

SPORTS MEDICINE ADVANCED**INDUSTRY SECTOR:** Health Science and Medical Technology Sector**PATHWAY:** Patient Care**CALPADS TITLE:** Advanced Patient Care (Capstone)**CALPADS CODE:** 7922**HOURS:**

Total	Classroom	Laboratory/CC/CVE
180	90	90

JOB TITLE	O*NET CODE	JOB TITLE	O*NET CODE
Physical Therapist Assistants	31-2021.00	Occupational Therapy Aides	31-2012.00
Physical Therapist Aides	31-2022.00	Athletic Trainers	29-9091.00

COURSE DESCRIPTION:

This class will offer students more in-depth coverage of the skills and fundamentals necessary for careers relating to sports medicine and athletic training. Students will learn how to prevent and rehabilitate injuries and increase athletic performance through a directed, practical experience in pre-event, on-field, and post-event sports medicine interventions. This class will cover comprehensive hands-on applications in the following areas: body mechanics, advanced anatomy and physiology, emergency procedures, advanced taping and bracing, therapeutic modalities, expanded injury evaluation and prevention techniques, injury rehabilitation, strength and conditioning theory, pharmacology, sports psychology, clinic budget considerations, and clinic management.

A-G APPROVAL: G**ARTICULATION:** None**DUAL ENROLLMENT:** None**PREREQUISITES:**

Prerequisite
Sports Medicine and Athletic Training - UC
CPR and AED Certification

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:

- None

RECOMMENDED TEXTS:

- 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	Intro to Medical Careers
9, 10, 11, 12				Introductory	Medical Terminology
10, 11, 12				Concentrator	Athletic Training and Sports Medicine
11, 12				Capstone	Sports Medicine Advanced

I.	INTRODUCTION AND ORIENTATION	CR	Lab/ CC	Standards
	1.0 INTRODUCTION AND ORIENTATION • Demonstrate understanding of course objectives and competencies • Understand 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	2	0	Academic: LS: 11-12.4 RSIT: 11-12.4 RLST: 11-12.1 CTE Anchor: Health and Safety: 6.2, 6.5, 6.6, 6.8 Responsibility and Flexibility: 7.1, 7.2, 7.3, 7.4, 7.5, 7.6, 7.7, 7.8 CTE Pathway: B8.1, B8.5
II.	WORKPLACE SAFETY	CR	Lab/ CC	Standards
	• 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 • Determine an appropriate SPF for specific individuals • Determine the risks associated with repeated overexposure to the sun • Discuss the importance of an EAP and policy for thunder and lightning as it relates to athletics • Explain the complications circadian dysrhythmia could have for various levels of athletes	3	2	Academic: LS: 11-12.1, 11-12.4, 11-12.5 RSIT: 11-12.1, 11-12.6, 11-12.7 RLST: 11-12.1, 11-12.2, 11-12.3, 11-12.4, 11-12.5, 11-12.6, 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, B10.4, B10.5, B10.6, B10.7, B10.3
III.	INFECTIOUS DISEASES & BLOODBORNE PATHOGENS	CR	Lab/ CC	Standards
	• Discuss how infections are spread from person to person • Describe how the immune system neutralizes and eliminates foreign intruders in the body • Explain what bloodborne pathogens are and how they can infect patients and athletic trainers • Describe the transmission, symptoms, signs, and treatment of: • Hepatitis B virus • Hepatitis C virus • Human immunodeficiency virus (HIV) • Acquired immunodeficiency syndrome (AIDS) • Evaluate universal precautions as mandated by the Occupational Safety and Health Administration (OSHA) and how they apply to the athletic trainer	4	3	Academic: RLST: 11-12.1, 11-12.2, 11-12.3, 11-12.4, 11-12.5, 11-12.6, 11-12.7, 11-12.8, 11-12.9 WS: 11-12.2, 11-12.2a, 11-12.2b, 11-12.2d, 11-12.4, 11-12.6, 11-12.7, 11-12.8, 11-12.9 WHSST: 11-12.1, 11-12.10, 11-12.2, 11-12.3, 11-12.4, 11-12.5, 11-12.6, 11-12.7, 11-12.8, 11-12.9 LS: LS1, LS1.B,

