Course Meeting Time: MWF 11:00-11:50am
Course Meeting Location: Johnson Center, Room 206
Instructor: Susan L. Rozzi, PhD, ATC, SCAT, Associate Professor, Department of Health and Human Performance
Office Location: 317 Silcox Physical Education & Health Center
Office Hours: Posted on office door. If you are unable to meet during my scheduled office hours, please contact me to set up an appointment. Note: Office hours are tentative.
Office Phone: 843-953-7163
Cell Phone: 843-327-7169 (please do not text or call after 9pm)
Email: rozzis@cofc.edu

Please note: I read and respond to e-mail messages only one time each day. You should not expect a response to your e-mail message for at least 48 hours. For emergency situations please call my office phone or send a text to my cell phone number.

Class On-line Management System: Hosted by OAKS
Co-requisites: ATEP 245L

Course Description
An introduction to the field of sports medicine and the athletic training profession. The course will present information on recognition, prevention, treatment/management, and applied anatomy of common and less common musculoskeletal injuries.

Learning Objectives: Upon the successful completion of this course, the student should be able to:
1. Describe the principles and concepts of body movement, including normal osteokinematics and arthrokinematics.
2. Identify the principles of conditioning and evaluate the importance of muscular strength and endurance, flexibility, and cardiovascular endurance for injury prevention.
3. Demonstrate current and accepted techniques for assessing and improving muscular strength and endurance, flexibility, and cardiovascular endurance.
4. Explain the role of and importance of nutrition (including fluid intake) in preventing and managing common musculoskeletal injuries and disorders by:
   a. Distinguishing the six classes of nutrients.
   b. Assessing the advantages and disadvantages of dietary supplements.
   c. Describing the nutritional/energy goals of pre- and post-event meals.
   d. Describing the role of fluids and available sports drinks in replacing expended energy and body fluids.
5. Explain the mechanical properties of tissue based on the stress-strain curve model.
6. Discuss the types of tissue loads that can produce stress and strain.
7. Identify and explain the various injuries to the musculotendinous unit, synovial joint, bone, and nerve tissue by detailing how mechanical loads applied to these structures produce injury.
8. Explain the normal and abnormal responses of tissue to injury by:
   a. Detailing the three phases of the healing process and classifying the physiological events that must take place during each phase relative to (i) cartilage, (ii) ligament, (iii) muscle, (iv) tendon, (v) nerve, and (vi) bone.
   b. Identifying factors that may impede the healing process.
9. Explain the ways in which pain influences injury prevention and management by:
a. Defining “pain” and discussing the various types of pain.
b. Explaining various techniques for assessing (qualifying and quantifying) pain.
c. Differentiate among the mechanisms of pain control by detailing the neurophysiology of pain.

10. Describe the role of the athletic trainer and the delivery of athletic training services within the context of the broader healthcare system and differentiate these roles and responsibilities of the athletic trainer from other pre-hospital care and hospital-based providers (ie: EMT/paramedics, nurses, physician assistant, and physicians).

11. Differentiate among the preparation, scopes of practice, and roles and responsibilities of healthcare providers and other professionals with whom athletic trainers interact and describe the protocols that govern the referral of patients to these various healthcare providers.

12. Summarize the athletic training profession's history and development and how current athletic training practice has been influenced by its past.

13. Describe the role and function of the National Athletic Trainers' Association and its influence on the profession.

14. Discuss certification, continuing education, and various employment settings for the certified athletic trainer.

15. Define evidence-based practice as it relates to athletic training clinical practice.

16. Demonstrate the ability to perform scene, primary, and secondary surveys to include:
   a. Obtaining a medical history appropriate for the patient's ability to respond.
   b. Obtaining and monitoring signs of basic body functions including pulse, blood pressure, respiration, pulse oximetry, pain, and core temperature.
   c. Differentiating between normal and abnormal physical findings (eg, pulse, blood pressure, heart and lung sounds, oxygen saturation, pain, core temperature) and the associated pathophysiology.
   d. Identify cases when rescue breathing, CPR, and/or AED use is indicated according to current accepted practice protocols.
   e. Recognizing signs and symptoms of catastrophic and emergent conditions and demonstrate appropriate referral decisions.

17. Demonstrate the ability to manage an athlete with a potentially life threatening injury/illness by:
   a. Establishing a plan for handling emergency situations.
   b. Explaining the indications, guidelines, proper techniques, and necessary supplies for removing equipment and clothing in order to access the airway, evaluate and/or stabilize an athlete's injured body part.
   c. Utilizing an automated external defibrillator (AED) according to current accepted practice protocols.
   d. Identifying the types of hemorrhage, shock, and musculoskeletal injuries and their management, including on the field treatment, off-site transportation, and referral.

