
KIN 421 (Credits 3) Fall 2007
Lower Body Injury Evaluation
Location: 309 Jenison Fieldhouse
Time: T/TH 10:20-11:40 AM

Instructor: Tracey Covassin, Ph.D., ATC
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Office Hours: T-TH 12:00-2:00 PM
W 10:00-12:00pm
or by appointment
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COURSE DESCRIPTION:

Knowledge and skills needed for evaluating lower body injuries in athletic training. Techniques and tests used for evaluating acute and chronic injuries to the lower body.

COURSE OVERVIEW:

This course is designed to serve as an advanced course for athletic training students. The content of this course will focus on the clinical evaluation techniques of injury assessment of the lower body. An emphasis will be placed on the identification and palpation of bony landmarks, soft tissue structures, and ability to administer the proper special tests for various sports-related injuries. Laboratory experience will emphasize hands-on techniques in evaluating lower body injuries.

PREREQUISITES: KIN 320

COURSE OBJECTIVES:

1. The student shall demonstrate the ability to palpate various anatomical structures.
2. The student should be able to recognize and evaluate common injuries of the lower-body using the proper techniques and special tests.
3. The student should be able to interpret the results of tests used in the evaluation to determine the extent of an athlete's injury.
4. The student shall be able to apply goniometric measurements when assessing lower extremity joints.

REQUIRED TEXT: Starkey, C., Ryan, J. Evaluation of Orthopedic and Athletic Injuries, F.A. Davis, Philadelphia, 2002

OPTIONAL TEXT(S):

- 1) Magee, D. Orthopedic Physical Assessment, W.B. Saunders, Philadelphia, 1987
- 2) Netter, F. Atlas of Human Anatomy, Novartis, New Jersey, 1997

3) Prentice, W. Arnheim's. Principles of Athletic Training: A Competency-Based Approach (12th edition). McGraw-Hill

ADDITIONAL REFERENCES: Articles from professional journals in sports medicine. Students are encouraged to familiarize themselves and read articles in the following journals:

Journal of Athletic Training
Clinical Journal of Sports Medicine
American Journal of Sports Medicine
Medicine and Science in Sport and Exercise
Athletic Therapy Today

COURSE REQUIREMENTS:

Attendance & Participation:

Attendance to lectures and lab sessions is the responsibility of the student. The student is responsible for any information missed due to absences. Students are expected to participate in scheduled lab sessions.

Cell Phone Policy: It is understood that cell phones are a part of every day life for most college students. As students you are permitted to have a cell phone in class with you, but you are to have the cell phone off during the class session. If your cell phone is to ring, vibrate, or disrupt class in any way five points will be deducted from your final grade. If there are extreme situations that you must have your cell phone on during class you are to inform the instructor prior to the start of class.

Examinations:

Students will be evaluated through 3 written examinations and 2 practical examinations. Dates of examinations are listed in the syllabus. An unexcused absence on the day of the exam will result in a score of 0 for that exam. A student may reschedule the exam date if prior arrangements are made with the instructor.

Quizzes: Students will be evaluated through 4 quizzes. Quizzes may be surprise, random or announced. All quizzes will be worth 10 points each.

Academic Integrity:

Students must conduct themselves in accordance with the highest of academic honesty and integrity. Academic dishonesty by a student will not be tolerated in activity or academic areas and will be treated in accordance to the policy in the Academic Programs publication. The general policy of Scholarship and Grades can be found in the Academic Programs publication page 51. "If any instance of academic dishonesty is discovered by an instructor, it is his/her responsibility to take appropriate action." Depending on his or her judgment of the particular case, he or she may give a failing grade to the student on the assignment or course. Academic

dishonesty will be reported to the KIN Department.

<http://www.msu.edu/academics/governance.html> heading academic integrity.

Special Needs:

If you need course adaptations or accommodations because of a disability, if you have emergency medical information to share with the instructor, or if you need special arrangements in case the building must be evacuated, please make an appointment and notify the instructor as soon as possible. It is the student's responsibility to inform the instructor of any medical condition that may effect their participation in the class. Medical clearance may be required.

ANGEL Web Site:

This class will use ANGEL as a course management tool. **YOU ARE RESPONSIBLE FOR CHECKING THIS SITE ON A REGULAR BASIS.** It will contain information such as power point notes, review questions, and all other course materials. You can access the site by going to the following site <http://angel.msu.edu>. You will need your pilot ID and password to login.

