

**George Mason University**  
**College of Education and Human Development**  
**Athletic Training Education Program**

ATEP 560 - 002 Upper Body Therapeutic Interventions  
3 credits, Spring 2017  
M/W-7:30-8:45 AM-214 Freedom Center Science & Technology Campus

**Faculty**

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**Prerequisites/Corequisites**

Pre-requisites: Formal admission to Professional Masters ATEP and a grade of B- or better in the following courses: ATEP 510, ATEP 520, ATEP 530, ATEP 540, ATEP 545, ATEP 550, ATEP 555

Co-requisites: ATEP 565 and ATEP 566

**COURSE DESCRIPTION**

Utilizes an integrated approach to therapeutic interventions including modalities and rehabilitation in the treatment of upper body, head and neck injuries and conditions. Includes development, implementation, and evaluation of treatment plans for upper body, head and neck injuries.

**COURSE OVERVIEW**

Not Applicable

**COURSE DELIVERY METHOD**

Face-to-face

**LEARNER OUTCOMES OR OBJECTIVES**

This course is designed to enable students to do the following:

1. Appraise the healing process and incorporate therapeutic interventions suitable to each phase;
2. Design rehabilitative plans specific to upper body, neck and head injuries;
3. Develop long and short-term rehabilitative goals appropriate for specific upper body, neck and head injuries;
4. Choose appropriate therapeutic interventions for upper body, neck and head injuries;
5. Construct therapeutic exercises used for specific upper body, neck and head injuries;
6. Identify return to sport criteria and testing for each joint of the upper body, neck and head; and
7. Assess abnormal posture patterns.

**PROFESSIONAL STANDARDS**

The course meets Commission on Accreditation of Athletic Training Education (CAATE) competencies and proficiencies in one or more of the following content areas: evidence-based

practice, prevention and health promotion, clinical examination and diagnosis, acute care of injury and illness, therapeutic interventions, psychosocial strategies and referral, healthcare administration, professional development and responsibility.

## REQUIRED TEXTS

1. Prentice, W. (2015). *Rehabilitation Techniques for Sports Medicine and Athletic Training*. (6<sup>th</sup> ed.). Slack Incorporated.
2. Knight K., Draper D. (2012). *Therapeutic Modalities: The Art and Science*. Lippincott, Williams & Wilkins.
3. Additional readings as assigned via Blackboard.

## COURSE PERFORMANCE EVALUATION

Students are expected to submit all assignments on time in the manner outlined by the instructor (e.g., Blackboard, Tk20, hard copy). Students will be evaluated on content standards (knowledge gained). Content standards will be assessed via projects, written quizzes and exams. Performance will be assessed through completion of class activities.

- **Assignments and/or Examinations**

### Article Review

Throughout the semester you will be assigned one article for review. You will write a reflective summary that is typed, single spaced with your first/last name, course number and date listed at the top of the page. Review should not exceed two pages in length. An outline describing the information to be included in article review will be provided.

### Quizzes

Quizzes will be given periodically during the first 10 minutes of class and will be announced in the preceding class meeting. This will be a brief multiple choice and true-false assessment of your knowledge from the readings and class lectures. If you are not present before the instructor is done handing out the quiz, you will be considered late and will not be allowed to complete the quiz.

### Examinations

Five examinations, including a comprehensive final exam, will be administered in class. The format of these examinations may be multiple choice, true/false, short answer, long answer, matching, essay and fill in the blank type questions. Each of the examinations will test the material covered in the assigned readings, discussions and during the prior class meetings.

### Case Study

For this assignment, you will be required to write your own case study report. You choose your own case from this semester's experiences. The case study must involve the upper extremity, thorax, head and/or spine (unless approved by instructor). The format of this paper will coincide with *AMA* guidelines. This assignment should be of a length, quality, and style that emulates a case study article found a peer-review scholarly medical journal (for example: *Journal of Athletic Training, Athletic Therapy Today, American Journal of Sports Medicine, Medicine and Science in Sports and Exercise, Journal of Sports Rehabilitation, JAMA*). An outline for the format of the case study will be provided.

### Evidence-Based Medicine (EBM) Assignment

Using an evidence-based practice format, you will examine the current literature to critique an assessment technique (test) of your choice and synthesize this information into a clinical appraisal of the test (CAT). See included directions.