				LS2.A, LS2.C, LS2 CTE Anchor: Problem Solving and Critical Thinking: 5.1, 5.2, 5.4, 5.6 CTE Pathway: B10.3
IV.	PATIENT ASSESSMENT	CR	Lab/ CC	Standards
	- Describe various methods of patient assessment - Discuss the effects of treatment on the body - Observe and record treatments effects and results - Review terminology used in injury evaluation - Apply the HOPS evaluation scheme - Review Myotomes and Dermatomes - Explain the difference between HIPAA and FERPA in relation to sharing medical information	4	20	Academic: LS: LS1, LS1.B CTE Anchor: Problem Solving and Critical Thinking: 5.1, 5.2, 5.3, 5.4, 5.6 CTE Pathway: B2.3, B2.4
V.	EXERCISE PHYSIOLOGY	CR	Lab/ CC	Standards
	- Describe the body's response to exercise which include increased stamina, weight reduction, weight control, and weight increase - Investigate the roles of the athletic trainer and the strength and conditioning coach on an athlete's fitness - Design goals of a training and conditioning program for a specific sport/position on a team - Differentiate between the types of stretching and determine which is best in a given scenario	3	2	Academic: PS: PS2.A, PS2, PS3, PS3.C CTE Anchor: Technology: 4.1, 4.2, 4.3, 4.4, 4.6 Problem Solving and Critical Thinking: 5.1, 5.2, 5.4, 5.5, 5.6 CTE Pathway: B1.4
VI.	PROTECTIVE EQUIPMENT	CR	Lab/ CC	Standards
	- Fit selective equipment properly including: - Football helmets - Shoulder pads - Running Shoes - Differentiate between good and bad features of selected protective devices - Contrast the advantages and disadvantages of customized versus prefabricated foot and ankle protective devices - Evaluate the protective value of various materials used in sports to make pads and orthotic devices - List the steps in making a customized foam pad with a thermo-moldable shell	4	4	Academic: ETS: ETS1, ETS1.C CTE Anchor: Problem Solving and Critical Thinking: 5.2, 5.4 CTE Pathway: B1.4, B9.1, B12.1
VII.	EMERGENCY PROCEDURES	CR	Lab/ CC	Standards
	- Establish an emergency action plan - Explain the importance of knowing CPR and how to manage an obstructed airway - Describe the types of hemorrhage and their management - Assess the types of shock and their management - Describe the emergency management of musculoskeletal injuries - Describe the techniques for moving and transporting the injured patient	6	4	Academic: WS: 11-12.2f, 11-12.2d, 11-12.2e, 11-12.2, 11-12.4, 11-12.6 CTE Anchor: Problem Solving and Critical

				Thinking: 5.1 CTE Pathway: B10.2, B11.4, B12.1
VIII.	FACILITY MANAGEMENT	CR	Lab/ CC	Standards
	• Describe maintenance procedures for a training room and a clinic • Develop plans for the interior arrangement of a physical therapy clinic • List the equipment needed in a clinic and establish a purchasing budget for this equipment • Discuss the financial considerations of running a clinic • Explain the legal importance of accurate, clear, and up-to-date record keeping	4	4	Academic: RLST: 11-12.1, 11-12.4, 11-12.5, 11-12.6, 11-12.7, 11-12.9 WS: 11-12.2, 11-12.4, 11-12.6, 11-12.8 WHSST: 11-12.10, 11-12.2, 11-12.3, 11-12.4, 11-12.5, 11-12.6, 11-12.8, 11-12.9 CTE Anchor: Leadership and Teamwork: 9.1, 9.2, 9.3 Technical Knowledge and Skills: 10.1, 10.3 CTE Pathway: B8.4, B8.5
IX.	ANKLE, FOOT AND LOWER LEG INJURIES	CR	Lab/ CC	Standards
	• Demonstrate an understanding of advanced and functional anatomy of the lower extremities • Describe the mechanism of injury to the lower extremities • Determine the immediate treatment for these injuries • Describe practical assessments for these injuries • Identify rehab techniques used for these injuries	6	8	Academic: LS: 11-12.1 CTE Anchor: Problem Solving and Critical Thinking: 5.3 CTE Pathway: B2.1, B2.3, B2.4, B7.1, B7.2
X.	KNEE AND THIGH INJURIES	CR	Lab/ CC	Standards
	• Demonstrate an understanding of advanced and functional anatomy of the lower extremities • Describe the mechanism of injury to the lower extremities • Determine the immediate treatment for these injuries • Describe practical assessments for these injuries • Identify rehab techniques used for these injuries	6	7	Academic: LS: 11-12.1 CTE Anchor: Problem Solving and Critical Thinking: 5.3 CTE Pathway: B2.4, B2.1, B2.3, B7.2, B7.1
XI.	WRIST AND HAND INJURIES	CR	Lab/ CC	Standards

