ATHLETIC TRAINING AND SPORTS MEDICINE - UC (CMHS)

INDUSTRY SECTOR: Health Science and Medical Technology Sector
PATHWAY: Patient Care
CALPADS TITLE: Intermediate Patient Care (Concentrator)
CALPADS CODE: 7921
HOURS:

<table>
<thead>
<tr>
<th>Total</th>
<th>Classroom</th>
<th>Laboratory/CC/CVE</th>
</tr>
</thead>
<tbody>
<tr>
<td>180</td>
<td>107</td>
<td>73</td>
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<table>
<thead>
<tr>
<th>JOB TITLE</th>
<th>O*NET CODE</th>
<th>JOB TITLE</th>
<th>O*NET CODE</th>
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<tbody>
<tr>
<td>Physical Therapist Aides</td>
<td>31-2022.00</td>
<td>Athletic Trainers</td>
<td>29-9091.00</td>
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<tr>
<td>Fitness Trainers and Aerobics Instructors</td>
<td>39-9031.00</td>
<td>Occupational Therapy Aides</td>
<td>31-2012.00</td>
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COURSE DESCRIPTION:
In this UC D-Science Lab approved CTE and science-based course, students will learn about the anatomy and physiology of the human body, the interaction of the body systems, theories, and methods of prevention, evaluation, treatment, management, rehabilitation and emergency response to sports and exercise-related injuries. It will also address cellular structure and the body's response as it relates to the Sports Nutrition, Supplementation and Substance Abuse Injury/Illness Prevention and Wellness Protection. It includes introductory information about the AT’s scope of practice: injury prevention, treatment, rehabilitation, emergency injury management, and administrative functions. This course is intended to help students gain an understanding of athletic training, various associated disciplines, and the role they play in the physically active community. Students enrolled in this class will learn the fundamentals of emergency response to sports injuries.

A-G APPROVAL: D

ARTICULATION:

<table>
<thead>
<tr>
<th>College</th>
<th>Course Code</th>
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<tbody>
<tr>
<td>Orange Coast College</td>
<td>KIN A273</td>
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DUAL ENROLLMENT: None

PREREQUISITES:

<table>
<thead>
<tr>
<th>Prerequisite</th>
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<tbody>
<tr>
<td>Biology (Required)</td>
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<tr>
<td>Anatomy &amp; Physiology (Recommended)</td>
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<tr>
<td>Chemistry (Recommended)</td>
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<tr>
<td>Algebra (Required)</td>
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METHODS OF INSTRUCTION

- Direct instruction
- Group and individual applied projects
- Multimedia
- Demonstration
- Field trips
- Guest speakers

STUDENT EVALUATION:

- Student projects
- Written work
- Exams
- Observation record of student performance
- Completion of assignment

INDUSTRY CERTIFICATION:

- AHA Basic Life Support for Healthcare Provider (CPR and AED) Certification

RECOMMENDED TEXTS:

- Hole’s Anatomy - David Shier and Ricki Lewis
- Introduction to Sports Medicine and Athletic Training - Robert France

PROGRAM OF STUDY

<table>
<thead>
<tr>
<th>Grade</th>
<th>Fall</th>
<th>Spring</th>
<th>Year</th>
<th>Course Type</th>
<th>Course Name</th>
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<tbody>
<tr>
<td>9, 10, 11, 12</td>
<td>✓</td>
<td></td>
<td></td>
<td>Introductory</td>
<td>Introduction to Medical Careers</td>
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<tr>
<td>9, 10, 11, 12</td>
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<td>✓</td>
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<td>Introductory</td>
<td>Medical Terminology</td>
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<tr>
<td>10, 11, 12</td>
<td></td>
<td>✓</td>
<td>✓</td>
<td>Concentrator</td>
<td>Athletic Training and Sports Medicine - UC (CMHS)</td>
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<tr>
<td>11, 12</td>
<td></td>
<td></td>
<td>✓</td>
<td>Capstone</td>
<td>Advanced Sports Medicine</td>
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</table>
## I. INTRODUCTION AND ORIENTATION

- Demonstrate understanding of course objectives and competencies
- Understand the course requirements and student expectations
- Demonstrate awareness of the industry standards and career opportunities
- Practice safety measures required for each sport played during the semester
- Understand the education and skill requirements of athletic training field and other health-related fields.
- Demonstrate appropriate communication skills and strategies
- Determine the scope of practice for athletic trainer aides and physical therapy aides
- Understand patients’ rights
- Discuss ethical situations that may occur in health care
- Define Health Insurance Portability and Accountability Act (HIPAA) guidelines and regulations regarding confidentiality and how it is interpreted in athletic training
- Describe liability issues in athletic training

