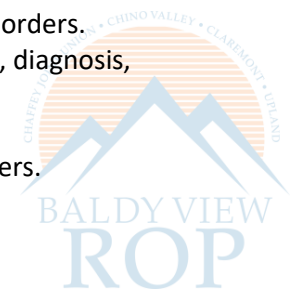
- Upper extremity injury evaluation – HOPS (History, Observation, Palpation, Special Tests)
- Injury Identification

### Anchor Standards

- 5.0 **Problem Solving and Critical Thinking:** Conduct short, as well as more sustained, research to create alternative solutions to answer a question or solve a problem unique to the Health Science and Medical Technology sector using critical and creative thinking, logical reasoning, analysis, inquiry, and problem-solving techniques.
- 5.1 Identify and ask significant questions that clarify various points of view to solve problems.
- 5.4 Interpret information and draw conclusions, based on the best analysis, to make informed decisions.
- 5.6 Read, interpret, and extract information from documents.
- 10.0 **Technical Knowledge and Skills:** Apply essential technical knowledge and skills common to all pathways in the Health Science and Medical Technology sector, following procedures when carrying out experiments or performing technical tasks.
- 10.1 Interpret and explain terminology and practices specific to the Health Science and Medical Technology sector.

### Pathway Standards

- B2.0 Understand the basic structure and function of the human body and relate normal function to common disorders.
- B2.1 Know basic human body structure and function in relationship to specific care between prevention, diagnosis, pathology, and treatment.
- B2.3 Recognize common disease and disorders of the human body.
- B2.4 Compare normal function of the human body to the diagnosis and treatment of disease and disorders.



### Common Core Standards

LS 11-12.1. Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.

### RESOURCES:

#### Resources

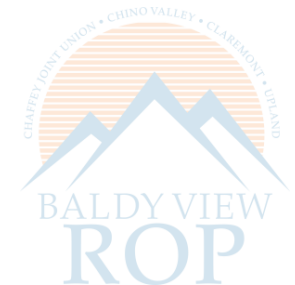
Principles of Athletic Training

CH. 22 pg 669-675 shoulder

CH. 23 pg 712-714, 716 elbow  
720-725

CH. 24 pg 741-742 wrist and hand  
748-758

Youtube.com Randale Sechrest  
Functional Anatomy



IDEA/THEME: UNIT 6. GET A LEG UP - LOWER EXTREMITY INJURIES

ENGAGING TITLE:

ESSENTIAL QUESTION: What's the bees knees?

INSTRUCTIONAL HOURS: 20.00 hours

### Common Core Unit Objective

At the completion of this unit students will analyze and apply the concepts of this unit using lecture notes, internet resources and discussions / demonstrations to produce poster board presentation that demonstrates their understanding of basic structure and function of the lower extremities as relates to prevention, pathology and treatment of injury.

### Key Assignments

- Lower extremity injury evaluation – HOPS (History, Observation, Palpation, Special Tests)
- Injury Identification

### Anchor Standards

- 5.0 **Problem Solving and Critical Thinking:** Conduct short, as well as more sustained, research to create alternative solutions to answer a question or solve a problem unique to the Health Science and Medical Technology sector using critical and creative thinking, logical reasoning, analysis, inquiry, and problem-solving techniques.
- 5.1 Identify and ask significant questions that clarify various points of view to solve problems.
- 5.4 Interpret information and draw conclusions, based on the best analysis, to make informed decisions.
- 5.6 Read, interpret, and extract information from documents.
- 10.0 **Technical Knowledge and Skills:** Apply essential technical knowledge and skills common to all pathways in the Health Science and Medical Technology sector, following procedures when carrying out experiments or performing technical tasks.
- 10.1 Interpret and explain terminology and practices specific to the Health Science and Medical Technology sector.
- 10.3 Construct projects and products specific to the Health Science and Medical Technology sector requirements and expectations.



### Pathway Standards

- B2.0 Understand the basic structure and function of the human body and relate normal function to common disorders.
- B2.1 Know basic human body structure and function in relationship to specific care between prevention, diagnosis, pathology, and treatment.
- B2.3 Recognize common disease and disorders of the human body.
- B2.4 Compare normal function of the human body to the diagnosis and treatment of disease and disorders.

### Common Core Standards

- LS 11-12.1. Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.

## RESOURCES:

### Resources

Principles of Athletic Training

CH. 18 pg. 507-513 foot  
520-536

CH. 19 pg. 546-551 ankle and lower leg  
553-571

CH. 20 pg. 582-587 knee  
593, 595-600

CH. 21 pg. 640-643 hip

Youtube.com Randale Sechrest  
Functional anatomy



IDEA/THEME: UNIT 7. SHRUG IT OFF - INTERNAL INJURIES WITH EMPHESIS

ENGAGING TITLE:

ESSENTIAL QUESTION: What's really going on inside?