### Objectives

On completion of the assignment you should have:

1. Improved your internet (Pubmed) searching skills for relevant evidence
2. Gained practice and skill in critically appraising an original research paper
3. Learned how to apply evidence to clinical practice

This assignment assesses your ability to find evidence and critically review a paper using the strategies that you have learned in the Foundation courses.

### **What is required?**

You are required to answer **the** clinical question. The questions cover five EBM themes:

1. Diagnosis
2. Intervention
3. Prognosis
4. Systematic review/Meta-analysis
5. Harm/Risk

You are required to do an EBM search and identify **ONE original (research) paper** relevant to the clinical question below.

### **Clinical question:**

#### **Diagnosis**

- What is the diagnostic accuracy the rectal thermometry for acute exertional heat illness?

#### **Intervention**

- What is the most effective treatment for pediatric patients diagnosed with acute exertional heat illness?

#### **Prognosis**

- What are the outcomes of pediatric patients receiving ice bath for acute exertional heat illness?

#### **Systematic review**

- Is rectal thermometry and ice bath combined better than ice bath alone for pediatric patients suffering from acute exertional heat illness?

#### **Harm/Risk**

- What risk factors are associated with increased mortality pediatric patients suffering from acute exertional heat illness?

### **Format of assignment**

#### ***Front cover:***

1. Ensure that your name, date and class number/title appear on the front cover (first page).
2. Also include the clinical question you have selected and the title of the paper you have selected to review.

#### ***Presentation***

- Begin by creating a brief **real or hypothetical scenario** where the clinical question you selected may be relevant.
- The assignment requires that you **answer a series of EBM questions** on study types that were covered in the Foundations courses. The nature of these questions depends on the type of study you have selected, e.g. diagnosis or prognosis.
- You should also review your Foundations course materials and readings for examples of what kind of responses are expected of you.

#### ***Original paper***

- **Remember to include a copy of your selected paper/manuscript together with your assignment.** (Tip: it is best to save the paper you download in .pdf (Acrobat) rather than .html format)

#### **Assessment**

- You will be rewarded for your ability to create a **relevant real or hypothetical scenario** related to your chosen question, and for your ability to relate the selected paper to this scenario.
- You will be rewarded for your ability to identify a **relevant original paper** on the topic, i.e. to search and identify the **most** relevant paper. In your presentation indicate your **search strategy**, including:

1. Your PICO question,
2. Search terms and strategy you used,
3. Number of relevant articles you found using different search terms, and
4. Why you chose to review the paper you selected, instead of any others.

The majority of the grades will be awarded for your critique of the paper. You are asked to record a "yes", "no" or "can't tell" to most of the questions, followed by a short explanation for your selected response. A number of italicized prompts are given after each question. These are designed to remind you why the question is important.

### Grading

The table below indicates the relative points placed on individual components of the assignment in general. There may be modifications made based on the clinical question/type of study chosen.

Section	Points
Scenario	5
Structured clinical (PICO) question	10
Search strategy and ability of article identified to answer clinical question	10
Are the results valid?	10
Are the results important?	20
Will the results help me in caring for my patient?	20
Clinical bottom line	15
Presentation (format followed, length of responses, spelling, grammar, neatness, etc)	10
<b>TOTAL</b>	<b>100</b>

**Due date:** The assignment has to be completed and handed in on or before the *(May 3, 2017) (5pm)*. Assignments handed in after the deadline will automatically get a grade of zero.

- **Other Requirements**

#### Class Participation

Attending, being prompt, and active participation are important components of this course. Therefore, students will lose credit for not attending and contributing to the class. ***An unexcused absence will result in a 1 point reduction of the student's final grade. Each additional late arrival will result in a 0.5 point reduction of the student's final grade.*** If a student arrives more than 20 minutes after the beginning of class, it will be recorded as an unexcused absent even if the student attends the class. Attendance will be recorded at the beginning of class.

