KIN 340
MUSCULOSKELETAL INJURY AND DYSFUNCTION IN SPORT AND THE WORKPLACE

COURSE OUTLINE, FALL 2014

Instructor: Rob Burns- MS, CAT(C), CSCS
Adjunct Lecturer- AHS-KIN
University of Waterloo
Teaching Assistant: Khanh Tranh

Location and Time: ENV 2- 1408
Tuesday/Thursday 8:30am-9:50am

Course Description:

This course will introduce and familiarize students with basic injury mechanism, assessment, treatment and rehabilitation. Lectures will focus on sport (competitive and/or recreational), as well as some work-related injuries. The basics of tissue damage (chemical and mechanical) and their commonality to both environments will be addressed along with assessment and management of injuries to specific areas of the body.

Course Objectives:

1. To review normal tissue mechanics and the inflammatory/healing process.
2. To present common injuries and the basic principles of assessment and management of injuries to the following body areas:
   - Shoulder, arm, elbow
   - Forearm, wrist, hand
   - Hip, groin, pelvis
   - Knee, lower leg, ankle, foot
   - Cervical, thoracic and lumbar spine
   * It is assumed that students are familiar with the basic anatomy in these regions. There will be a very brief review of each, but anyone NOT familiar with the anatomy, at the level it is being discussed, is strongly encouraged to consult an anatomy textbook or the course text.

3. Discuss the general management of the following conditions:
   - Common joint dysfunctions: shoulder, elbow, ankle, knee, etc.
   - Muscle imbalances and kinetic chain dysfunctions
   - Acute and chronic neck and back pain
   - Postural and gait abnormalities

4. Demonstrate and practice basic taping and wrapping techniques
Text/ Resources:


Students are responsible for assigned readings in the textbook. Specific chapters you are responsible for will be outlined in class. These are meant to give you an overview of each body region, to refresh your anatomy and get you oriented to the muscles/bones/etc prior to each lecture, so you can take in the given information without trying to remember anatomy taken in past years, which may have become a little “rusty”. Content from the text is fair game for quizzes and term tests. It is an integral part of the course. Please use the various tools within the text to help your learning. Those include the Clinical Application Exercises, Diagrams and Web Links.

Notes: Lecture notes will be posted each Sunday for the following week.

Evaluation:

Evaluation for this course will consist of term test one, four quizzes and term test two. Absence from any of the tests will require a signed physician’s note explaining your absence. Quizzes are completed online via UW LEARN at specific dates/times. The emphasis is placed upon content covered in lectures therefore attendance is strongly encouraged. Make-up classes are not offered.

**Term Test #1:**
The first term test will cover material from the start of classes, including assigned textbook readings. It will take place in class and be approximately 70 minutes. There will be a variety of question types, including short answer, multiple choice, true/false, matching and fill in the blanks. This exam will count for 40% of your final mark.

**Quizzes:**
There will be 4 quizzes throughout the term delivered via UW LEARN and will be shown in the LEARN calendar. Notes, text, screen shots and team-taking or assistance is not permitted during the quizzes: all are considered cheating. These quizzes will cover content from the previous 2-3 lectures. Each will be worth 5 % of your mark for a total of 20%. These quizzes are a result of student feedback indicating concern over heavily weighted midterm and final exams. You are given 5 days to complete the quiz, which will be removed 30 minutes prior to class on Tuesday. Retakes of missed quizzes are not permitted unless a medical note indicating illness prohibiting you from taking the quiz is presented. Please ensure you have a secure internet connection when taking the quizzes.

**Term Test #2:**
The final exam will primarily cover the items from the midterm forward, including all material covered in the class and text. The emphasis will be on material from the second half of the term, as well as assimilation of all material. Again, the question format will be varied. You will have 70 minutes to write the exam in class, and it will count towards 40% of your final mark.
**Academic Integrity**: In order to maintain a culture of academic integrity, members of the University of Waterloo community are expected to promote honesty, trust, fairness, respect and responsibility. [Check www.uwaterloo.ca/academicintegrity/ for more information.]

**Grievance**: A student who believes that a decision affecting some aspect of his/her university life has been unfair or unreasonable may have grounds for initiating a grievance. Read Policy 70, Student Petitions and Grievances, Section 4, www.adm.uwaterloo.ca/infosec/Policies/policy70.htm. When in doubt please be certain to contact the department’s administrative assistant who will provide further assistance.

**Discipline**: A student is expected to know what constitutes academic integrity [check www.uwaterloo.ca/academicintegrity/ ] to avoid committing an academic offence, and to take responsibility for his/her actions. A student who is unsure whether an action constitutes an offence, or who needs help in learning how to avoid offences (e.g., plagiarism, cheating) or about “rules” for group work/collaboration should seek guidance from the course instructor, academic advisor, or the undergraduate Associate Dean. For information on categories of offences and types of penalties, students should refer to Policy 71, Student Discipline, www.adm.uwaterloo.ca/infosec/Policies/policy71.htm. For typical penalties check Guidelines for the Assessment of Penalties, www.adm.uwaterloo.ca/infosec/guidelines/penaltyguidelines.htm.

**Appeals**: A decision made or penalty imposed under Policy 70 (Student Petitions and Grievances) (other than a petition) or Policy 71 (Student Discipline) may be appealed if there is a ground. A student who believes he/she has a ground for an appeal should refer to Policy 72 (Student Appeals) www.adm.uwaterloo.ca/infosec/Policies/policy72.htm.

**Note for Students with Disabilities**: The AccessAbility Office located in Needles Hall, Room 1132, collaborates with all academic departments to arrange appropriate accommodations for students with disabilities without compromising the academic integrity of the curriculum. If you require academic accommodations to lessen the impact of your disability, please register with the AccessAbility at the beginning of each academic term.

**Turnitin.com**: Plagiarism detection software (Turnitin) will be used to screen assignments in this course. This is being done to verify that use of all material and sources in assignments is documented. In the first week of the term, details will be provided about the arrangements for the use of Turnitin in this course.

Note: students must be given a reasonable option if they do not want to have their assignment screened by Turnitin. See: http://uwaterloo.ca/academicintegrity/Turnitin/index.html for more information.

June 15, 2009 (updated July 2014)