INSTRUCTIONAL HOURS: 20.00 hours

### Common Core Unit Objective

At the completion of this unit students will analyze and apply the concepts of this unit using lecture notes, internet resources and discussions/demonstrations to produce medical brochure that demonstrates their understanding of internal injuries as they result from sports trauma.

### Key Assignments

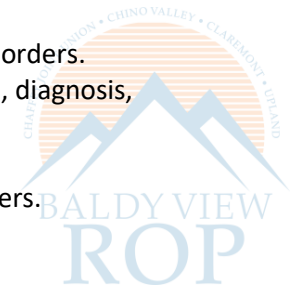
- Medical brochure for sports related internal injury

### Anchor Standards

- 5.0 **Problem Solving and Critical Thinking:** Conduct short, as well as more sustained, research to create alternative solutions to answer a question or solve a problem unique to the Health Science and Medical Technology sector using critical and creative thinking, logical reasoning, analysis, inquiry, and problem-solving techniques.
- 5.1 Identify and ask significant questions that clarify various points of view to solve problems.
- 5.4 Interpret information and draw conclusions, based on the best analysis, to make informed decisions.
- 5.6 Read, interpret, and extract information from documents.
- 10.0. **Technical Knowledge and Skills:** Apply essential technical knowledge and skills common to all pathways in the Health Science and Medical Technology sector, following procedures when carrying out experiments or performing technical tasks.
- 10.1 Interpret and explain terminology and practices specific to the Health Science and Medical Technology sector.
- 10.3 Construct projects and products specific to Health Science and Medical Technology sector requirements and expectations.

### Pathway Standards

- B2.0 Understand the basic structure and function of the human body and relate normal function to common disorders.
- B2.1 Know basic human body structure and function in relationship to specific care between prevention, diagnosis, pathology, and treatment.
- B2.3 Recognize common disease and disorders of the human body.
- B2.4 Compare normal function of the human body to the diagnosis and treatment of disease and disorders.



### Common Core Standards

LS 11-12.1. Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.

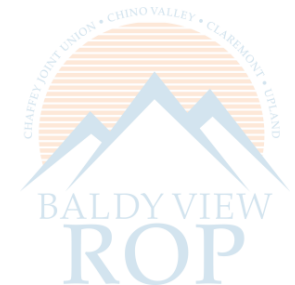
### RESOURCES:

#### Resources

Principles of Athletic Training  
CH. 27 pg. 861-868  
875-890

Anatomyarcade.com

Youtube.com Internal Organs/Human Body/Science Video Lecture (iprofindia)



**IDEA/THEME: UNIT 8. NERVOUS SYSTEM ANATOMY**  
**ENGAGING TITLE: USING YOUR NOODLE? - HEAD AND BRAIN INJURIES**  
**ESSENTIAL QUESTION: Can you break it if you shake it?**  
**INSTRUCTIONAL HOURS: 15.00 hours**

### Common Core Unit Objective

Utilizing lecture, internet and discussion groups, students will complete a simulation concussion education with a written lab report.

### Key Assignments

- Injury evaluation for head and brain injuries – 2 page Lab report for Concussion Evaluation

### Anchor Standards

- 5.0 **Problem Solving and Critical Thinking:** Conduct short, as well as more sustained, research to create alternative solutions to answer a question or solve a problem unique to the Health Science and Medical Technology sector using critical and creative thinking, logical reasoning, analysis, inquiry, and problem-solving techniques.
- 5.1 Identify and ask significant questions that clarify various points of view to solve problems.
  - 5.4 Interpret information and draw conclusions, based on the best analysis, to make informed decisions.
  - 5.6 Read, interpret, and extract information from documents.
- 10.0 **Technical Knowledge and Skills:** Apply essential technical knowledge and skills common to all pathways in the Health Science and Medical Technology sector, following procedures when carrying out experiments or performing technical tasks.
- 10.1 Interpret and explain terminology and practices specific to the Health Science and Medical Technology sector.

### Pathway Standards

- B2.0 Understand the basic structure and function of the human body and relate normal function to common disorders.
- B2.1 Know basic human body structure and function in relationship to specific care between prevention, diagnosis, pathology, and treatment.
- B2.3 Recognize common disease and disorders of the human body.
- B2.4 Compare normal function of the human body to the diagnosis and treatment of disease and disorders.

### Common Core Standards

- LS 11-12.1. Demonstrate command of the convention of standard English grammar and usage when writing or speaking.