- **Grading**

ASSESSMENT	NUMBER	POINTS EACH	POINTS TOTAL
Class Participation & Quizzes	Variable	Variable	50
Article Review	1	25	25
Exams	4	50	200
Case Study	1	50	50
Evidence-Based Medicine (EBM) Assignment	1	50-completion of Fall-16 100	150
Comprehensive Final Exam	1	100	100
<b>TOTAL</b>			<b>575</b>

### Grading Scale

The student's final letter grade will be earned based on the following scale:

- A: (93%)
- A-: (90%)
- B+: (87%)
- B: (83%)
- B-: (80%)
- C+: (77%)
- C: (73%)
- F: (<70%)

**GRADING**

Every attempt will be made to grade and return assignments in a timely manner to provide students with constructive feedback. To provide students the opportunity to fully assess the feedback provided on graded assignments, the professor will be happy to answer any questions at the next class period following the return of the assignments or during the professor's office hours. The professor acknowledges the passion with regards to grades, but unprofessional and uncivil behavior either in person or through other modes of communication will not be tolerated.

**NAME**

Your name **MUST** be on your papers/assignments when you turn them in. Failure to put your name will result in a 0 for the assignment.

**MAKE UP WORK**

Students who are absent or who arrive late without an official university or a medical doctor's excuse will not be permitted to participate in the class activities for credit the day of the absence or tardy event. There will be no make-up quizzes or exams unless an excused absence has been warranted. Students who miss an examination, quiz or other class activity because of an excused absence must complete the assignment ***within a week of the excused absence***. It is the student's obligation to pursue any make-up work.

**LATE ASSIGNMENTS**

All work is due at the beginning of class time on the indicated day. **NO LATE WORK WILL BE ACCEPTED AND WILL RESULT IN A 0 GRADE!!!**

**PROFESSIONAL DISPOSITIONS**

Students are expected to exhibit professional behaviors and dispositions at all times.

**CLASS SCHEDULE**

Day	Date	Topic	Reading	Assignments Due
1	Jan 23	Course Introduction		
2	Jan 25	Healing Process Review Review of Rehab Principles	Ch 1, 2	
3	Jan 30	Review of Rehab Principles	Ch 3, 4	

4	Feb 1	Posture and Gait Analysis of REAL Patient	Handouts	
5	Feb 6	Shoulder and Upper Arm	Ch 17	
6	Feb 8	Shoulder and Upper Arm	Ch 17	Fall EBM CAT
7	Feb 13	Shoulder and Upper Arm	Ch 17	
<b>8</b>	<b>Feb 15</b>	<b>Written Examination # 1</b>		
9	Feb 20	Elbow and Arm	Ch 18	
10	Feb 22	Elbow and Arm	Ch 18	
11	Feb 27	Elbow and Arm	Ch 18	
12	Mar 1	Review		
<b>13</b>	<b>Mar 6</b>	<b>Written Examination #2</b>		
14	Mar 8	Wrist and Hand	Ch 19	
15	Mar 13	Spring Break		
16	Mar 15	Spring Break		
17	Mar 20	Wrist and Hand	Ch 19	
18	Mar 22	Wrist and Hand	Ch 19	Case study Proposal
19	Mar 27	Wrist and Hand/Review		
<b>20</b>	<b>Mar 29</b>	<b>Written Examination #3</b>		
21	Apr 3	Head and Face	Handouts	Article Review
22	Apr 5	Cervical Spine	Ch 24	
23	Apr 10	Cervical Spine	Ch 24	
24	Apr 12	Cervical Spine	Ch 24	
25	Apr 17	Thoracic Spine	Ch 24	
26	Apr 19	Thoracic Spine/Review		
<b>27</b>	<b>Apr 24</b>	<b>Written Examination #4</b>		
28	Apr 26	Rehab Design & Review- whole body		Case Study Due
29	May 1	Rehab Design & Review-whole body		
30	May 3	<b>Review</b>		EBM CAT
<b>31</b>	<b>May 10</b>	<b>Final Examination (Cumulative) 7:30am-10:15am</b>		

Note: Faculty reserves the right to alter the schedule as necessary, with notification to students.

Template Revision Date: 11/14/16

## CORE VALUES COMMITMENT

The College of Education and Human Development is committed to collaboration, ethical leadership, innovation, research-based practice, and social justice. Students are expected to adhere to these principles: <http://cehd.gmu.edu/values/>.

