COLLEGE OF CHARLESTON
ATEP 365-001 General Medical Conditions in Athletics
Fall Semester 2017

Meeting Time: TR 10:50-12:05
Meeting Location: Silcox Center Room 409
Instructor: Susan L. Rozzi, PhD, ATC, SCAT, Associate Professor
Department of Health and Human Performance
Office Location: 317 Silcox Physical Education & Health Center
Office Phone: 843.953.7163
Cell Phone: 843.327.7169 (Please do not text or call between 9pm and 7am)
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
Prerequisites: ATEP 345 and lab, BIOL 201, and acceptance into the Athletic Training Education Program, or permission of course instructor.

Course Description
This course focuses on general medical conditions by body system; their mechanism of acquisition, signs, symptoms, referral criteria and return-to-participation guidelines. Candidates explore treatment options and the body’s physiological and psychological response to pharmacological agents. Methods of identifying risk factors and preventing general medical conditions will also be discussed.

Student Learning Outcomes
1. As a result of participating in ATEP 365-001, all students will be able to explain the general therapeutic strategies for managing asthma in a physically active population as indicated by earning a B or higher on Application Scenario C.
2. As a result of participating in ATEP 365-001, all students will be able to design a therapeutic intervention plan for a common disease using prescription and nonprescription medications as indicated by earning a B or higher on the Final Medical Condition Presentation.
3. As a result of participating in ATEP 365-001, all students will be able to identify and describe the basic signs and symptoms of mental health disorders that may indicate the need for referral to a mental health care professional as indicated by earning a B or higher on Application Scenario F.

Course Objectives
Upon successful completion of the course, the student should be able to:
1. explain the etiology and prevention guidelines associated with the leading causes of sudden death during physical activity, including but not limited to: (a) cardiac arrest, (b) asthma, (c) traumatic brain injury, (d) hyponatremia, (e) exertional sickling, (f) anaphylactic shock
2. identify the signs, symptoms, interventions, and when appropriate the return to play criteria for potential life-threatening conditions such as: (a) sudden cardiac arrest, (b) exertional sickling associated with sickle cell trait, (c) rhabdomyolysis, (d) diabetic emergencies including hypoglycemia and ketoacidosis, (e) asthma attacks, (f) systemic allergic reaction, including anaphylactic shock, (g) epileptic and non-epileptic seizures, (h) shock, (i) toxic drug overdose, (j) local allergic reaction.

3. develop specific plans of care for common potential emergent conditions.

4. determine the need for, demonstrate use of, and assist a patient in the use of (when warranted): (a) a nebulizer, (b) a meter-dose inhaler, (c) glucometer, (d) auto-injectable epinephrine.

5. identify common congenital, acquired, modifiable, non-modifiable risk factors along with typical injury/illness mechanisms, and signs and symptoms for common illnesses affecting people who engage in physical activity throughout their life span.

6. explain the precautions and risk factors associated with physical activity in persons with common congenital and acquired abnormalities, disabilities, and diseases.

7. assess, interpret findings, determine participation status, and make referral decisions from a clinical examination conducted using standard techniques and procedures for the clinical examination of common conditions, illnesses, and diseases including, but not limited to:
   a. history taking (pertinent past medical history, underlying systemic disease, use of medications, patient’s perceived pain, course of condition)
   b. inspection/observation
   c. palpation
   d. cardiovascular function (including differentiation between normal and abnormal heart sounds, blood pressure, and heart rate)
   e. pulmonary function (including differentiating between normal breath sounds, percussion sounds, number and characteristics of respiration, peak expiratory flow)
   f. abdominal assessment (percussion, palpation, auscultation)
   g. gastrointestinal function (including differentiating between normal and abnormal bowel sounds)
   h. genitourinary function (urinalysis)
   i. ocular function (vision, ophthalmoscope)
   j. function of the ear, nose, and throat (including otoscopic evaluation)
   k. dermatological assessment
   l. other assessments (glucometer, temperature)
   m. functional assessment

8. conduct a clinical examination of common conditions, illnesses, and diseases by:
   a. describing the role of diagnostic imaging and testing in the diagnostic procedure,
   b. applying clinical prediction models
   c. modifying the diagnostic exam according to situation and patient demands
   d. using clinical reasoning
e. incorporating concept of differential diagnosis  
  
  f. determining when examination results warrant referral of patient  
  
  g. explaining the role of evidence in the clinical decision making process  
  
  h. determining the effectiveness and efficacy of an athletic training intervention using evidence-based practice concepts.  
  