## RESOURCES:

### Resources

1. League of Denial – Documentary
2. Preston Plevretes Story – Internet
3. Principles of Athletic Training, chapter 26, Page 825-856 Head and Brain CH. 25 pg. 768-772 Spine and Nervous System
4. CIFSS.org – Return to Play Protocol
5. School House Rock – Nervous System



IDEA/THEME: UNIT 11. NUTRITION  
ENGAGING TITLE: EAT THIS, NOT THAT  
ESSENTIAL QUESTION: Are you really what you eat?  
INSTRUCTIONAL HOURS: 10.00 hours

### Common Core Unit Objective

Through integration of lecture and class discussions, students will analyze food related resources to develop individual dietary needs.

### Key Assignments

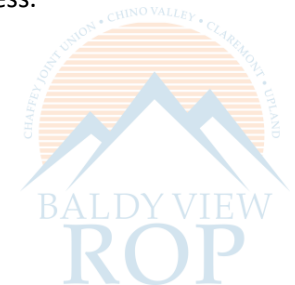
- Completion of nutritional Self – Evaluation packet

### Anchor Standards

- 2.0 **Communications:** Acquire and accurately use Health Science and Medical Technology sector terminology and protocols at the career and college readiness level for communicating effectively in oral, written, and multimedia formats.
- 2.6 Advocate and practice safe, legal, and responsible use of digital media information and communications technologies.
- 5.0 **Problem Solving and Critical Thinking:** Conduct short, as well as more sustained, research to create alternative solutions to answer a question or solve a problem unique to the Health Science and Medical Technology sector using critical and creative thinking, logical reasoning, analysis, inquiry, and problem-solving techniques.
- 5.4 Interpret information and draw conclusions, based on the best analysis, to make informed decisions.

### Pathway Standards

- B3.0 Know how to apply mathematical computations used in health care delivery system.
- B3.2 Analyze diagrams, charts, graphs, and table to interpret health care results.
- B9.0 Implement wellness strategies for the prevention of injury and disease.
- B9.1 Know and implement practices to prevent injury and protect health for self and others.
- B9.6 Explore consequences of not utilizing available wellness services and behaviors that prevent injury and illness.



### Common Core Standards

- LS 11-12.1. Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.
- RRLST 11-12.9. Synthesize information from a range of sources (e.g., texts, experiments, simulations) into a coherent understanding of a process, phenomenon, or concept, resolving conflicting information when possible.
- WS 11-12.4. Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.

### RESOURCES:

#### Resources

1. My Plate .Gov
2. My Pyramid . Gov
3. YouTube – Obesity in America
4. Principles of Athletic training – chapter 5, pages 128-146



IDEA/THEME: UNIT 12. WHAT DOES YOUR FUTURE HOLD? – Employability Skills

ENGAGING TITLE:

ESSENTIAL QUESTION: Are you ready to work?

INSTRUCTIONAL HOURS: 30.00 hours

### Common Core Unit Objective

At the completion students will have a complete resume and cover letter for a real job posting of their choice and complete a mock interview, preparing them for the future.

### Key Assignments

- Instructor evaluation of employability skills

### Anchor Standards

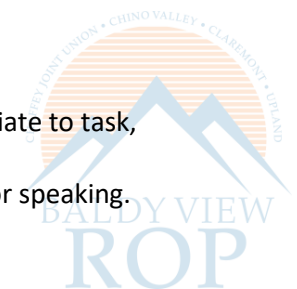
- 3.0 **Career Planning and Management:** Integrate multiple sources of career information from diverse formats to make informed career decisions, solve problems, and manage personal career plans.
- 11.0 **Demonstration and Application:** Demonstrate and apply the knowledge and skills contained in the Health Science and Medical Technology anchor standards, pathway standards, and performance indicators in classroom, laboratory, and workplace settings and through the Cal-HOSA career technical student organization.
- 11.5 Create a portfolio, or similar collection of work, that offers evidence through assessment and evaluation of skills and knowledge competency as contained in the anchor standards, pathway standards, and performance indicators.

### Pathway Standards

- B12.0 Adhere to the roles and responsibilities, within the scope of practice, that contribute to the design and implementation of treatment planning.
- B12.1 Demonstrate the knowledge and delivery of specific skills and procedures as outlined within the scope of practice appropriate for patient care in prevention, diagnosis, pathology, and treatment.

### Common Core Standards

- WS 11-12.4. Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.
- LS 11-12.1. Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.



## RESOURCES:

### Resources

1. Microsoft Office – Resume, LOR Templates
2. Business Insider.com – 12 Ted Talks
3. Monster.com – 12 tips to Improve Interview Performance

