# GEORGE MASON UNIVERSITY School of Recreation, Health and Tourism

ATEP 255-01 — Clinical Techniques 1: Physical Assessment of the Lower Body (3 credits) Fall 2011

DAY/TIME: TR 10:30 – 11:45 AM LOCATION: PW-OCC (ATEP Lab)
INSTRUCTOR: Elizabeth Codjoe EMAIL ADDRESS: ecodjoe@gmu.edu
OFFICE LOCATION: Bull Run Hall 210A PHONE NUMBER: 703-993-4389
OFFICE HOURS: T, R, by appointment FAX NUMBER: 703-993-2025

#### PRE/CO-REQUISITES

**Pre-requisites:** Formal acceptance to the professional phase of the ATEP; ATEP 150, 180; BIOL 124, 125;

HEAL 110; PHED 300

**Co-requisite:** Concurrently enrolled in ATEP 250 and 256.

### **COURSE DESCRIPTION**

An analysis of physical assessment clinical techniques of the lower body (including the lower extremity and abdomen).

## **COURSE OBJECTIVES**

At the completion of this course students should be able to complete the following:

- 1. Conduct a thorough historical inquiry relative to an injury to the lower extremity, torso, and thorax
- 2. Apply skills in communicating clinical findings to other medical personnel
- 3. Demonstrate palpation techniques of human surface anatomy, specifically boney landmarks and soft tissue conformations
- 4. Conduct proper manual muscle testing, range of motion, joint stability, and neurological testing techniques
- 5. Synthesize information obtained in a patient physical assessment to determine the appropriate patient diagnosis and management strategy
- 6. Employ proper medical documentation procedures
- 7. Effectively establish lines of communication to elicit and convey information about the patient's status; and
- 8. Maintain patient confidentiality

#### **COURSE OVERVIEW**

This clinical techniques laboratory course will be taught in the Athletic Training Clinical Simulation Laboratory. The focus of this course is to develop the cognitive and psychomotor competencies necessary for the safe, effective, and evidenced-based application of therapeutic modalities in a physically active patient population.

## 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, 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. It is the student's obligation to pursue any make-up work.

#### Dress

During the laboratory section of the course, students will be asked to wear appropriate clothing to expose various body parts for the purposes of practicing the application of various emergency medical procedures. Shorts/skorts will be required will be required when topics focus on the lower body.

#### **Special Requirements**

This course requires a laboratory fee of \$100.00 payable to George Mason University.

# **Accreditation Standards**

Upon completion of this course, students will meet the following Commission on Accreditation of Athletic Training Education (CAATE) competencies:

