

VALLEY ROP COURSE OUTLINE

COURSE TITLE: Sports Medicine

VALLEY ROP #: HSM-4298-SptMed
CDE #: 4687

CBEDS TITLE: Other Health Science & Medical Technology
CBEDS #: 4298

CTE SECTOR: Health Science & Medical Technology
CTE PATHWAY: Therapeutic Services

JOB TITLES:

Athletic Trainers and Assistants	29-9091.00
Healthcare Practitioners & Technical Workers	29-9099.99
Physical Therapists and Aides	29-1123.00

COURSE DESCRIPTION:

This health science course introduces students to the field of Sports Medicine and other allied health professions. Basic anatomy and physiology concepts provide the framework of study. Other content areas include prevention of injuries, protective taping and wrapping techniques, stretching methods, overall wellness, injuries, therapeutic modalities, and drug related topics. Students enroll in this one-period theory class during the day and may **with instructor permission** participate in additional class hours in a community classroom or vocational experience situation for real world training; i.e., as student athletic trainers after school.

DATE APPROVED:

REVISED DATE: March 2009 / Oct 2009

HOURS: 180-360 hours per year

CREDITS: 10-20 credits per year

PREREQUISITES:

None for the theory class

For the Community Classroom and/or Cooperative

Vocational Experience (CVE) hours participating as

Student Athletic Trainers after school, the students must meet the

following requirements: 1) Be enrolled in the Sports Medicine theory class, 2) Maintain a 2.5 GPA, 3) Have excellent attendance, and 4) Obtain instructor permission. Approximately 12 students will be selected as Student Athletic Trainers.

GRADE LEVELS: 11-12

TEXTBOOKS:

Sports Injury Management, by Marcia K. Anderson and Susan J. Hall, Williams & Williams Pub.

COURSE COMPETENCIES:

Upon completion of this course, the student will:

Design a Training Room:

- Students will design a training room layout involving equipment, electrical, storage, etc. within given parameters.

Create an Emergency Plan:

- Students will create emergency protocol & emergency routes as well as access that could be implemented in a medical emergency.

Tape Ankles:

- Students will be given instructions & practice they will be given a timed test on a basket-weave ankle test.

Wrap Shoulders:

- Students will be instructed & given practice time & then will be tested on shoulder spicas.

Research a Modality:

- Students will choose an approved Modality & research methods of application, indication & contra-indications, physiological effects, etc.

Design Flexibility Program:

- Students will create a 15 minute flexibility & a 15 minute cool down program with an explanation of stretches & times.

Design program to improve Muscle Strength and Endurance:

- Students will create a weekly Muscle Strength & endurance program with an explanation of exercises & times.

Design a Cardiovascular Endurance Program:

- Students will create a weekly endurance program including an explanation of exercises & duration.

Students will keep a notebook throughout the year that will be checked at test times. Notebooks will contain all homework, notes, in-class assignments, supplemental information, & table of contents. Students will create a supply list that stays within a given budget.

Instructional Strategies:

- Lecture
- Demonstrations
- Videos
- Simulations

Evaluation Methods:

Assessment opportunities, which allow continuous evaluation of students' progress, will be embedded throughout the course and should be a learning experience. All students will be expected to achieve mastery of all topics; often, demonstrations of mastery will occur in a public forum. The following strategies, which include both formal and informal assessment techniques will include, but are not limited to:

- Written exams
- Performance exams
- Projects

COURSE OUTLINE:**Unit of Instruction****Theory CC/CVE****Introduction to Sports Medicine****5**

- What is Athletic Training?
- Athletic Trainer Requirements
- Founding of NATA
- Roles Athletic Trainer, Team Physician,
- Coach, Athletic Director, Physical Therapist,
- Student Athletic Trainer
- Career Opportunities in Athletic Training

Legal Liabilities**10**

- Recordkeeping/Medical Forms
- Legal Vocabulary
- Confidentiality
- Preventing Litigation

Injury Mechanisms**5****15**

- Soft Tissue Injuries
- Bone Injuries
- Nerve Injuries
- Pain

Emergency Procedure**10****25**

- Emergency Situations
- ABCs (Airway, Breathing, Circulation)
- Vital Signs
- Unconscious Athlete
- Spinal Immobilization
- Shock
- Emergency Plan
- Body Isolation/OSHA

Injury Assessment**10****25**

- Anatomical Directional Terms
- Injury Assessment (on field/off field)
- HOPS
- SOAP Notes

Therapeutic Modalities**10****20**

- Psychology of an Injured Patient
- Developing an Exercise Program
- Indications/Contraindications
- Controlling Inflammation
- Restoring ROM
- Develop Muscle Strength
- Return to Sporting Activity
- Modalities and Medications
- Nutrition

