COLLEGE OF CHARLESTON
ATEP 365 General Medical Conditions in Athletics (3 credits)
Fall 2014 Academic Semester

Meeting Time: MWF 9:00-9:50
Meeting Location: Silcox Center Room 111
Instructor: Susan L. Rozzi, PhD, ATC, SCAT, Associate Professor,
Department of Health and Human Performance
Office Location: 111 Silcox Physical Education & Health Center
Office Hours: Posted on office door. If you are unable to meet during my regularly 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 9am)
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 the 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.

Learning Objectives: Upon the successful completion of this 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 WebSite
- Evolve Student Learning Resources for Cuppett/Walsh Text. Go to: http://evolve.elsevier.com/Cuppert/athlete
- Magnus and Miller. Pharmacology Application in Athletic Training. FA Davis, 2005

Suggested Additional Texts
- Mensch JM, Miller GM. The Athletic Trainers’ Guide to Psychosocial Intervention and Referral. SLACK, Inc. 2008

Evaluation Criteria
Application Scenarios (15 x 15 pts) = 225
Integration and Application Assessments (4 x 100 pts) = 400
Medical Condition Informational Packet Project
   Article Summaries (5 x 5 pts) = 25
   Reference List = 15
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>
</tr>
</thead>
<tbody>
<tr>
<td>90-100 %</td>
<td>A</td>
<td>70-74 %</td>
<td>C</td>
</tr>
<tr>
<td>88-89 %</td>
<td>A-</td>
<td>68-69%</td>
<td>C-</td>
</tr>
<tr>
<td>85-87 %</td>
<td>B+</td>
<td>66-67%</td>
<td>D+</td>
</tr>
<tr>
<td>80-84%</td>
<td>B</td>
<td>64-65%</td>
<td>D</td>
</tr>
<tr>
<td>78-79 %</td>
<td>B-</td>
<td>62-63%</td>
<td>D-</td>
</tr>
<tr>
<td>75-77 %</td>
<td>C+</td>
<td>&lt;62%</td>
<td>F</td>
</tr>
</tbody>
</table>

*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:

**Application Scenarios**
Fifteen real-to-life scenarios based on the course content will be provided over the course of the semester. Working independently students will answer the questions associated with the scenario. For each scenario the question answers must be word processed and submitted via the course’s OAKS dropbox by the due date.

**Integration and Application Assessments**
Four written Integration and Application Assessments covering materials presented in this course will be given. Three of these assessments will be administered on the dates provided on the tentative lecture schedule and the fourth will be administered on the date assigned by the College of Charleston’s final examination schedule.

**Medical Condition Informational Packet Project**
Over the course of the semester each student will create an informational packet on a medical condition common to the athletic or sport environment. The information contained within the packet must be based on current published research findings and literature. This informational packet is broken into eight parts. (1) Initially students will conduct a literature search to obtain ten topic related journal articles and submit a list of these references, formatted according to the requirements in the Journal of Athletic Training. (2) Using this reference list, students will write a summary of five of these articles by following an assigned format. To construct the bulk of the packet’s information students will (3-6) write drafts of each of the four sections of this packet. At the end of the semester students will (7) submit a revised/edited final version of the complete medical condition informational packet. In order to share their research findings with their peers, each student will (8) submit a PDF file consisting of the recommendations for practice and the
reference list. Details regarding these assignments are detailed on a handout, which will be provided in class.

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.

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 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.

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.

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.
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.