GEORGE MASON UNIVERSITY School of Recreation, Health, and Tourism

ATEP 325 – C01 — Athletic Training Foundations (3) Summer 2016

DAY/TIME: Online: June 27-July LOCATION: BRH 148 August 1st-2nd, 8-12th

 31^{st}

Face to Face:

-August 1st & 2nd 9am-

3pm

-August 8-12th 9am-

12pm

PROFESSOR: Dr. Amanda M. EMAIL aalleni@gmu.edu

Caswell, PhD, LAT, ADDRESS:

ATC

OFFICE LOCATION: BRH 208D PHONE 703-993-9914

NUMBER:

OFFICE HOURS: Times by Appointment FAX NUMBER: 703-993-2025

PREREQUISITES/COREQUISITES

Prerequisites: Admission to the Master of Science in Athletic Training program and a B- or greater in the

following courses:

Co-requisites: ATEP 310, 320

COURSE DESCRIPTION

Investigates the knowledge, skill and professional foundations of the athletic training. Emphasizes is placed on the role of the athletic trainer as a member of the health care system by decision-making through evidence-based practice and foundational skills including fitting protective equipment and devices, and prophylactic preventative taping.

COURSE OBJECTIVES

At the completion of this course the student will be able to:

- 1. Identify significant historical events in the athletic training profession,
- 2. Describe certification requirements for athletic training
- 3. Explain the practice domains of athletic training,
- 4. Describe the role of evidence based practice in health care,
- 5. List the five steps of evidence based practice,
- 6. Solve a clinical question through evidence assessment,
- 7. Select appropriate athletic taping, protective devices, or braces,
- 8. Apply prophylactic preventative athletic tape, protective devices, and braces,
- 9. Identify rules and requirements specific to
- 10. sport or activity for athletic taping, protective devices, braces, etc.,
- 11. Design, fit, and apply custom protective devices.

ACCREDITATION 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.

NATURE OF COURSE DELIVERY

Hybrid:

June 27th – July 31st: 100% on-line via Blackboard.

August 1st-2nd, 8-12th: Face to Face.

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 before the course meeting 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.

MEDICAL PROFESSIONALISM

It is critical each student conduct themselves in an appropriate manner and decorum fitting of a health care provider. Making light of injuries, conditions, or illnesses that is not respectful to the class, instructor, or patient study will not be tolerated. Submission of documents or assignments should not include personal information and comply with Health Insurance Portability & Accountability Act (HIPPA) regulations.

E-MAIL CORRESPONDENCE

Only messages that originate from a George Mason University address will be accepted. The following is an appropriate professional format:

Dear Dr. Caswell; (Beginning salutation)

I am looking forward to your class. (*Text body*)

Regards, (Ending Salutation)

First Name Last Name (Your name)

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*, *Smart Phones*, *or other technology* 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.

REQUIRED READINGS

- 1) Raab, S. & Craig, D. (2016). Evidence-Based Practice in Athletic Training. Human Kinetics.
- 2) Beam, J. (2006). Orthopedic Tapping, Wrapping, Bracing and Padding. F.A. Davis Publishers.

RECOMMENDED READING

Prentice, W.E. (2014). *Arnheim's Principles of Athletic Training: A Competency-based Approach*, 15th Edition. McGraw Hill Publishers.

EVALUATION

Assignments

There are a variety of assignments that will be disbursed throughout the course. Directions, content and grading information will be provided as the assignments are included in the on-line modules and in class.

| Description | Due Date | Points |
|------------------------------|----------|--------|
| Video Introduction | 6-28 | 10 |
| Sci Tech Scavenger Hunt | 8-11 | 10 |
| NATA scavenger hunt | 7-5 | 10 |
| BOC scavenger hunt | 7-5 | 10 |
| CAATE website scavenger hunt | 7-5 | 10 |
| CITI Training | 7-22 | 10 |

Lab Practical Exam

Two assessments of various taping related psychomotor skills will be administered throughout the semester. The skills practiced in class will be assessed in a live practical examination format. This is a real time examination that will require the student to demonstrate various taping, wrapping and strapping techniques. Students will be randomly scheduled for testing.

Ouizzes

The Course Calendar indicates a *Quiz* in the assessment column on the days required. There are two types of quizzes for this course:

Reading Material Quiz: A quiz will be given for the required reading and on-line module material. This will be a brief multiple choice and true-false assessment of your knowledge from the required material. Taping Practical Quiz: One taping/wrapping technique from the previous class will be selected and the student will have to perform the entire technique.

Evidence Based Practice Discussion

The student will review each EBP Presentation located in the Discussion Board section of Blackboard. A minimum of one thoughtful question will be posted in the discussion for each presentation (due 7-26, 5pm).

Evidence Based Practice (EBP) Project

Student will develop and answer a clinical question by performing an evidence-based medicine search to identify an original research paper for critical review. The student will present a clinical scenario and then relate the evidence to this clinical case. See included directions.

This course will be graded on a point system, with a total of 600 possible points.

| ASSESSMENT METHOD | NUMBER | POINTS EACH | POINTS TOTAL |
|------------------------------------|--------|----------------|-----------------|
| Evidence Based Practice Project | 1 | 100 | 100 |
| Evidence Based Practice Discussion | 1 | 50 | 50 |
| Quizzes | 20 | 5 | 100 |
| Laboratory Assessments | 2 | 100 | 200 |
| Assignments | 6 | Varies | 60 |
| TOTAL | _ | _ | 510 |

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 first and last name MUST be on your papers 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 will be <u>no</u> 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!!!

