

Western University
Faculty of Health Sciences
School of Kinesiology

**KIN 4457B – Ergonomics & Aging
2016/2017**

Lectures:

Tuesdays TBA

Thursdays: TBA

Instructor: A. Salmoni asalmoni@uwo.ca TH3159b

Office hours: upon request

TA:

NOTE: *The course has 4 hours of class time per week.*

Calendar Description: Melding together concepts from Cognitive Ergonomics and gerontology, the course focuses on how to prolong independent living in older adults by improving function, safety, and quality of life.

Course Description: This course combines important concepts from gerontology and cognitive ergonomics to study how changes can be made to the person, environment, and task to promote safety. Ultimately, the goal of these ergonomic interventions is the prolongation of independent living and the optimization of quality of life in older adults as they age successfully. In addition, a major part of the course is devoted to the teaching of thinking skills germane to a professional working in the area of ergonomics and aging and therefore relevant to the in-course assignments.

Course Format:

4 hours lecture & discussion per week. The extra hour of class time may, at times, be allotted to group work.

Course Objectives:

1. To introduce students to selected concepts/topics in aging and ergonomics.
2. To provide students with practical experience using some of the knowledge, strategies, and methodologies employed in the fields of gerontology and ergonomics.
3. Have students:
 - Practice being a professional with minimal direction
 - Focus on thinking, through class discussion and application-based assignments

- Practice being a self-directed and self-reflective learner
4. To promote the development of:
 - Self-motivated, self-directed learning
 - Effective listening skills
 - Critical reading & thinking
 - Creative thinking
 - Thinking with theoretical and other mental models
 - Communication skills
 - **PRIDE & INTEGRITY** *in all of your work (remember that in all assignments you are demonstrating the type of professional you are (sub par work means you are projecting a sub par image of yourself))*
 5. For the promotion of **student listening and thinking skills** the class has the following procedure/policy:
 - No electronic note taking during lectures – just listening (this means no computers or cell phones on during class).
 - Student to keep a “4457 notebook” with questions and any points from lecture (notebook points can be embellished after class if necessary).
 - Lectures are normally posted on OWL after the lectures are given

Behaviours I Expect of the Students

1. I expect you to come to EVERY class and participate
2. Read, read, read, and read some more (particularly as background for assignments).
3. Listen, think, produce work, and communicate as a professional.

Required Course Material

- I expect all assignments to be accompanied by lots of references to material students have read in preparation for and in completion of assignments [**as a rule of thumb I expect each member of a team to have read at least 5 articles to contribute to the reference list for your project**]
- Articles for quizzes will be assigned on a weekly basis (or more).

Course Evaluation

1. In class quizzes (30%) – there will be a minimum of 12 quizzes (each marked out of 3) and students need to accrue at least 29 to get full marks for this portion of the course (i.e., 29 will give you 30 out of 30)
2. Investigating a fall on campus (10%)
3. Falls prevention program at Cherryhill (25%)
4. Major Group Presentation (35%)

Note: assignments may change in weight and content after class discussion and (majority-based) agreement.

Assignments

It is very important for students to recognize that the amount of work put in may not be directly proportionate to the value given to the assignment. MOST ASSIGNMENTS WILL BE DONE IN GROUPS. So learning how to work in groups/teams is an important goal in this course. Specific details about the content of the assignment and grading will be discussed when presented in class.

Tentative Schedule

Conceptual content for ergonomics and aging

1. Introduction and models of ergo and aging
2. Injury statistics for older Ontarians/Canadians
3. Investigating falls: a systems approach to the understanding of reasons for seniors falling
4. Fall risk factors and fall risk assessment
5. Falls prevention strategies – systematic reviews
6. Driving: Ontario law for seniors; self-regulation by senior drivers
7. Driving: cognitive retraining; mental/physical fitness
8. Driving: car and road design for safety
9. PE fit model
10. PE fit at home: ADLs, home design, accessibility, social support
11. PE fit: assistive devices/walkers for mobility & falls prevention

Becoming an Expert Thinker

In a complex world where solutions are not readily apparent, a premium is placed on thinking and other problem solving skills. Thinking is a skill to be learned and as such must be practiced to be improved. Students will be presented several “thinking” models, that when practiced on gero/ergo problems will help them become more skilled. To accomplish this objective this course will, after equipping students with thinking strategies (and an introduction to necessary conceptual content), give students real world problems to be solved.