| Code    | Competency  |  |  |
|---------|---|--|--|
| DI-C1   | Demonstrate knowledge of the systems of the human body.   |  |  |
| DI-C2   | Describe the anatomical and physiological growth and development characteristics as well as   |  |  |
|         | gender differences across the lifespan.   |  |  |
| DI-C3   | Describe the physiological and psychological effects of physical activity and their impact on   |  |  |
|         | performance.  |  |  |
| DI-C4   | Explain directional terms and cardinal planes used to describe the body and the relationship  |  |  |
|         | of its parts.   |  |  |
| DI-C5   | Describe the principles and concepts of body movement including functional classification of  |  |  |
|         | joints, arthrokinematics, normal ranges of joint motion, joint action terminology, and muscle   |  |  |
|         | groups responsible for joint actions (prime movers, synergists), skeletal muscle contraction,   |  |  |
|         | and kinesthesis/proprioception.   |  |  |
| DI-C6   | Describe common techniques and procedures for evaluating common injuries including  |  |  |
|         | taking a history, inspection/observation, palpation, functional testing, special evaluation   |  |  |
| DI CZ   | techniques, and neurological and circulatory tests.   |  |  |
| DI-C7   | Explain the relationship of injury assessment to the systematic observation of the person as a  |  |  |
| DI Co   | whole.  |  |  |
| DI-C8   | Describe the nature of diagnostic tests of the neurological function of cranial nerves, spinal  |  |  |
| DI-C9   | nerves, and peripheral nerves using myotomes, dermatomes, and reflexes.  Assess neurological status, including cranial nerve function, myotomes, dermatomes and |  |  |
| DI-C9   | reflexes, and circulatory status.   |  |  |
| DI-C10  | Explain the roles of special tests in injury assessment.  |  |  |
| DI-C10  | Explain the role of postural examination in injury assessment including gait analysis.  |  |  |
| DI-C11  | Describe strength assessment using resistive range of motion, break tests, and manual muscle  |  |  |
| DI-C12  | testing.  |  |  |
| DI-C13  | Describe the use of diagnostic tests and imaging techniques based on their applicability in the   |  |  |
| D1 013  | assessment of an injury when prescribed by a physician.   |  |  |
| DI-C15  | Describe and identify postural deformities.   |  |  |
| DI-C16  | Explain medical terminology and abbreviations necessary to communicate with physicians  |  |  |
|         | and other health professionals  |  |  |
| DI-C17  | Describe the components of medical documentation (e.g. SOAP, HIPS and HOPS).  |  |  |
| DI-P1   | Obtain a medical history of the patient that includes a previous history and a history of the   |  |  |
|         | present injury.   |  |  |
| DI-P2   | Perform inspection/observation of the clinical signs associated with common injuries  |  |  |
|         | including deformity, posturing and guarding, edema/swelling, hemarthrosis, and  |  |  |
|         | discoloration.  |  |  |
| DI-P3   | Perform inspection/observation of postural, structural, and biomechanical abnormalities.  |  |  |
| DI-P4   | Palpate the bones and soft tissues to determine normal or pathological characteristics.   |  |  |
| DI-P5   | Measure the active and passive joint range of motion using commonly accepted techniques,  |  |  |
|         | including the use of a goniometer and inclinometer.   |  |  |
| DI-P6   | Grade the resisted joint range of motion/manual muscle testing and break tests.   |  |  |
| DI-P7   | Apply appropriate stress tests for ligamentous or capsular stability, soft tissue and muscle, and fractures.  |  |  |
| DI-P8   | Apply appropriate special tests for injuries to the specific areas of the body as listed below.   |  |  |
| DI-P8   | Apply appropriate special tests for injuries to the specific areas of the body as listed below.   |  |  |
| DI-P8.1 | Foot and Toes   |  |  |
| DI-P8.2 | Ankle   |  |  |
| DI-P8.3 | Lower Leg   |  |  |
| DI-P8.4 | Knee (tibiofemoral and patellofemoral)  |  |  |
| DI-P8.5 | Thigh Thigh   |  |  |
| DI-P8.6 | Hip/Pelvis/Sacroiliac Joint   |  |  |

| DI-P8.7 | Lumbar Spine   |  |
|---------|--|--|
| DI-P8.8 | Thoracic Spine   |  |
| DI-P9   | Assess neurological status, including cranial nerve function, myotomes, dermatomes and reflexes, and circulatory status. |  |
| DI-P10  | Document the results of the assessment including the diagnosis.  |  |

#### REQUIRED READINGS

Konin, J.G., Wiksten, D., Brader, H., Isear, J.A: Special Tests for Orthopedic Examination (3<sup>rd</sup> Ed). Thorofare, NJ: Slack, Incorporated; 2006 (**KWBI**)

Shultz, S. J., Houglum, P. A., Perrin, D. H: Examination of Musculoskeletal Injuries (3<sup>rd</sup> Ed). Champaign, IL: Human Kinetics; 2005 (**SHP**)

#### SUGGESTED READINGS

Hoppenfeld, S: Physical Examination of the Spine and Extremities, Upper Saddle River, NJ, Prentice Hall; 1976 (**HF**)

#### **EVALUATION**

Students will be evaluated on content standards (knowledge gained) and psychomotor competency performance (demonstration of the skill content). Content standards and psychomotor skills will be assessed via practical skill demonstrations (Competency Evaluations) and a comprehensive practical examination. Class participation will be assessed through completion of daily class activities.

# **Competency Assessment**

Performance will be assessed through completion of cognitive and psychomotor competency examinations.

## **Comprehensive Practical Examination**

One comprehensive practical examination will be administered. The examination will require a demonstration of content knowledge and psychomotor skill gained throughout the entire semester.