TENTATIVE COURSE SCHEDULE

| Week | TENTATIVE TOPIC | ASSIGNMENT |
|------------------------|---|---|
| June - 6-27 & 28 | LECTURE: Introduction to Course and Athletic Training | Pren pg 5; Start @ Sports Medicine and Athletic Training, Stop @ Growth of Professional Sports Medicine Organizations 6-28: Video Introduction Due |
| 6-29 | LECTURE: History of Athletic Training and Education | Pren pg 3-5 (Stop @ Sports Medicine and Athletic Training) |
| 6-30 | LECTURE: Tearing Tape | Pren Pg 222-223 Tearing Tape section only Quiz |
| 7-1 | LECTURE: Roles, Responsibilities and Professional Behaviors of the ATC ,Athletic Training Employment and Education Requirements | Pren Pg 7 (start @ Employment Settings) -20 (stop @ The Importance of Engaging), 24 (start @ Professional Behaviors) – 28 (stop @ Referring the Patient), 31-36 Quiz |
| 7-5 & 6 | LECTURE: Introduction to Evidence Based Practice and Models | Pren Pg 20-24 (stop @ Professional Behaviors) Raab Chp 1 Quiz 7-5 Assignments Due: NATA/BOC/CAATE Scavenger Hunts |
| 7-7 | LECTURE: Steps in Evidence-Based Practice Research | Raab Chp 2 Quiz |
| 7-8 | LECTURE: Research Evaluation | Raab Chp 3 Quiz |
| 7-11 | LECTURE: Diagnostic Research | Raab Chp 4 Quiz |
| 7-12 | LECTURE: Prognostic Research | Raab Chp 5 Quiz |
| 7-13 | LECTURE: Systematic Review and Meta-Analyses | Raab Chp 6 Quiz |
| 7-14 | LECTURE: Evidence-Based Clinical Practice | Raab Chp 7 Quiz |
| 7-15 | LECTURE: Overview of Outcome Measures | Raab Chp 8 Quiz |
| 7-18 | LECTURE: Quatitative Research | Raab Chp 9 Quiz |

| 7-19 | LECTURE: Qualitative Studies | Raab Chp 10 Quiz |
|--------------------|--|--|
| 7-20 | LECTURE: Research Ethics | Raab Chp 11 Quiz |
| 7-21 & 22 | HSRB CITI Training | Submit Certificate of Completion |
| 7-26 | Review and post questions to EBP presentations | Due by 11:59pm |
| 7-27 | Authors answer questions from EBP presentations | Due by 5pm |
| 7-28 | LECTURE: Protective Equipment | Pren. pg 181-204 (stop at Construction of Protective and Supportive Devices) Quiz |
| 7-29 | LECTURE: Taping, wrapping and bracing introduction | Beam pg 1-19 (stop @ Custom-made Pads), pg 25-26 <i>Quiz</i> |
| 8-1 9am- 3pm | LAB: Arch & toe taping/strapping; Equipment Fitting; Introduction to Science and Technology Campus | Beam pg 39-66, 75-81 <i>Quiz</i> |
| 8-2 9am- 3pm | LAB: Ankle Taping, Achilles Tendon-lower leg /Strapping/bracing | Beam pg 84-94, 99- 100, 105-107 (stop at Soft Cast), 126-133 (stop at Dorsal Bridge), 136-139 (stop at Bracing Techniques), 199-122 Taping Practical Quiz |
| 8-8 | LAB PRACTICAL EXAM: 4 tape jobs from 8-1&2 classes LAB: Knee- Knee Thigh, Hip-Pelvis Strapping/Wrapping | Beam pg 148-150, 161-163, 167, 174- 175, 194-198, 200- 212 EXAM: 4 tape jobs from 8-1 & 8-2 class |
| 8-9 | LAB: Shoulder-Upper Arm-Elbow Taping/Wrapping Strapping | Beam pg 227- 242(Stop at Figure-of- Eight), 262-269, 274- 279 Taping Practical Quiz |
| 8-10 | LAB: Wrist -Hand-Finger-Thumb Tapping/Wrapping/Strapping | Beam 301-309, 313-316, 321-324, 336-342, 344-347 <i>Taping Practical Quiz</i> |
| 8-11 | Protective Equipment Fitting | Taping Practical Quiz Sci Tech Scavenger Hunt |
| 8-12 | LAB PRACTICAL EXAM: 4 tape jobs from 8-8 to 8-1 | 0 |

Student Expectations

- Students must adhere to the guidelines of the George Mason University Honor Code [See http://oai.gmu.edu/the-mason-honor-code/].
- Students with disabilities who seek accommodations in a course must be registered with the George Mason University Office of Disability Services (ODS) and inform their instructor, in writing, at the beginning of the semester [See http://ods.gmu.edu/].
- 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 George Mason University 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 must follow the university policy stating that all sound emitting devices shall be turned off during class unless otherwise authorized by the instructor.

Campus Resources

- The George Mason University 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 George Mason University Writing Center staff 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/].
- For additional information on the College of Education and Human Development, School of Recreation, Health, and Tourism, please visit our website [See http://rht.gmu.edu].

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

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.



EVIDENCE -BASED MEDICINE (EBM) ASSIGNMENT DIRECTIONS

Evidence-based Medicine (EBM) Assignment

Evidence-based medicine is the practice of medicine based on the best available evidence. Health professionals caring for children and adults need to be aware of the evidence about the benefits and harms of preventive methods, diagnostic strategies, treatments, and rehabilitation techniques in order to provide optimal care to their patients.

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 throughout 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** <u>original (research) paper</u> 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, | 10 |
| etc) | |
| TOTAL | 100 |

Due date: The assignment has to be completed and handed in on or before the (*July 25th*, 2016 11:59pm). Assignments handed in after the deadline will automatically get a grade of zero.