18. Detail the components of a comprehensive off-the-field injury evaluation used to make an accurate clinical diagnosis.

19. Identify and explain the statutes that regulate the privacy and security of medical records and listing the components of a comprehensive medical record

20. Demonstrate the ability to prevent, identify, and manage environment related injuries and illnesses by:
   a. Explaining the various environmental factors impacting exercising individuals.
   b. Examining the problems high altitude, air pollution, sun exposure, and circadian dysrhythmia might present and explaining how they can be managed.
   c. Describing the precautions that should be taken during an impending and actual lightning storm.
d. Detailing the signs and symptoms, recommended management, and return to participation criteria for heat cramps, heat exhaustion, exertional heat stroke, hyponatremia, exertional sickling associated with sickle cell trait, rhabdomyolysis, hypothermia, and frostbite.

e. Differentiating the different methods for assessing core body temperature and explaining the role of core body temperature in differentiating between various body temperature-related illnesses.

f. Explaining the role of rapid full body cooling in the emergency management of exertional heat stroke.

21. Demonstrate accepted infectious disease control strategies by:
   a. Describing federal and state infection control regulations and guidelines, including universal precautions as mandated by the Occupational Safety and Health Administration (OSHA), for the prevention, exposure, and control of infectious diseases and discuss how they apply to the practicing of athletic training.
   b. Implementing disinfectant procedures to prevent the spread of infectious diseases and to comply with OSHA and other federal regulations.

5th Edition Educational Competencies The content of this course will in part or completely cover the following competencies from the 5th edition of the NATA Educational Competencies. For each class topic listed in the course schedule you will find a list of the competencies addressed. These competencies meet requirements set forth by the CAATE (Commission for the Accreditation of Athletic Training Education).

- AC-2 Differentiate the roles and responsibilities of the athletic trainer from other pre-hospital care and hospital-based providers, including emergency medical technicians/paramedics, nurses, physician assistants, and physicians.
- AC-4 Demonstrate the ability to perform scene, primary, and secondary surveys.
- AC-5 Obtain a medical history appropriate for the patient's ability to respond.
- AC-6 When appropriate, obtain and monitor signs of basic body functions including pulse, blood pressure, respiration, pulse oximetry, pain, and core temperature. Relate changes in vital signs to the patient's status.
- AC-7 Differentiate between normal and abnormal physical findings (eg, pulse, blood pressure, heart and lung sounds, oxygen saturation, pain, core temperature) and the associated pathophysiology.
- AC-8 Explain the indications, guidelines, proper techniques, and necessary supplies for removing equipment and clothing in order to access the airway, evaluate and/or stabilize an athlete's injured body part.
- AC-12 Identify cases when rescue breathing, CPR, and/or AED use is indicated according to current accepted practice protocols.
- AC-13 Utilize an automated external defibrillator (AED) according to current accepted practice protocols.
- AC-18 Assess oxygen saturation using a pulse oximeter and interpret the results to guide decision making.
- AC-27 Explain the role of core body temperature in differentiating between exertional heat stroke, hyponatremia, and head injury.
- AC-28 Differentiate the different methods for assessing core body temperature.
- AC-30 Explain the role of rapid full body cooling in the emergency management of exertional heat stroke.
- AC-36 Identify the signs, symptoms, interventions and, when appropriate, the return-to-participation criteria for:(AC-36d) heat illness including heat cramps, heat exhaustion, exertional heat stroke, and hyponatremia, (AC-36e) exertional sickling associated with sickle cell trait, (AC-36f) rhabdomyolysis, and (AC-36m) hypothermia, frostbite
- CE-4 Describe the principles and concepts of body movement, including normal osteokinematics and arthrokinematics
- CE-16 Recognize the signs and symptoms of catastrophic and emergent conditions and demonstrate appropriate referral decisions.
- EBP-1 Define evidence-based practice as it relates to athletic training clinical practice.
• HA-1 Describe the role of the athletic trainer and the delivery of athletic training services within the context of the broader healthcare system.
• HA-9 Identify the components that comprise a comprehensive medical record.
• HA-10 Identify and explain the statutes that regulate the privacy and security of medical records.
• HA-16 Describe federal and state infection control regulations and guidelines, including universal precautions as mandated by the Occupational Safety and Health Administration (OSHA), for the prevention, exposure, and control of infectious diseases and discuss how they apply to the practicing of athletic training.
• HA-30 Describe the role and functions of various healthcare providers and protocols that govern the referral of patients to these professionals.
• PD-1 Summarize the athletic training profession's history and development and how current athletic training practice has been influenced by its past.
• PD-2 Describe the role and function of the National Athletic Trainers' Association and its influence on the profession.
• PD-8 Differentiate among the preparation, scopes of practice, and roles and responsibilities of healthcare providers and other professionals with whom athletic trainers interact.
• PHP-7 Implement disinfectant procedures to prevent the spread of infectious diseases and to comply with Occupational Safety and Health Administration (OSHA) and other federal regulations.

