COLLEGE OF CHARLESTON
ATEP 345-01: ATHLETIC INJURY EVALUATION I (3 CREDITS)
SPRING 2016
Final Exam Date: Friday April 29, 2016 8:00-11:00 a.m.

Meeting Time: Lecture: MWF 9:00-9:50 AM
Meeting Location: Silcox Center, Room 146
Instructor: Michelle M. McLeod, PhD, ATC, SCAT, PES
Office Location: 314 Silcox Center
Office Hours: MW 11:00 a.m. – 1:00 p.m. (subject to change) or by appointment
Office Phone: 843.953.3047
Email: mcleodmm@cofc.edu
Class On-line Management System: Hosted by OAKS
Prerequisites: ATEP 245
Co-requisites: ATEP 345L

Course Description:
This course focuses on the assessment of athletic injuries occurring to the extremities of the human body. Mechanisms and characteristics of athletic injuries commonly occurring to the joints of the human extremities will be discussed. Emphasis will be placed on the components of the comprehensive orthopedic physical examination.

Course Objectives: The content of this course will in part or completely cover the following competencies from the 5th edition of the NATA Educational Competencies. Therefore, upon successful completion of this course, you should be able to:
1. demonstrate the ability to perform scene, primary, and secondary surveys. (AC-4)
2. obtain a medical history appropriate for the patient’s ability to respond. (AC-5)
3. identify the common congenital and acquired risk factors and causes of musculoskeletal injuries and common illnesses that may influence physical activity in pediatric, adolescent, adult, and aging populations. (CE-3)
4. describe the principles and concepts of body movement, including normal osteokinematics and arthrokinematics. (CE-4)
5. describe the influence of pathomechanics on function. (CE-5)
6. describe the basic principles of diagnostic imaging and testing and their role in the diagnostic process. (CE-6)
7. identify the patient’s participation restrictions (disabilities) and activity limitations (functional limitations) to determine the impact of the condition on the patient’s life. (CE-7)
8. explain the role and importance of functional outcome measures in clinical practice and patient health-related quality of life. (CE-8)
9. identify functional and patient-centered quality of life outcome measures appropriate for use in athletic training practice. (CE-9)
10. explain diagnostic accuracy concepts including reliability, sensitivity, specificity, likelihood ratios, prediction values, pre-test and post-test probabilities in the selection and interpretation of physical examination and diagnostic procedures. (CE-10)
11. explain the creation of clinical prediction rules in the diagnosis and prognosis of various clinical conditions. (CE-11)
12. apply clinical prediction rules (e.g: Ottawa Ankle Rules) during clinical examination procedures. (CE-12)
13. obtain a thorough medical history that includes the pertinent past medical history, underlying systemic disease, use of medications, the patient’s perceived pain, and the history and course of the present condition. (CE-13)
14. differentiate between an initial injury evaluation and follow-up/reassessment as a means to evaluate the efficacy of the patient's treatment/rehabilitation program, and make modifications to the patient's program as needed. (CE-14)

15. demonstrate the ability to modify the diagnostic examination process according to the demands of the situation and patient responses. (CE-15)

16. recognize the signs and symptoms of catastrophic and emergent conditions and demonstrate appropriate referral decisions. (CE-16)

17. use clinical reasoning skills to formulate an appropriate clinical diagnosis for common illness/disease and orthopedic injuries/conditions. (CE-17)

18. incorporate the concepts of differential diagnosis into the examination process. (CE-18)

19. use standard techniques and procedures for the clinical examination of common injuries, conditions, illnesses, and diseases, including but not limited to history taking, inspection/observation, palpation, functional assessment, selective tissue testing techniques/special tests. (CE-20a-e)

20. assess and interpret findings from a physical examination that is based on the patient's clinical presentation. The exam can include: assessment of posture, gait, and movement patterns, palpation, muscle function assessment, assessment of quantity and quality of osteokinematic joint motion, capsular and ligamentous stress testing, joint play (arthrokinematics), selective tissue examination techniques, and dermatological assessment. (CE-21a-g,o)

21. determine when the findings of an examination warrant referral of the patient. (CE-22)

22. define evidence-based practice as it relates to athletic training clinical practice. (EBP-1)

23. explain the role of evidence in the clinical decision making process. (EBP-2)

24. apply and interpret clinical outcomes to assess patient status, progress, and change using psychometrically sound outcome instruments. (EBP-14)

25. specify when referral of a client/patient to another healthcare provider is warranted and formulate and implement strategies to facilitate that referral. (PD-9)

26. identify modifiable/non-modifiable risk factors and mechanism for injury and illness. (PHP-3)

27. provide appropriate education regarding the condition and plan of care to the patient and appropriately discuss with others as needed and as appropriate to protect patient privacy. (PS-18)

28. compare and contrast the variations in the physiological response to injury and healing across the lifespan. (TI-5)

**Student Learning Outcomes:**

1. As a result of this course, students will be able to utilize diagnostic accuracy concepts to formulate a clinical diagnosis for common orthopedic injuries and conditions as evidenced by earning a B- or higher for their final grade.