  9. describe ways federal and state infection control regulations and guidelines for the prevention, exposure, and control of infectious diseases apply to the practice of athletic training and describe a plan to limit transmission of communicable diseases including:  
  a. accessing appropriate medical assistance on disease control  
  b. notifying medical authorities  
  c. protecting health care providers to prevent disease transmission and epidemics.  
  
  10. describe current setting-specific and activity specific rules and guidelines for managing injuries and illnesses and develop healthcare educational programs specific to the target audience.  
  
  11. describe the role of the athletic trainer and the delivery of athletic training services in the healthcare system by:  
  a. describing the role and function of various health care providers and protocols that govern the referral of patients to these professionals  
  b. differentiating among the preparation, scope of practice, and roles and responsibilities of healthcare providers and other professionals  
  c. specifying when referral of a client/patient to another healthcare provider is warranted  
  d. formulating and implementing strategies to facilitate that referral.  
  
  12. identify and describe the basic signs and symptoms of mental health disorders, and personal/social conflict that may indicate the need for referral to a mental health care professional.  
  
  13. describe how common pharmacological agents influence pain and differentiate between palliative and primary pain-control interventions.  
  
  14. explain the concepts of pharmacokinetics and the influence exercise might have on these process  
  
  15. explain the concepts of bioavailability, half-life, and bioequivalence and their relevance to the patient, the choice of medications, and the dosing schedule.  
  
  16. explain the concepts of pharmacodynamics as they relate to the mechanism of drug action and therapeutic effectiveness.  
  
  17. explain the theories and principles relating to expected physiological responses during and following therapeutic (pharmacological) intervention and how these responses vary across the lifespan.
18. explain the federal, state, and local laws, regulations, and procedures for the proper storage, disposal, transportation, dispensing, administering (when appropriate), and documentation associated with commonly used prescription and nonprescription medications.

19. design, dispense, and administer (when appropriate) therapeutic interventions using prescription and nonprescription medications by:
   a. assessing the patient and employ an electronic drug resource to identify indications, contraindication, precautions, and potential adverse reactions.
   b. identifying therapeutic drugs, supplements, and performance-enhancing substances banned by sport or workplace organizations
   c. stating the advantages and disadvantages of common routes used to administer medications
   d. positioning and preparing the patient and properly assisting and/or instructing the patient in the proper use, cleaning, and storage of drugs commonly delivered by metered dose inhalers, nebulizers, insulin pumps, or other parenteral routes.
   e. communicating with patient regarding compliance issues, drug interactions, adverse drug reactions, and sub-optimal therapy.
   f. applying the intervention, using appropriate parameters
   g. reassessing the patient to determine the immediate impact of treatment and to determine when a treatment should be progressed, regressed, or discontinued
   h. using appropriate pharmaceutical terminology for management of medications, inventory control, and reporting of all pharmacological agents.

20. explain the general therapeutic strategy for the following common diseases and conditions:
   (a) asthma, (b) diabetes, (c) hypertension, (d) infections, (e) depression, (f) GERD, (g) allergies, (h) pain, (i) inflammation, and (j) the common cold.

**Required Texts and Additional Information**
  - To access the supplemental web study guide: go to www.HumanKinetics.com/MedicalConditionsInTheAthlete and click on the third edition link next to the third edition book cover.
- Magnus and Miller. Pharmacology Application in Athletic Training. FA Davis, 2005
- All other required readings will be available online and/or are available in OAKS.
- Required videos and Internet links will also be available in OAKS.

**Evaluation Criteria**
- Application Scenarios (7 x 20 pts) = 140
- Topic Knowledge Assessments (20 x 10 pts) = 200
- Unit Content Questions (7 x 15 pts) = 105
- Examinations (2 x 100) = 200
- Medical Condition Presentation = 135
  - Reference List = 10
  - Draft Version = 25
Final Presentation = 100

Total Available Points = 780

Evaluation Criteria Details

Application Scenarios
Seven (7) real-to-life scenarios based on course content will be provided via OAKS. Working independently you will answer the questions associated with the scenario. Simply type your answers immediately after each question so that I can read the question and then your answer. You may want to bold or italicize the question or your answer. For each application scenario the question answers must be word processed, using the question sheet as your template. The document must be saved as a .pdf file and submitted via the course’s OAKS dropbox by the due date and time. Only submitted documents in .pdf format and formatted according to the template will be accepted and graded.