Required Textbook and Readings
- Other required readings to include position statements or current literature will be posted on OAKS

Recommended Textbooks

Course Requirements

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<tr>
<th>Requirement</th>
<th>Points Assigned</th>
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<tr>
<td>Tests (3 @ 100 pts each)</td>
<td>300 pts</td>
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<tr>
<td>Pre-Class Content Assessment (12 @ 10 pts each)</td>
<td>120 pts</td>
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<tr>
<td>Unannounced Class Content Assessments (10 @ 10 pts each)</td>
<td>100 pts</td>
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<tr>
<td>Career Exploration Project</td>
<td>40 pts</td>
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<tr>
<td>Literature Article Summaries (6 @ 10 pts each)</td>
<td>60 pts</td>
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<tr>
<td>Comprehensive Final Examination</td>
<td>150 pts</td>
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<tr>
<td>CPR-BLS or Professional Rescuer Certification</td>
<td>40 pts</td>
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<tr>
<td>First Aid Certification</td>
<td>40 pts</td>
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<tr>
<td>TOTAL POINTS</td>
<td><strong>850 PTS</strong></td>
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Final Grade Calculation
Totaling the number of points you earn and dividing it by the total number of available points will calculate your final grade for this course. No other factors will be considered. The grade will be assigned according to the following table:
<table>
<thead>
<tr>
<th>Percentage</th>
<th>Grade Earned</th>
<th>Percentage</th>
<th>Grade Earned</th>
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<tbody>
<tr>
<td>90-100 %</td>
<td>A</td>
<td>70-74 %</td>
<td>C</td>
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<tr>
<td>88-89 %</td>
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<td>B-</td>
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<tr>
<td>75-77 %</td>
<td>C+</td>
<td>&lt;62 %</td>
<td>F</td>
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*IT IS IMPORTANT TO NOTE THAT ANY STUDENT DETERMINED BY THE COLLEGE OF CHARLESTON HONOR BOARD TO BE IN VIOLATION OF ANY ASPECT OF THE HONOR CODE WILL BE ASSIGNED AN "XF" AS THE FINAL GRADE IN THIS COURSE, INDICATING FAILURE OF THE COURSE DUE TO ACADEMIC DISHONESTY.

Details of Evaluation Criteria:

Tests (3 @ 100 pts ea): Three tests covering material presented in the course will be given on the dates provided on the tentative lecture schedule. Any changes in these dates will be announced and posted on OAKS. Tests will be administered using the testing feature in OAKS. Test material will be taken from lectures, readings, and assignments. Tests will involve objective questions, anatomic diagrams, short discussion and application type questions.

Pre-Class Content Assessments
Thirteen (13) content assessments covering material presented in this course will be administered on OAKS. The best twelve (12) assessment scores will be used in calculating the total points and final grade for this course. The questions in these content assessments will contain information pertaining to upcoming class discussion content (topics). These assessments are an independent assignment and must be completed independently and without assistance from any persons.

Unannounced Class Content Assessments
Thirteen (13) content assessments will be given during class meeting times over the course of the semester. These assessments will not be announced ahead of time and will only be given during class meetings. The best twelve (10) assessment scores will be used in calculating the total points and final grade for this course. The questions in these content assessments will contain information pertaining to past and current class discussion content (topics).

Career Exploration Project
Students will investigate an assigned medical or allied health career field that is part of or interacts with members of the Sports Medicine Team. The information obtained will be posted for the class on OAKS and used during an in-class discussion of the role of various medical and allied health providers.

Literature Article Summaries
Six (6) recently published journal articles from professional journals will be provided via OAKS. Working independently you will answer the questions associated with the article. These questions must be word processed, using the question sheet as your template, and submitted via the course’s OAKs dropbox by the due date and time.

CPR Certification
Students are required to complete CPR certification at the BLS (American Heart Association) or Professional Rescuer (American Red Cross) level. Students are responsible for acquiring this certification on their own and must show proof of certification in order to receive credit. This
may be turned in at any time during the semester but must be submitted before the date of the third class examination.