2. As a result of this course, students will be able to define evidenced based medicine and describe its impact in the clinical decision-making process as evidenced by earning a B or higher on the Evidence Based Practice in Clinical Diagnosis Worksheet.

3. As a result of this course, students will be able to assess and interpret findings from an orthopedic physical examination as evidenced by earning a B or higher on each of the Case Study Worksheets.

**Required Texts**


Optional Supplemental Texts

<table>
<thead>
<tr>
<th>Evaluation Criteria</th>
<th>Points Possible</th>
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<tbody>
<tr>
<td>Examinations (3 x 100 pts)</td>
<td>300</td>
</tr>
<tr>
<td>Assigned Case Study Readings &amp; Worksheets (5 x 15 pts)</td>
<td>75</td>
</tr>
<tr>
<td>Evidence Based Practice in Clinical Diagnosis Worksheet</td>
<td>25</td>
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<tr>
<td>Quizzes (10 x 10 pts)</td>
<td>100</td>
</tr>
<tr>
<td>Comprehensive Final Exam (100 pts + 75 pts comprehensive)</td>
<td>175</td>
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<tr>
<td><strong>Total Points Possible</strong></td>
<td><strong>675</strong></td>
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Additional Course Credit
Students in this course may earn up to 10 additional class points (added to total points available) for participation in activities contributing to their professional development. These activities might include but are not limited to: participation in departmental and professional organizations, participation in departmental sponsored activities, participation in class activities and discussions, and participation in departmental, college, and area professional development opportunities. It is the responsibility of the student to keep track of his own participation, signed off by a faculty member or clinical preceptor, and submit an explanation of these activities by the last day of the classes in the semester (prior to the start of final examinations). Points are awarded at the discretion of the instructor based on the type of activity, time spent during the activity, and detail of the summary provided.

Final Course Grade: Totaling the number of points earned and dividing it by the total number of available points (675) will calculate/determine the final grade. The final grade for this course will be assigned based solely upon the percentage of points earned. No other factor will be considered. The grade will be assigned according to the following table:

<table>
<thead>
<tr>
<th>Grade</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>A</td>
<td>&gt;90%</td>
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<tr>
<td>A-</td>
<td>89 – 88%</td>
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<td>B+</td>
<td>87 – 85%</td>
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<tr>
<td>B</td>
<td>84 – 80%</td>
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<tr>
<td>B-</td>
<td>79 – 78%</td>
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<tr>
<td>C+</td>
<td>77 – 75%</td>
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<tr>
<td>C</td>
<td>74 – 70%</td>
</tr>
<tr>
<td>C-</td>
<td>69 – 68%</td>
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<tr>
<td>D+</td>
<td>67 – 66%</td>
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<tr>
<td>D</td>
<td>65 – 64%</td>
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<tr>
<td>D-</td>
<td>63 – 62%</td>
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<tr>
<td>F</td>
<td>&lt;62%</td>
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NOTE: The last day to withdraw with a grade of “W” for the semester is Friday, March 18th, 2016.

Details of Evaluation Criteria

Lecture Examinations:
Three written tests covering material presented in the lecture portion of the course will be given on the dates provided on the tentative lecture schedule. In addition, a final partially comprehensive examination will be given on the date assigned by the College of Charleston's final examination schedule.

Assigned Readings & Worksheets:
You will be required to complete various case-study readings relevant to topics being covered in class. After reading each case-study you will be assigned questions to be completed and submitted prior to the course meeting time on the designated due date. The aim of these assigned readings are to prepare you to engage in class discussions, gain a thorough understanding of the course content and to prepare you for hands-on
application of lecture content in the laboratory based ATEP 345L course. Assigned readings and questions will be available via OAKS.