# **Course Grading Scale**

| ASSESSMENT METHOD            | NUMBER | POINTS EACH | POINTS TOTAL |
|------------------------------|--------|-------------|--------------|
| Class Participation          | 25     | 2           | 50           |
| Competency Evaluations       | 5      | 70          | 350          |
| Comprehensive Practical Exam | 1      | 100         | 100          |
| TOTAL                        | _      | _           | 500          |

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

| <b>A</b> : 465 – 500 pts. (93%)  | C+: 385 – 399 pts. (77%)         |
|----------------------------------|----------------------------------|
| <b>A</b> -: 450 – 464 pts. (90%) | C: 365 – 384 pts. (73%)          |
| <b>B</b> +: 435 – 449 pts. (87%) | <b>C-</b> : 350 – 364 pts. (70%) |
| <b>B</b> : 415 – 434 pts. (83%)  | <b>D</b> : 315 – 349 pts. (63%)  |
| <b>B-</b> : 400 – 414 pts. (80%) | $\mathbf{F}$ : < 315 pts         |

#### MAKE UP WORK

Students who are absent or who arrive late without an official university or a medical doctor's excuse may miss quizzes or other in-class activities. There 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 on their first time back in class. All make-up work must be completed by the last day of class unless other approved arrangements are made. <u>It is the student's obligation to pursue any make-up work.</u>

TENTATIVE COURSE SCHEDULE

| DAY   | DATE     | TENTATIVE TOPIC                              | READING ASSIGNMENT |
|-------|----------|--|--------------------|
| 1     | Tu/8/30  | Introduction to course                       |                    |
| 2     | Th/9/1   | Fitting Equipment                            |                    |
| 3     | Tu/9/6   | Gait and Movement Analysis                   |                    |
| 4     | Th/9/8   | Ranges of Motion & Manual Muscle Testing     |                    |
| 5     | Tu/9/13  | Clinical techniques – Foot                   | KWBI-sect.12       |
| 6     | Th/9/15  | Clinical techniques – Ankle & Lower Leg      | KWBI-sect.12       |
| 7     | Tu/9/20  | Clinical techniques – Review                 |                    |
| 8     | Th/9/22  | Competency Evaluation #1                     |                    |
| 9     | Tu/9/27  | Clinical techniques – Knee                   | KWBI-sect.11       |
| 10    | Th/9/29  | Clinical techniques – Knee                   |                    |
| 11    | Tu/10/4  | Clinical techniques – Knee                   |                    |
| 12    | Th/10/6  | Clinical techniques – Review                 |                    |
| 13    | Tu/10/11 | NO CLASS                                     |                    |
| 14    | Th/10/13 | Competency Evaluation #2                     |                    |
| 15    | Tu/10/18 | Clinical techniques - Hip, Pelvis, and Thigh | KWBI-sect.10       |
| 16    | Th/10/20 | Clinical techniques - Hip, Pelvis, and Thigh |                    |
| 17    | Tu/10/25 | Clinical techniques - Hip, Pelvis, and Thigh |                    |
| 18    | Th/10/27 | Clinical techniques – Review                 |                    |
| 19    | Tu/11/1  | Competency Evaluation #3                     |                    |
| 20    | Th/11/3  | Clinical techniques – Lumbar Spine           | KWBI-sect.8 & 9    |
| 21    | Tu/11/8  | Clinical techniques – Lumbar Spine           |                    |
| 22    | Th/11/10 | Clinical techniques – Lumbar Spine           |                    |
| 23    | Tu/11/15 | Clinical techniques – Review                 |                    |
| 24    | Th/11/17 | Competency Evaluation #4                     |                    |
| 25    | Tu/11/22 | Putting it All Together                      |                    |
| 26    | Th/12/1  | Review                                       |                    |
| 27    | Tu/12/6  | Review                                       |                    |
| 28    | Th/12/8  | Closure and Review                           |                    |
| FINAL | Th/12/13 | Comprehensive Practical Examination          |                    |
|       |          | 10:30 AM – 1:15 PM                           |                    |

Note: Faculty reserves the right to alter the schedule as necessary.



#### COLLEGE OF EDUCATION AND HUMAN DEVELOPMENT

## Student Expectations

- Students must adhere to the guidelines of the George Mason University Honor Code [See <a href="http://academicintegrity.gmu.edu/honorcode/">http://academicintegrity.gmu.edu/honorcode/</a>].
- 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 <a href="http://universitypolicy.gmu.edu/1301gen.html">http://universitypolicy.gmu.edu/1301gen.html</a>].
- 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.
- Students are expected to exhibit professional behaviors and dispositions at all times.

## 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 <a href="http://writingcenter.gmu.edu/">http://writingcenter.gmu.edu/</a>].

#### School of Recreation, Health, and Tourism

• For additional information on the College of Education and Human Development, School of Recreation, Health, and Tourism, please visit our website [See <a href="http://rht.gmu.edu">http://rht.gmu.edu</a>].