Topic Knowledge Assessments
For twenty (20) topics in this course you will complete a topic knowledge assessment using the Quiz feature in OAKS. Each knowledge assessment will consist of 10 to 20 questions which may be multiple choice, fill-in-the-blank, or short answer type questions. You will have only one attempt to complete each assessment as well as a limited amount of time to answer the questions. These assessments are an independent assignment and therefore must be completed without assistance from any person. You are permitted, however, to use class materials, including your textbooks and content posted in OAKS, to complete your assessment. I recommend you complete all the topic readings and associated assignments prior to attempting the assessment as you most likely WILL NOT have enough time to “look-up” answers for each of the assessment questions.

Module Content Questions
For each of the seven modules you will receive 10-15 questions related to the entire module content. Working independently you will answer the questions completely and concisely using any of the sources provided within the module. If you use outside sources (not information from texts or content posted in module) you need to provide a reference for that information. Your submitted work must be word processed, using the question sheet as your template. Simply type your answer immediately after each question so that I can read the question and then your answer. You may want to bold or italicize the question or your answer. The document must be saved as a .pdf file and submitted via the course’s OAKS dropbox by the due date and time. Only submitted documents in .pdf format and formatted according to the template will be accepted and graded. These assignments are an independent assignment and must be completed independently, without assistance from any persons.

Examinations
Two written comprehensive examinations will be given during the course of the semester. One examination will be based on contact from the first half of the semester and the other examination will be from the second half of the semester. The format for these examinations will be discussed during a class meeting.
Medical Condition Presentation
You will create an informational oral presentation on a medical condition common to the athletic or sport environment. The information contained within your presentation will be based on current published research findings and literature. Detailed information regarding this assignment will be posted in OAKS.

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:

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<th>Percentage</th>
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<th>Grade Earned</th>
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<tr>
<td>90-100 %</td>
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<td>70-74 %</td>
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<td>88-89 %</td>
<td>A-</td>
<td>68-69%</td>
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<td>85-87 %</td>
<td>B+</td>
<td>66-67%</td>
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<td>80-84%</td>
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<td>62-63%</td>
<td>D-</td>
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<td>75-77 %</td>
<td>C+</td>
<td>&lt;62%</td>
<td>F</td>
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COURSE POLICIES & ADDITIONAL INFORMATION

Class Attendance Policy
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. 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.

Assessment Policy
You will be notified at least one week in advance if there is a change in an assessment date. 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 know you will be unable to attend an assessment due to an excused absence (ie: athletic participation, professional conference, etc.) you must notify the instructor at least ten days prior to the absence.

Late Work Policy
All assigned work should be submitted by the due date and time. A 10% deduction will be taken for each 24 hour time block following the assignment’s due date and time. For example, if an
assignment is due at 11pm on October 1st then turning in the assignment any time after 11pm and before 11pm on October 2nd will result in the total points available for the assignment being reduced by 10%. If the assignment is turned in on or after October 2nd but before 11pm on October 3rd the total points available for the assignment will be reduced by 20%. Keep in mind the 24-hour blocks include Saturdays, Sundays, and holidays. Assignments will not be accepted more than five (5) 24-hour blocks after the assignment’s due date.

**You MUST Double Check**
In previous semester students in this class have uploaded the "wrong document" when uploading an assignment to a dropbox. I understand electronic files can get mixed up and errors can occur. However, you need to be very careful submitting electronic documents. After uploading a document to a dropbox you need to take a minute to make sure the uploaded document is the one you intended to submit. The dropboxes are set up for multiple submissions so if you upload the wrong document you can upload the correct one. Uploading an incorrect document is not an accepted excuse for an assignment being submitted late. I encourage you to submit all assignments far in advance of the due date and time and double check your submissions.

**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 Policy**
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.

**Academic Support Services—The Center for Student Learning**
The CSL, located on the first floor of the library, offers a wide variety of tutoring and other academic resources that support many courses offered at the College. Services include walk-in tutoring, by appointment tutoring, study strategies appointments, Peer Academic Coaching (PAC), and Supplemental Instruction (SI). All services are described and all lab schedules are posted on the CSL website [http://csl.cofc.edu/](http://csl.cofc.edu/) , or call 843.953.5635 for information.

**Accessibility Statement**
The College of Charleston is committed to providing access for all people with disabilities and will provide accommodations if notified.

- Students with a documented disability requesting accommodations in this course must be registered with the Center for Disability Services:
http://disabilityservices.cofc.edu/index.php

- Students must discuss needed accommodations within the first two days of the course start date or immediately after obtaining an access plan.

**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.