## GMU POLICIES AND RESOURCES FOR STUDENTS

### *Policies*

- Students must adhere to the guidelines of the Mason Honor Code (see <http://oai.gmu.edu/the-mason-honor-code/>).
- Students must follow the university policy for Responsible Use of Computing (see <http://universitypolicy.gmu.edu/policies/responsible-use-of-computing/>).
- Students are responsible for the content of university communications sent to their Mason email account and are required to activate their account and check it regularly. All communication from the university, college, school, and program will be sent to students **solely** through their Mason email account.
- Students with disabilities who seek accommodations in a course must be registered with George Mason University Disability Services. Approved accommodations will begin at the time the written letter from Disability Services is received by the instructor (see <http://ods.gmu.edu/>).
- Students must follow the university policy stating that all sound emitting devices shall be silenced during class unless otherwise authorized by the instructor.

### *Campus Resources*

- Support for submission of assignments to Tk20 should be directed to [tk20help@gmu.edu](mailto:tk20help@gmu.edu) or <https://cehd.gmu.edu/aero/tk20>. Questions or concerns regarding use of Blackboard should be directed to <http://coursessupport.gmu.edu/>.
- The Writing Center provides a variety of resources and services (e.g., tutoring, workshops, writing guides, handbooks) intended to support students as they work to construct and share knowledge through writing (see <http://writingcenter.gmu.edu/>).
- The Counseling and Psychological Services (CAPS) staff consists of professional counseling and clinical psychologists, social workers, and counselors who offer a wide range of services (e.g., individual and group counseling, workshops and outreach programs) to enhance students' personal experience and academic performance (see <http://caps.gmu.edu/>).

- The Student Support & Advocacy Center staff helps students develop and maintain healthy lifestyles through confidential one-on-one support as well as through interactive programs and resources. Some of the topics they address are healthy relationships, stress management, nutrition, sexual assault, drug and alcohol use, and sexual health (see <http://ssac.gmu.edu/>). Students in need of these services may contact the office by phone at 703-993-3686. Concerned students, faculty and staff may also make a referral to express concern for the safety or well-being of a Mason student or the community by going to <http://ssac.gmu.edu/make-a-referral/>.

**For additional information on the College of Education and Human Development, please visit our website <https://cehd.gmu.edu/>.**

## **ATTENDANCE**

Students are expected to be on time, attend all class meetings and be prepared for in class assignments and projects. Excused absences include the following: illness (must bring a receipt or note from a doctor), family death, athletic/academic event (contact instructor in advance), and others at the discretion of the instructor. For known upcoming absences, students must contact the instructor at least one week in advance to the missed class to make up work. In the case of illness or some other unforeseen absence, the student must contact the instructor via e-mail or telephone. At the next attended class meeting the student will discuss material that is to be completed. ***Students will have one week from the excused absence to complete any missed assignments.*** It is the student's obligation to pursue any make-up work.

## **TECHNOLOGY USE DURING CLASS**

As per GMU policy, all sound emitting technology is required to be turned off during the class meeting time. Additionally, *no laptop computers* will be permitted for use during class time; the exceptions are for use during presentations/projects, and technology deemed as necessary by the Office of Disability Services. Students utilizing various technology devices during class will be asked to leave class and will not be permitted to complete course work or receive any points for assignments that day.

## **E-MAIL CORRESPONDENCE**

Only messages that originate from a George Mason University address will be accepted.

Please note that e-mail is a wonderful tool for brief communication of ancillary matters, but is a poor substitute for in-person discussion of detailed matters. Therefore, to make communication more effective, e-mail correspondence from students should be limited to brief clarification of matters related to the class schedule, to receive confirmation of receipt of an assignment, to schedule a meeting, to notify the instructor of problems accessing materials on the course website, or to notify the instructor of an anticipated or unanticipated absence (to be followed by in-person discussion prior to or following the class meeting time). All other communication including clarification of information presented in lecture, questions regarding assignments, questions

regarding grades, and all other matters should be addressed with the instructor in-person during office hours or during a scheduled meeting.

As a future health care practitioner, the ability to present yourself and communicate in a professional manner is essential, including the use of e-mail. The following is an appropriate professional format that should be followed for this class, as well as any other instructors/ACIs:

*(Beginning salutation) Dear Dr./Mr./Mrs. Last Name*

*(Text body) I have a question regarding...*

*(Ending Salutation) Regards/Respectfully/Sincerely,*

*(Your name) First and Last Name*