The following thinking strategies will be presented and practiced:

1. The steps scientists use to guide their critical thinking
 - a. Finding the right articles (dealing with too much information; quality of articles in systematic reviews)
 - b. Background reading
 - c. Clarifying the question
 - d. Finding/creating methods to gather data
 - e. Analyzing and presenting the evidence

- f. Discussing the meaning or application of the evidence
- 2. De Bono's 6 hats to guide problem solving (with emphasis on creative thinking)
 - a. White – knowing the facts
 - b. Yellow – being optimistic
 - c. Green – being creative – additional emphasis placed here
 - d. Black – being critical
 - e. Red – emotional reactions
 - f. Blue – controlling the timing of hat wearing
- 3. Thinking with models

Course/University Policies

1. **Lateness:** Assignments are due at 4 pm on the assigned due date and will not be accepted late, except under medical or other compassionate circumstances. Electronic submission of assignments will not be accepted (unless otherwise specified) under any circumstances. Submitting a late assignment without appropriate documentation will result in losing 33% per day late (beginning at 4:01 pm). Acceptable reasons might include hospital stays, serious illness, family emergencies (like serious accidents or illness, death) or similar circumstances.
2. **Written documentation:** Whenever possible, students who require academic accommodation should provide notification and documentation in advance of due dates, examinations, etc. stating specific reasons and dates. Students must follow up with their professors and their Academic Counselling office in a timely manner. Documentation for any request for accommodation shall be submitted directly, as soon as possible, to the appropriate *Academic Counselling Office* of the student's Faculty/School of registration not to the instructor, with a request for relief specifying the nature of the accommodation being requested. This documentation should be obtained at the time of the initial consultation with the physician or walk-in clinic. These documents will be retained in the student's file, and will be held in confidence in accordance with the University's Official Student Record Information Privacy Policy. See <https://studentservices.uwo.ca/secure/index.cfm> for specific policy and forms relating to accommodation.
3. **Grades:** Where possible assignment objectives will be posted on OWL. Should you have questions about an assignment or a concern regarding the grade you received for an assignment then make an appointment to discuss with professor. Please be aware that in requesting a grade reassessment, your grade could go up/down/or stay the same.
4. **Scholastic offences:** They are taken seriously and students are directed to read the appropriate policy, specifically, the definition of what constitutes a Scholastic Offence, at the following Web site:
http://www.uwo.ca/univsec/handbook/appeals/scholastic_discipline_undergrad.pdf.

A) Students must write their essays and assignments in their own words. Whenever

students take an idea, or a passage from another author, they must acknowledge their debt both by using quotation marks where appropriate and by proper referencing such as footnotes or citations. Plagiarism is a major academic offence (see Scholastic Offence Policy in the Western Academic Calendar). All required papers might be subject to submission for textual similarity review to the commercial plagiarism detection software under license to the University for the detection of plagiarism. All papers submitted for such checking will be included as source documents in the reference database for the purpose of detecting plagiarism of papers subsequently submitted to the system. Use of the service is subject to the licensing agreement, currently between Western University and Turnitin.com (<http://www.turnitin.com>)

5. **Formatting:** No specific format is required, however, students need to cite the reference material used and write in a concise and effective manner, to parallel that of a professional report.

6. **Classroom Behaviour:** Class will begin promptly at the time specified at the top of page one of this syllabus. In the event that you must arrive late, please enter the classroom with a minimal disturbance to the class. Cellular phones, pagers, and text-messaging devices are distracting to you and to others. Please have the courtesy to turn them off and remove them from sight. Laptops not recommended during class. *Listening, thinking and asking questions are the expected behaviours in the classroom.*

STUDENT CODE OF CONDUCT

The purpose of the Code of Student Conduct is to define the general standard of conduct expected of students registered at Western University, provide examples of behaviour that constitutes a breach of this standard of conduct, provide examples of sanctions that may be imposed, and set out the disciplinary procedures that the University will follow. For more information, visit

<http://www.uwo.ca/univsec/board/code.pdf>

ENGLISH PROFICIENCY FOR THE ASSIGNMENT OF GRADES

Visit the website <http://www.uwo.ca/univsec/handbook/exam/english.pdf>

SUPPORT SERVICES

There are various support services around campus and these include, but are not limited to:

1. Student Development Centre -- <http://www.sdc.uwo.ca/ssd/>
2. Student Health -- <http://www.shs.uwo.ca/student/studenthealthservices.html>
3. Registrar's Office -- <http://www.registrar.uwo.ca/>
4. Ombuds Office -- <http://www.uwo.ca/ombuds/>