GRADING:

<u>EXAMS</u>		<u>COURSE GRADE</u>
Exam 1: 100 pts	Practical 1: 40 pts	93-100% = 4.0
Exam 2: 100 pts	Practical 2: 70 pts	87-92% = 3.5
Exam 3: 100 pts	Quizzes: 40 pts	80-86% = 3.0
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300 pts	150 pts	69-73% = 2.0
TOTAL = 450 pts		65-68% = 1.5
		60-64% = 1.0
		< 59% = 0.0

Tentative Schedule

SESSION	DATE	TOPIC:
1	08/28	Course Introduction, Injury Evaluation Process Ch.1
2	08/30	Injury Evaluation Process Ch.1, Injury Nomenclature Ch. 2
3	09/04	Injury Nomenclature Ch. 2
4	09/06	Injury Nomenclature Ch. 2
5	09/11	Posture Ch. 3
6	09/13	Posture Lab Ch. 3
7	09/18	Posture Lab Ch. 3
8	09/20	TEST 1
9	09/25	Foot and Toes Ch. 4
10	10/02	Foot and Toes Ch. 4
11	10/04	Foot and Toes Lab Ch. 4
12	10/09	Foot and Toes Lab Ch. 4
13	10/11	Ankle and Lower Leg Ch. 5
14	10/16	Ankle and Lower Leg Ch. 5
15	10/18	Ankle and Lower Leg Lab Ch. 5
16	10/23	Ankle and Lower Leg Lab Ch. 5
17	10/25	TEST 2 and PRACTICAL 1
18	10/30	Knee Ch. 6
19	11/01	Knee Ch. 6
20	11/06	Knee Lab Ch. 6
21	11/08	Knee Lab Ch. 6
22	11/13	Patellofemoral Ch. 7
24	11/15	Patellofemoral Ch. 7
25	11/20	Patellofemoral Lab Ch. 7
26	11/22	Pelvis and Thigh Ch. 8
27	11/27	Pelvis and Thigh Lab Ch. 8
28	11/29	Pelvis and Thigh Lab Ch. 8
29	12/04	Review
30	12/06	TEST 3
TBA	12/10-15	PRACTICAL 2 (Comprehensive)

CAATE COMPETENCIES AND PROFICIENCIES COVERED:**Competency****Code****Competency**

DI-C6	Describe common techniques and procedures for evaluating common injuries including taking a history, inspection/observation, palpation, functional testing, special evaluation techniques, and neurological and circulatory tests.
DI-C7	Explain the relationship of injury assessment to the systematic observation of the person as a whole.
DI-C10	Explain the roles of special tests in injury assessment.
DI-C11	Explain the role of postural examination in injury assessment including gait analysis.
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 above.
DI-P9	Assess neurological status, including cranial nerve function, myotomes, dermatomes and reflexes, and circulatory status.
DI-CP1	Demonstrate a musculoskeletal assessment of upper extremity, lower extremity, head/face, and spine (including the ribs) for the purpose of identifying (a) common acquired or congenital risk factors that would predispose the patient to injury and (b) a musculoskeletal injury. This will include identification and recommendations for the correction of acquired or congenital risk factors for injury. At the conclusion of the assessment, the student will diagnose the patient's condition and determine and apply immediate treatment and/or referral in the management of the condition. Effective lines of communication should be established to elicit and convey information about the patient's status. While maintaining patient confidentiality, all aspects of the assessment should be documented using standardized record-keeping methods.
DI-CP1.1	Foot and Toes
DI-CP1.2	Ankle
DI-CP1.3	Lower Leg
DI-CP1.4	Knee (tibiofemoral and patellofemoral)
DI-CP1.5	Thigh
DI-CP1.6	Hip/Pelvis/Sacroiliac Joint
AC-P4h	Acute musculoskeletal injuries (i.e. sprains, strains, fractures, dislocations)

AC-C6	Differentiate the components of a secondary assessment to determine the type and severity of the injury or illness sustained.
AC-C16	Describe the injuries and illnesses that require medical referral.
AC-C24	Describe the indications, guidelines, proper techniques and necessary supplies for removing equipment and clothing in order to evaluate and/or stabilize the involved area.
AC-C30	Identify information obtained during the examination to determine when to refer an injury or illness for further or immediate medical attention.
DI-C12	Describe strength assessment using resistive range of motion, break tests, and manual muscle testing.
DI-C13	Describe the use of diagnostic tests and imaging techniques based on their applicability in the assessment of an injury when prescribed by a physician.
DI-C15	Describe and identify postural deformities.
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.
MC-P2	Perform a visual observation of the clinical signs associated with common injuries and/or illnesses including deformity, edema/swelling, discoloration, and skin abnormalities.