**First Aid Certification**

Students are required to obtain Basic First Aid certification. Students are responsible for acquiring this certification on their own and must show proof of certification in order to receive credit. This may be turned in at any time during the semester but must be submitted before the date of the third class examination.

**Comprehensive Final Examination**

This comprehensive written exam is designed to test knowledge gained by students over the entire semester and will cover all reading assignments, lecture material, and anatomy assignments. This test will be administered on the day and time stated on the College of Charleston’s final examination schedule. You must plan to take this examination on this day and time.

**Course Policies**

**Class Attendance**

Class attendance is vital to success in this course. Therefore, it is your responsibility as a student to attend all class meetings. If extreme circumstances necessitate an absence you will be held responsible for the class material covered during your absence. Quizzes missed due to unexcused absences will not be re-administered. YOU ARE RESPONSIBLE FOR ALL INFORMATION COVERED AND REFERRED TO IN CLASS. If you know you will be missing a class it is your responsibility to make arrangements with the instructor in advance of the missed class.

**Assignment Policy**

All assignments are expected to be turned in at the beginning of class time on the designated DUE DATE. A 20% deduction will be taken each calendar day the assignment is late (1 day = 20%, 2 days = 40%, etc). This includes Saturdays, Sundays, and holidays. Assignments will not be accepted more than 4 days after the assignment’s due date.

**Assessment Policy**

You will be notified at least one week in advance if there is a change in an assessment date, except for unannounced class content assessments. Please note that if you miss a scheduled assessment you will earn zero (0) points for that particular examination. No make-up examinations will be given for a missed assessment. If extreme, unpreventable and unpredictable circumstances prevent you from attending an assessment you should contact the course instructor as soon as possible. Consideration will be given on an individual case basis. If you enter class late and miss a graded assessment or assignment you will not be allowed to complete the assessment or assignment. If you know you will not be in class due to an excused absence (ie: athletic participation, professional conference, etc.) you must notify the instructor at least ten days prior to the absence.

**Technology Knowledge/Usage Policy**

This course will be administered using OAKS. All course information to include lecture notes, powerpoints, assignments and assessment tools will be posted to this site. Students are responsible for familiarizing themselves with this course management tool. Students who are unfamiliar with OAKS should arrange an appointment immediately with the help desk or the course instructor for assistance. Additionally, this class may incorporate the use of software
programs or apps used on smart phones, iPads, or laptop computers. It is the student’s responsibility to become familiar with this technology and seek assistance when needed.

**Personal Electronic Devices**  
The use of personal electronic devices such as cell phones, iPads, and laptop computers are permitted during specific class times. When not being used for note taking or a class activity these electronic devices should be turned off (not set to vibrate) and secured inside a book-bag, purse, or pocket. Students disrupting class by using personal electronic devices will be asked to leave the classroom for the remainder of the class meeting time.

**Honor Code and Academic Integrity**  
It is expected that each student in this class will conduct him or herself within the guidelines of the honor system. All academic work should be done with the highest level of honor and integrity that this institution demands. Lying, cheating, attempted cheating, and plagiarism are violations of our Honor Code that, when identified, are investigated. Each instance is examined to determine the degree of deception involved.

Incidents where the professor believes the student’s actions are clearly related more to ignorance, miscommunication, or uncertainty, can be addressed by consultation with the student. We will craft a written resolution designed to help prevent the student from repeating the error in the future. The resolution, submitted by form and signed by both the professor and the student, is forwarded to the Dean of Students and remains on file.

Cases of suspected academic dishonesty will be reported directly to the Dean of Students. A student found responsible for academic dishonesty will receive a XF in the course, indicating failure of the course due to academic dishonesty. This grade will appear on the student’s transcript for two years after which the student may petition for the X to be expunged. The student may also be placed on disciplinary probation, suspended (temporary removal) or expelled (permanent removal) from the College by the Honor Board.

It is important for students to remember that unauthorized collaboration--working together without permission-- is a form of cheating. Unless a professor specifies that students can work together on an assignment and/or test, no collaboration is permitted. Other forms of cheating include possessing or using an unauthorized study aid (such as a test from a previous semester), copying from another’s exam, fabricating data, and giving unauthorized assistance.

Remember, research conducted and/or papers written for other classes cannot be used in whole or in part for any assignment in this class without obtaining prior permission from the professor.

Students can find a complete version of the Honor Code and all related processes in the Student Handbook at [http://www.cofc.edu/studentaffairs/general_info/studenthandbook.html](http://www.cofc.edu/studentaffairs/general_info/studenthandbook.html).

**Disability Statement**  
If there is a student in this class who has a documented disability and has been approved to receive accommodations through SNAP Services, the student should please feel free to come and discuss this with me during my office hours.