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<thead>
<tr>
<th>CR</th>
<th>Lab/CC</th>
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</table>
| 10 | 10     | Academic: RLST: 11-12.7  
 |     |        | CTE Anchor:  
 |     |        | Communications: 2.3, 2.4  
 |     |        | Responsibility and Flexibility: 7.1, 7.2, 7.3, 7.4, 7.5, 7.7, 7.8  
 |     |        | Ethics and Legal Responsibilities: 8.2, 8.3, 8.4  
 |     |        | Technical Knowledge and Skills: 10.1, 10.2  
 |     |        | CTE Pathway: B12.1, B12.3  |

## II. WORKPLACE SAFETY

- Exhibit an understanding of occupational safety issues and describe the policies, procedures, regulations, and agencies that govern workplace safety
- Understand the importance of emergency preparedness and describe the elements of an emergency preparedness plan
- Describe proper procedures for handling hazardous materials
- Operate equipment safely so as not to endanger themselves or others
- Explain personal health and safety precautions in the workplace, including universal precautions, stress management, and ergonomics

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| 5  | 4      | Academic: RLST: 11-12.1, 11-12.4, 11-12.7  
 |     |        | CTE Anchor:  
 |     |        | Health and Safety: 6.1, 6.2, 6.3, 6.4, 6.5, 6.6, 6.7, 6.8  

## III. FUNCTIONS OF THE APPENDICULAR AND AXIAL SKELETAL

**Skeletal System**
- Identify and palpate the major bones and anatomical bony landmarks of the skeletal system
- Describe and explain the organization and articulation of the major bones in the skeletal system
- Describe the importance of bone articulation in relation to sports medicine

**Joints and Movement**
- Identify and palpate the major joints of the upper and lower limbs
- Describe both the movement and function of the joints in the upper and lower limbs

**Muscular System**
- Identify the major skeletal muscles
- Identify a muscles origin and insertion
- Know the structures of a skeletal muscle and be able to describe the

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| 15 | 15     | Academic: LS: 11-12.1, 11-12.2  
 |     |        | RSIT: 11-12.1, 11-12.7  
 |     |        | CTE Anchor:  
 |     |        | Technical Knowledge and Skills: 10.1  
 |     |        | CTE Pathway: B2.1, B2.3, B2.4, B5.1, B5.6  |
**IV. LOWER BODY: ANKLE, FOOT, LOWER LEG, KNEE, HIP, AND THIGH**

- Know and locate the major bones of the lower limbs
- Identify the major muscles of the lower limbs
- Identify the ligaments and tendons of the lower limbs

**Recognition of Mechanisms of Injury:**
- Identify the causes of sprains, strains, and fractures

**Prevention/Treatment:**
- Understand and describe appropriate injury prevention techniques
- Synthesize knowledge and information to evaluate, design, and monitor appropriate care and rehabilitation

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| 12 | 12     | Academic: RLST: 11-12.9
      |        | CTE Anchor: Problem Solving and Critical Thinking: 5.3
      |        | CTE Pathway: B2.4, B2.3, B2.1, B7.1, B7.2 |

**V. UPPER BODY – NECK, BACK, SHOULDER, FOREARM, ELBOW, AND WRIST**

- Know and locate the major bones of the neck, back, shoulder, forearm, elbow, and wrist.
- Identify the large muscles of the neck and back, shoulder, forearm, elbow, and wrist
- Identify the ligaments and tendons of the neck and back, shoulder, forearm, elbow, and wrist

**Recognition of Mechanisms of Injury:**
- Identify the causes of sprains, strains, and fractures.

**Prevention/Treatment:**
- Understand and describe appropriate injury prevention techniques.
- Synthesize knowledge and information to evaluate, design, and monitor appropriate care and rehabilitation.

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| 12 | 12     | Academic: RLST: 11-12.9
      |        | CTE Anchor: Problem Solving and Critical Thinking: 5.3
      |        | CTE Pathway: B2.1, B2.3, B2.4, B7.1, B7.2 |

**VI. EMERGENCY AND IMMEDIATE CARE**

- Attain certification in Cardiopulmonary Resuscitation (CPR) and demonstrate first aid skills
- Interpret, differentiate and treat sprains, strains, and abrasions
- Describe and demonstrate primary and secondary survey
- Describe and demonstrate the procedures for immobilization, splinting and logrolling
- Evaluate an athletic injury using a systematic approach such as History, Observation, Palpation, and Special Tests (HOPS)
- Understand the importance of documenting injuries
- Synthesize knowledge and information to identify and treat heat illnesses

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<th>Standards</th>
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</thead>
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| 8  | 4      | Academic: RLST: 11-12.9
      |        | WHSST: 11-12.7
      |        | CTE Anchor: Technical Knowledge and Skills: 10.5
      |        | CTE Pathway: B4.1, B4.4, B4.5, B7.2, B8.2, B8.3, B8.4, B9.1, B11.4 |