Protective Equipment	5	10
<ul style="list-style-type: none"> • Role of Equipment • Head and Face • Upper Body • Lower Body 		
Heat and Cold Related Injuries	10	10
<ul style="list-style-type: none"> • Preventing Heat Emergencies • Internal Temperature Regulation • Heat Cramps • Heat Exhaustion • Heat Stroke • Preventing Cold Injuries • Hypothermia • Frostbite 		
Foot, Ankle, and Lower Leg	10	5
<ul style="list-style-type: none"> • Anatomy • Kinetics • Gait • Prevention of Injury • Injuries • HOPS • Modalities • Rehabilitation 		
Knee	10	5
<ul style="list-style-type: none"> • Anatomy • Kinetics • Gait • Prevention of Injury • Injuries • HOPS • Modalities • Rehabilitation 		
Thigh, Hip and Pelvis	10	5
<ul style="list-style-type: none"> • Anatomy • Kinetics • Gait • Prevention of Injury • Injuries • HOPS • Modalities • Rehabilitation 		
Shoulder	10	5
<ul style="list-style-type: none"> • Anatomy • Kinetics • Gait • Prevention of Injury • Injuries • HOPS • Modalities 		

<ul style="list-style-type: none"> • Rehabilitation 		
Upper Arm, Elbow and Forearm	10	5
<ul style="list-style-type: none"> • Anatomy • Kinetics • Gait • Prevention of Injury • Injuries • HOPS • Modalities • Rehabilitation 		
Wrist and Hand	10	5
<ul style="list-style-type: none"> • Anatomy • Kinetics • Gait • Prevention of Injury • Injuries • HOPS • Modalities • Rehabilitation 		
Head and Facial	10	5
<ul style="list-style-type: none"> • Anatomy • Kinetics • Gait • Prevention of Injury • Injuries • HOPS • Modalities • Rehabilitation 		
Spine	10	5
<ul style="list-style-type: none"> • Anatomy • Kinetics • Gait • Prevention of Injury • Injuries • HOPS • Modalities • Rehabilitation 		
Throat, Thorax, and Visceral	10	5
<ul style="list-style-type: none"> • Anatomy • Kinetics • Gait • Prevention of Injury • Injuries • HOPS • Modalities • Rehabilitation 		

Skin Conditions

- Fungi
- Bacterial infections
- Chronic skin conditions, treatments

Special Conditions

- Diabetes
- Eating Disorders
- Asthma

Drugs and Related Topics:

- Steroids
- HGH
- Creatine
- Alcohol
- Marijuana
- Inhalants
- Amphetamines
- Depressants

Training Room Management

- Perform training room maintenance and management
- Describe and practice training room discipline
- Describe principles of conditioning
- Design flexibility program
- Describe conditioning seasons
- Understand weight room design and equipment
- Conduct cross-training
- Define plyometrics
- Build neuromuscular coordination
- Discuss core development

Employability Portfolio

Total Hours:

5

5

10

30

5

180

180

CAREER PREPARATION STANDARDS:

- A. **PERSONAL SKILLS** - Students will understand how personal skill development affects their employability. This skill includes positive attitudes, self-confidence, honesty, responsibility, initiative, self-discipline, personal hygiene, time management, and the capacity for lifelong learning.
1. Demonstrate an understanding of classroom policies and procedures.
 2. Discuss importance of the following personal skills in the business environment:
 - a. positive attitude
 - b. self-confidence
 - c. honesty
 - d. perseverance
 - e. self-management/work ethic
 - f. pride in product/work
 - g. dependability
 3. Identify acceptable work attire.
 4. Establish goals for self-improvement and further education/training.
 5. Prioritize tasks and meet deadlines.
 6. Understand the importance of initiative and leadership.
 7. Understand the importance of lifelong learning in a world of constantly changing technology.
- B. **INTERPERSONAL SKILLS** - Students will understand key concepts on group dynamics, conflict resolution, and negotiation. This skill includes the ability to work cooperatively, accept supervision, assume leadership roles, and show respect for others. This standard includes an understanding of sexual harassment laws and an appreciation of cultural diversity in the workplace.
1. Identify and discuss behaviors of an effective team.
 2. Explain the central importance of mutual respect in the workplace relations.
 3. Discuss and demonstrate strategies for conflict resolution and negotiation, and explain their importance within the business environment.
 4. Understand laws that apply to sexual harassment in the workplace, and identify tactics for handling harassment situations.
 5. Work cooperatively, share responsibilities, accept supervision and assume leadership roles.
 6. Demonstrate cooperative working relationships and proper etiquette across gender and cultural groups.
- C. **THINKING AND PROBLEM-SOLVING SKILLS** - Students will exhibit critical and creative thinking skills, logical reasoning, and problem-solving. These skills include applying basic skills in order to calculate, estimate, measure; identify, locate, and organize information/data; interpret and follow directions from manuals, labels, and other sources; analyze and evaluate information and solutions.
1. Recognize the importance of good academic skills and implement a plan for self-improvement as needed.
 2. Read, write, and give directions.
 3. Exhibit critical and creative thinking skills and logical reasoning skills, and employ these skills for problem solving.
 - a. Work as a team member in solving problems.
 - b. Diagnose the problem, its urgency, and its causes.
 - c. Identify alternatives and their consequences.
 - d. Explore possible solutions.
 - e. Compare/contrast the advantages and disadvantages of alternatives.
 - f. Determine appropriate action(s).
 - g. Implement action(s).