	• Demonstrate an understanding of advanced and functional anatomy of the upper extremities • Describe the mechanism of injury to the upper extremities • Determine the immediate treatment for these injuries • Describe practical assessments for these injuries • Identify rehab techniques used for these injuries	6	8	Academic: LS: 11-12.1 CTE Anchor: Problem Solving and Critical Thinking: 5.3 CTE Pathway: B2.1, B2.3, B2.4, B7.2, B7.1
XII.	ELBOW AND SHOULDER INJURIES	CR	Lab/CC	Standards
	• Demonstrate an understanding of advanced and functional anatomy of the upper extremities • Describe the mechanism of injury to the upper extremities • Determine the immediate treatment for these injuries • Describe practical assessments for these injuries • Identify rehab techniques used for these injuries	6	6	Academic: LS: 11-12.1 CTE Anchor: Problem Solving and Critical Thinking: 5.3 CTE Pathway: B2.4, B2.3, B2.1, B7.1, B7.2
XIII.	THERAPEUTIC MODALITIES	CR	Lab/CC	Standards
	• Recognize legal ramifications of treating a patient with therapeutic modalities • Describe theoretical uses of various types of modalities • Correctly demonstrate a variety of thermotherapy and cryotherapy techniques • Discuss the psychological basis and therapeutic uses of electrical stimulation • Examine the use of ultrasound in an athletic training setting • Explain how massage, traction, and intermittent compression can be used as therapeutic agents	6	14	Academic: RLST: 11-12.1, 11-12.2, 11-12.4, 11-12.9 WHSST: 11-12.6, 11-12.7, 11-12.8, 11-12.9 CTE Anchor: Health and Safety: 6.3, 6.7 Technical Knowledge and Skills: 10.1 Demonstration and Application: 11.1 CTE Pathway: B2.1, B2.4, B12.4
XIV.	SPORTS PSYCHOLOGY	CR	Lab/CC	Standards
	• Analyze the patient's psychological response to injury • Recognize the importance of social support for the injured athlete • Explain the relationship of stress and overtraining to the risk of injury • Describe the role of athletic trainer as counselor to the injured athlete • Compare and contrast the mental training techniques that are used to manage the psychological aspects of injury • Recognize the different mental disorders and the appropriate referral and treatment techniques	4	4	Academic: RLST: 11-12.1, 11-12.2, 11-12.4, 11-12.6, 11-12.7, 11-12.9 WHSST: 11-12.1, 11-12.2, 11-12.4, 11-12.5, 11-12.6, 11-12.7, 11-12.8, 11-12.9 CTE Anchor: Communications: 2.3 Responsibility and Flexibility: 7.3 CTE Pathway:

				B4.5, B6.4, B7.1
XV.	SPORTS PHARMACOLOGY	CR	Lab/ CC	Standards
	- Identify the various methods by which drugs can be administered - Explain the difference between administering and dispensing medication - Express legal concern for administering medications to the athletic population - Categorize drugs that can be used to: - Treat infection - Reduce inflammation - Reduce pain - Relax muscles - Treat gastrointestinal disorders - Treat colds and congestion - Control bleeding - Recognize the problem of substance abuse in the athletic population - Describe ergogenic aids used by athletes to improve performance - Discuss the use of alcohol, drugs, and tobacco by athletes - Evaluate drug testing policies and procedures, and list the different types of banned drugs	4	4	Academic: LS: 11-12.4 RSIT: 11-12.7, 11-12.9 S-IC: 5 PS: PS1.A, PS1.B CTE Anchor: Communications: 2.5 CTE Pathway: B9.1, B9.5, B10.2, B12.1, B12.4
XVI.	EMPLOYMENT LITERACY	CR	Lab/ CC	Standards
	- Identify available positions in the industry through the use of the Internet - Delineate the process for attaining national certification and state licensure for the athletic trainer - Analyze the different types of job opportunities and settings available to the athletic trainer as well as other members of the sports medicine team - Complete an application form correctly - Prepare a written resume - Participate in a simulated employment interview - Prepare a portfolio	10	0	Academic: WS: 11-12.2e, 11-12.2f, 11-12.2, 11-12.2c, 11-12.2d, 11-12.6 CTE Anchor: Communications: 2.4 Career Planning and Management: 3.1, 3.2, 3.4, 3.5 CTE Pathway: B12.2, B12.1
XVII.	PERSONAL SKILLS RELATED TO EMPLOYMENT	CR	Lab/ CC	Standards
	- Demonstrate promptness, attend class regularly, and follow absence notification procedures - 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 - List and define the four components of negligence - Compare and contrast legal concepts of liability, negligence, supervision, and assumption of risks - Differentiate between legal and ethical actions in a given scenario	3	0	Academic: RLST: 11-12.6, 11-12.7, 11-12.9 WS: 11-12.2 CTE Anchor: Responsibility and Flexibility: 7.3, 7.7 Ethics and Legal Responsibilities: 8.2, 8.3, 8.4 CTE Pathway: B12.1, B12.2
XVIII.	INTERPERSONAL SKILLS AND GROUP DYNAMICS	CR	Lab/ CC	Standards

	• 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	3	0	Academic: LS: 11-12.1, 11-12.6 CTE Anchor: 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: 9.3, 9.5 CTE Pathway: B12.2, B12.1
XIX.	THINKING AND PROBLEM SOLVING SKILLS	CR	Lab/CC	Standards
	• Utilize problem solving techniques • Demonstrate creative thinking • Discuss decision making • Demonstrate the ability to interpret information correctly	3	0	Academic: RSIT: 11-12.7 RLST: 11-12.9 CTE Anchor: Problem Solving and Critical Thinking: 5.1, 5.2, 5.3 Leadership and Teamwork: 9.2, 9.3 CTE Pathway: B12.1, B12.2, B13.5
XX.	COMMUNICATION SKILLS	CR	Lab/CC	Standards
	• 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 ability to research and retrieve information	3	0	Academic: RSIT: 11-12.1, 11-12.10 RLST: 11-12.7, 11-12.8, 11-12.9 CTE Anchor: Communications: 2.3, 2.5, 2.7, 2.8 Technology: 4.1, 4.2, 4.3 CTE Pathway: B4.5, B5.1, B13.5