**VII. THE INTEGUMENTARY SYSTEM**

- Identify and describe the importance of the integumentary system to maintaining homeostasis

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</table>
| 4  | 4      | Academic: RLST: 11-12.9
      |        | WHSST: 11-12.7
      |        | CTE Anchor: Problem Solving and Critical Thinking: 5.3
<pre><code>  |        | CTE Pathway: B2.3, B2.4, B2.1, |
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<tr>
<th>VIII. THE NERVOUS SYSTEM</th>
<th>CR</th>
<th>Lab/CC</th>
<th>Standards</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Identify the structures of the nervous system and know the importance of integration and coordination</td>
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<td>4</td>
<td>Academic: RLST: 11-12.9 WHSST: 11-12.7 CTE Anchor: Problem Solving and Critical Thinking: 5.3 CTE Pathway: B1.1, B1.3, B1.4, B7.1, B7.2</td>
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<thead>
<tr>
<th>IX. THE ENDOCRINE SYSTEM</th>
<th>CR</th>
<th>Lab/CC</th>
<th>Standards</th>
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<tbody>
<tr>
<td>• Understand and explain the importance of hormone regulation • Identify and describe the effects of popular doping drugs with regard to the nervous, endocrine and major muscle systems</td>
<td>4</td>
<td>4</td>
<td>Academic: RLST: 11-12.9 WHSST: 11-12.7 CTE Anchor: Problem Solving and Critical Thinking: 5.3 CTE Pathway: B2.3, B2.1, B2.4, B7.1, B7.2</td>
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<thead>
<tr>
<th>X. NUTRITION AND EXERCISE PHYSIOLOGY</th>
<th>CR</th>
<th>Lab/CC</th>
<th>Standards</th>
</tr>
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<tbody>
<tr>
<td>• Understand energy systems and the energy required for physical activity • Describe how energy requirements affect body composition and weight control</td>
<td>9</td>
<td>4</td>
<td>Academic: RLST: 11-12.9 WHSST: 11-12.7 CTE Anchor: Problem Solving and Critical Thinking: 5.5, 5.6 CTE Pathway: B2.1, B3.1, B3.2, B4.4, B12.4</td>
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<thead>
<tr>
<th>XI. EMPLOYMENT LITERACY</th>
<th>CR</th>
<th>Lab/CC</th>
<th>Standards</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Identify available positions in the industry through the use of networking or the Internet • Complete an application form correctly • Prepare a written resume • Participate in a simulated employment interview • Prepare a portfolio • Research internship and externship opportunities</td>
<td>10</td>
<td>0</td>
<td>Academic: RLST: 11-12.9 WHSST: 11-12.7 CTE Anchor: Communications: 2.4 Career Planning and Management: 3.1, 3.2, 3.4, 3.5 CTE Pathway: B12.1, B12.2</td>
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</table>

Coastline ROP
PERSONAL SKILLS:
- Demonstrate promptness and attend class regularly
- Develop and maintain acceptable working relations
- Demonstrate the ability to manage time wisely
- Demonstrate a positive and cooperative attitude
- Demonstrate values of honesty and integrity
- Demonstrate respect for others
- Dress in a professional manner according to industry standards
- Demonstrate appropriate personal hygiene/grooming, and dress
- Demonstrate responsibility by exerting a high level of effort and working toward a goal

INTERPERSONAL SKILLS/GROUP DYNAMICS:
- Demonstrate the ability to work as a member of a team
- Identify proper procedures for handling harassment
- Demonstrate leadership skills by working independently, making appropriate decisions, working well with others, and accepting constructive criticism
- Demonstrate the ability to accept and work with individuals from various cultures

THINKING AND PROBLEM SOLVING:
- Utilize problem-solving techniques
- Understand logical reasoning
- Demonstrate creative thinking
- Discuss decision-making
- Demonstrate the ability to interpret information correctly

COMMUNICATIONS SKILLS:
- Demonstrate effective verbal and written skills
- Read technical journals, and write technical reports using appropriate terminology
- Listen attentively, follow directions, and relay directions to others
- Demonstrate the ability to research and retrieve information

Academic:
- RLST: 11-12.9
- WHSST: 11-12.7

CTE Anchor:
- Communications: 2.3, 2.5, 2.7, 2.8
- Technology: 4.1, 4.2, 4.3
- Problem Solving and Critical Thinking: 5.1, 5.2
- Responsibility and Flexibility: 7.3, 7.7
- Ethics and Legal Responsibilities: 8.2, 8.3, 8.4
- Leadership and Teamwork: 9.2, 9.3

CTE Pathway:
- B4.5, B5.1, B12.2, B12.1, B13.5