h. Evaluate results of action(s) taken.

D. **COMMUNICATION SKILLS** - Students will understand principles of effective communication. This standard includes effective oral and written communication, listening skills, following and giving directions, requesting and giving information, asking questions.

1. Use communication concepts in application of skills, techniques, and operations.
 - a. Prepare written material.
 - b. Analyze written material.
2. Understand and implement written instructions, from technical manuals, written communications, and reference books.
3. Present a positive image through verbal and nonverbal communication, and understand the power of body language in communication.
4. Demonstrate active listening through oral and written feedback.
5. Give and receive feedback.
6. Demonstrate assertive communications (both oral and written).
7. Demonstrate proper etiquette in workplace communications, including an awareness of requisites for international communications (languages, customs, time zones, currency and exchange rates).
8. Demonstrate writing/editing skills as follows:
 - a. Write, proofread, and edit work.
 - b. Use correct grammar, punctuation, capitalization, vocabulary, and spelling.
 - c. Select and use appropriate forms of technology for communication.
9. Exhibit a proficiency in the use of reference books.
10. Research, compose, and orally present information for a variety of business situations utilizing appropriate technology.

E. **OCCUPATIONAL SAFETY** - Students will understand occupational safety issues, including the avoidance of physical hazards in the work environment. This includes the safe operation of equipment, proper handling of hazardous materials, appropriate attire and safety accessories, avoidance of physical injuries, interpretation of warning and hazard signs and terminology, and following and understanding safety-related directions.

1. Discuss and implement good safety practices, including the following (if applicable to course):
 - a. personal
 - b. lab
 - c. fire
 - d. electrical
 - e. equipment
 - f. tools
 - g. interpretation of Material Safety Data Sheets (MSDSs)
 - h. Environmental Protection Agency (EPA)
 - i. Occupational Safety and Health Administration (OSHA)
 - j. American Red Cross Standards (ARC)
 - k. Networking Safety Standards
2. Apply sound ergonomic principles in organizing one's work space.

F. **EMPLOYMENT LITERACY** - Students will understand career paths and strategies for obtaining employment within their chosen field. This includes traditional job preparation skills, such as resumes, application forms, cover letters, sources of employment information, and interviewing skills, but also includes an overview of the industry and an understanding of labor market trends.

1. Explore career opportunities and projected trends; investigate required education, training and experience; and develop an individual education plan.
2. Identify steps for setting goals and writing personal goals and objectives.
3. Examine aptitudes related to career options; relate personal characteristics and interests to educational and occupational opportunities.

4. Develop a career portfolio, including the following documents:
 - a. job application
 - b. resume(s)
 - c. appropriate cover and follow-up correspondence
5. Identify and demonstrate effective interviewing techniques.
- G. **TECHNOLOGY LITERACY** - Students will understand and adapt to changing technology by identifying, learning, and applying new skills to improve job performance. Students should understand the role of technology in their chosen field and should be able to use all appropriate technology. Students should also feel confident in their ability to learn new technology by generalizing from what they know, adapting skills to new situations, and identifying and using sources of information and of further learning.
 1. Demonstrate the ability to use personal computers for loading and retrieving data, information gathering, measurements, and writing.
 2. Identify the characteristics and explain the importance of adapting to changes, being flexible, and evaluating goals when working in the industry.
 3. Understand the importance of lifelong learning in adapting to changing technology.
- H. **IMPORTANCE OF ETHICS** – Students will understand proper ethics in the workplace.
 1. Discuss social and ethical responsibilities in the industry.
 2. Demonstrate ethical choices in workplace situations.