**Evidence Based Practice in Clinical Diagnosis Worksheet:**
Evidence based practice (EBP) is increasing in importance in medical professions with the number of diagnostic techniques and interventions in the delivery of health care. It is important for clinicians to recognize diagnostic value of examination techniques in determining the presence or absence of a pathology. Students will be given an injury scenario and will be instructed to calculate and interpret diagnostic values. The aim of this worksheet is to familiarize you with concepts of EBP and increase your understanding of diagnostic values that will be presented with injury evaluation techniques.

**Quizzes:**
Throughout the course of the semester there will be 10 quizzes. These quizzes may or may not be announced ahead of time. If announced ahead of time, quizzes may be available for the student to complete via OAKS. Unannounced quizzes may be administered at the beginning of the class.

**Course Policies**

**Attendance**
You are expected 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.

**Professional Behavior:** You are expected to conduct yourself as a professional and to demonstrate respect for the course instructor and peers with behavior that is conducive to a positive learning environment. You are expected to be on time and present for each class session. Cell phones must be turned off prior to the beginning of class and stored away unless being utilized during class to complete an assignment as directed by the instructor.

**Examination Policy**
Dates of lecture topics, course assignments, and examinations are all subject to change given the nature of the course content. You will be notified at least one week in advance if there is a change in an examination date. Please note that if you miss a scheduled examination you will earn zero (0) points for that particular examination. No make-up examinations will be given for a missed examination. If extreme, unpreventable and unpredictable circumstances prevent you from attending an examination you should contact the course instructor as soon as possible. Consideration will be given on an individual case basis with appropriate documentation. If you know you will be unable to attend an examination due to an excused absence (ie: athletic participation, artistic performances, jury duty, professional conference, etc.) you must notify the instructor a minimum of least ten days prior to the absence or as soon as possible.

**Late Work Policy**
All assigned work must be turned in at the beginning of class (or by the assigned due time for assignments submitted electronically) on the respective due date. Work submitted past this time (even on the due date) will have 10 percent of the total available points deducted for that day and for each subsequent calendar day, including weekend and holiday days.

**Required Technology**
1. Internet
2. OAKS (all features including quizzes, dropbox)
3. Microsoft PowerPoint, Excel, Word
4. Google Drive
All the technology listed above can be accessed in the College of Charleston computer labs throughout campus. If you do not know how to use any of these computer applications you should arrange an appointment with the course instructor for tutoring.

**Honor Code and Academic Integrity:** It is expected you will conduct yourself within the guidelines of the honor system. (See 2015-2016 Student Handbook) All academic work should be done with the high level of honesty and integrity that this institution demands. The student handbook is a guide to your responsibilities and rights as a student. If you are not familiar with the document, please take the time to review the information contained within the handbook.

Incidents where your actions are determined by the instructor to be related more to a misunderstanding rather than a misjudgment will be handled as a Class 3 Honor Code Violation. An intervention designed to help prevent you from repeating the error will be given to you. The intervention, submitted by form and signed both by the instructor and yourself, will be forwarded to the Dean of Students and placed in the your student file.

Cases of suspected academic dishonesty will be reported directly by the instructor and/or others having knowledge of the incident to the Dean of Students as a Class 1 or Class 2 Honor Code Violation. If the Honor Board finds you responsible for academic dishonesty you will receive a XF in the course, indicating failure of the course due to academic dishonesty. This grade will appear on your transcript for two years after which you may petition for the X to be expunged. You may also be placed on disciplinary probation, suspended (temporary removal) or expelled (permanent removal) from the College by the Honor Board.

You should be aware that unauthorized collaboration--working together without permission-- is a form of cheating. Unless the instructor specifies that students can work together on an assignment, quiz and/or test, no collaboration during the completion of the assignment is permitted. Other forms of cheating include possessing or using an unauthorized study aid (which could include accessing information via a cell phone or computer, or using unauthorized resources during quizzes or exams), copying from others’ exams, plagiarism, and giving unauthorized assistance.

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 instructor.

**Disability Statement:** This College abides by section 504 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act that stipulates no student shall be denied access to an education “solely by reason of a handicap.” Disabilities covered by law include, but are not limited to, learning disabilities and hearing, sight or mobility impairments. If you have a documented disability that may have some impact on your work in this class and for which you may require accommodations, please see an administrator at the Center of Disability Services, 843.953.1431 or me so that such accommodation may be arranged. If there is a student in this class who has a documented disability and has been approved to receive accommodations through SNAP Services, please set up an appointment to discuss accommodations with me.