#### Coastline ROP - Career Technical Education

# 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:

Total	Classroom	Laboratory/CC/CVE
180	107	73

JOB TITLE	O*NET CODE	JOB TITLE	O*NET CODE
Physical Therapist Aides	31-2022.00	Athletic Trainers	29-9091.00
Fitness Trainers and Aerobics Instructors	39-9031.00	Occupational Therapy Aides	31-2012.00

### **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:** 

College	Course Code				
Orange Coast College	KIN A273				

**DUAL ENROLLMENT:** None

PREREQUISITES:

Prerequisite
Biology (Required)
Anatomy & Physiology (Recommended)
Chemistry (Recommended)
Algebra (Required)

### **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**

Grade	Fall	Spring	Year	Course Type	Course Name
9, 10, 11, 12				Introductory	Introduction to Medical Careers
9, 10, 11, 12				Introductory	Medical Terminology
10, 11, 12				Concentrator	Athletic Training and Sports Medicine - UC (CMHS)
11, 12				Capstone	Advanced Sports Medicine

I.	INTRODUCTION AND ORIENTATION	CR	Lab/ CC	Standards
	<ul> <li>Demonstrate understanding of course objectives and competencies</li> <li>Understand the course requirements and student expectations</li> <li>Demonstrate awareness of the industry standards and career opportunities</li> <li>Practice safety measures required for each sport played during the semester</li> <li>Understand the education and skill requirements of athletic training field and other health-related fields.</li> <li>Demonstrate appropriate communication skills and strategies</li> <li>Determine the scope of practice for athletic trainer aides and physical therapy aides</li> <li>Understand patients' rights</li> <li>Discuss ethical situations that may occur in health care</li> <li>Define Health Insurance Portability and Accountability Act (HIPAA) guidelines and regulations regarding confidentiality and how it is interpreted in athletic training</li> <li>Describe liability issues in athletic training</li> </ul>		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
П.	WORKPLACE SAFETY	CR	Lab/ CC	Standards
	<ul> <li>Exhibit an understanding of occupational safety issues and describe the policies, procedures, regulations, and agencies that govern workplace safety</li> <li>Understand the importance of emergency preparedness and describe the elements of an emergency preparedness plan</li> <li>Describe proper procedures for handling hazardous materials</li> <li>Operate equipment safely so as not to endanger themselves or others</li> <li>Explain personal health and safety precautions in the workplace, including universal precautions, stress management, and ergonomics</li> </ul>	5	4	Academic: RSIT: 11-12.1, 11-12.4, 11-12.7 RLST: 11-12.1, 11-12.2, 11-12.3, 11-12.4, 11-12.5, 11-12.7, 11-12.8, 11-12.9 CTE Anchor: Health and Safety: 6.1, 6.2, 6.3, 6.4, 6.5, 6.6, 6.7, 6.8 CTE Pathway: B10.1, B10.2, B10.3, B10.4, B10.5, B10.6, B10.7
III.	FUNCTIONS OF THE APPENDICULAR AND AXIAL SKELETAL	CR	Lab/ CC	Standards
	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	15	15	Academic: LS: 11-12.1, 11-12.2 RSIT: 11-12.1, 11-12.7 LS: LS1, LS1.B, LS1.C CTE Anchor: Technical Knowledge and Skills: 10.1 CTE Pathway: B2.1, B2.3, B2.4, B5.1, B5.6

	<ul> <li>importance of striations</li> <li>Describe the steps involved in muscle contraction</li> <li>Explain the importance of ligaments and tendons and why their healing process is different than muscle</li> </ul>			
IV.	LOWER BODY: ANKLE, FOOT, LOWER LEG, KNEE, HIP, AND THIGH	CR	Lab/ CC	Standards
	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	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	CR	Lab/ CC	Standards
	<ul> <li>Know and locate the major bones of the neck, back, shoulder, forearm, elbow, and wrist.</li> <li>Identify the large muscles of the neck and back, shoulder, forearm, elbow, and wrist</li> <li>Identify the ligaments and tendons of the neck and back, shoulder, forearm, elbow, and wrist</li> <li>Recognition of Mechanisms of Injury:         <ul> <li>Identify the causes of sprains, strains, and fractures.</li> </ul> </li> <li>Prevention/Treatment:         <ul> <li>Understand and describe appropriate injury prevention techniques.</li> <li>Synthesize knowledge and information to evaluate, design, and monitor appropriate care and rehabilitation.</li> </ul> </li> </ul>	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	CR	Lab/ CC	Standards
	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	<b>CR</b> 8		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.	<ul> <li>Attain certification in Cardiopulmonary Resuscitation (CPR) and demonstrate first aid skills</li> <li>Interpret, differentiate and treat sprains, strains, and abrasions</li> <li>Describe and demonstrate primary and secondary survey</li> <li>Describe and demonstrate the procedures for immobilization, splinting and logrolling</li> <li>Evaluate an athletic injury using a systematic approach such as History, Observation, Palpation, and Special Tests (HOPS)</li> <li>Understand the importance of documenting injuries</li> </ul>		СС	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,

		B7.2, B7.1		
VIII.	THE NERVOUS SYSTEM	CR	Lab/ CC	Standards
	Identify the structures of the nervous system and know the importance of integration and coordination	6	4	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
IX.	THE ENDOCRINE SYSTEM	CR	Lab/ CC	Standards
	<ul> <li>Understand and explain the importance of hormone regulation</li> <li>Identify and describe the effects of popular doping drugs with regard to the nervous, endocrine and major muscle systems</li> </ul>	4	4	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
X.	NUTRITION AND EXERCISE PHYSIOLOGY	CR	Lab/ CC	Standards
	Understand energy systems and the energy required for physical activity     Describe how energy requirements affect body composition and weight control	9	4	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
XI.	EMPLOYMENT LITERACY	CR	Lab/ CC	Standards
	<ul> <li>Identify available positions in the industry through the use of networking or the Internet</li> <li>Complete an application form correctly</li> <li>Prepare a written resume</li> <li>Participate in a simulated employment interview</li> <li>Prepare a portfolio</li> <li>Research internship and externship opportunities</li> </ul>	10	0	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
XII.	EMPLOYABILITY SKILLS AND SOFT SKILLS DEVELOPMENT	CR	Lab/ CC	Standards

**PERSONAL SKILLS:** Academic: 12 RLST: 11-12.9 · Demonstrate promptness and attend class regularly WHSST: 11-12.7 • Develop and maintain acceptable working relations CTE Anchor: • Demonstrate the ability to manage time wisely Communications: • Demonstrate a positive and cooperative attitude 2.3, 2.5, 2.7, 2.8 Demonstrate values of honesty and integrity Technology: 4.1, • Demonstrate respect for others 4.2, 4.3 • Dress in a professional manner according to industry standards Problem Solving • Demonstrate appropriate personal hygiene/grooming, and dress and Critical • Demonstrate responsibility by exerting a high level of effort and working Thinking: 5.1, 5.2 toward a goal Responsibility and **INTERPERSONAL SKILLS/GROUP DYNAMICS:** Flexibility: 7.3, 7.7 Ethics and Legal Demonstrate the ability to work as a member of a team • Identify proper procedures for handling harassment Responsibilities: • Demonstrate leadership skills by working independently, making 8.2, 8.3, 8.4 appropriate decisions, working well with others, and accepting constructive Leadership and criticism Teamwork: 9.2, • Demonstrate the ability to accept and work with individuals from various 9.3 cultures CTE Pathway: B4.5, B5.1, B12.2, THINKING AND PROBLEM SOLVING: B12.1, B13.5 · 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