## MIE1401F: Human Factors Engineering – Fall 2017 Syllabus

#### **Course Learning Objectives:**

- Learn the basic concepts of human factors engineering.
- Learn the importance of considering human capabilities and limitations in the design of systems.
- Develop skills to apply human factors principles to the analysis, design, and evaluation of systems.

#### Instructor:

Greg A. Jamieson

TA: Holland Vasquez

#### **Required Textbook:**

• Lee, Wickens, Liu, & Boyle (2017). *Designing for People: An Introduction to Human Factors Engineering*, CreateSpace.

#### Lectures:

Wednesdays 15:00 - 17:00 Location: HS100

The lectures **will** include examinable material not included in the readings. Handouts are provided for most lectures.

**Readings:** There are readings assigned for each week. The readings <u>will</u> include examinable material not discussed in lecture.

#### Assessment:

Each student has the option to pursue a B-range (B-, B, or B+) or A-range (A-, A, or A+) mark. Students electing to pursue a B-range mark must complete the quiz and final exam requirements. Students electing to pursue an A-range mark must complete the quiz and final exam requirements <u>AND</u> a three-part individual project.

Di cakao wii ana mai kisi		
Component	Weight	
Quizzes	40%	
Final Exam	40%	
Optional Project	20%	

#### **Breakdown and Marks:**

#### Quizzes:

A quiz will be given each week prior to the lecture. Quizzes may include lecture content from the previous week and/or content from that week's reading material. All quizzes are **closed book, closed notes**.

10 five-point quizzes will be given starting in Week 2 of the course. Students may drop their lowest two quizzes to obtain a score out of 40 (see Marks Breakdown). Absences will be marked as 0 score. Make-up quizzes will only be given upon completion of an official petition (e.g., medical).

#### **Final Exam:**

The final exam is **comprehensive** of all lecture and reading material from the course. The final examination is **closed book, closed notes**.

# Project

Students can elect to complete a 3-part individual project if they seek to obtain an A-range mark in the course. The table below lists the project stages and due dates. Further details will be distributed via the course website.

Project Stage	Deliverable	Assessment	Due date
Proposal	1-page proposal	Go/No Go	Sept. 27, 2017
Task analysis	Task analysis with supporting documentation	Letter	Oct. 11, 2017
Design	Design specification with supporting documentation	Letter	Nov. 8, 2017
Evaluation	Oral presentation of evaluation outcome	Letter	Nov. 29, 2017

Projects will be assessed with a single letter grade. Each of the deliverable phases will be assessed with a letter grade reflecting **both** technical merit and communication effectiveness. The project mark will be the lowest of the three deliverable marks. Project marks correspond to a score as indicated in the table below. Deliverables can be resubmitted once for regrading (maximum 2-mark increase for re-assessed deliverables).

Mark	Score
C+-FZ	0
В-	5
В	8
B+	11
A-	14
А	17
A+	20

### Blackboard Academic Suite (a.k.a. "the portal"):

The Blackboard site is used to maintain communication, record marks, post lecture notes and supplementary materials, and distribute project instructions. You are expected to visit the site each week and ensure that you are receiving course announcements and email. Please use the portal to communicate with the instructor and TA.

## Academic Integrity:

From <u>http://www.utoronto.ca/academicintegrity/</u>: "Honesty and fairness are considered fundamental values shared by students, staff and faculty at the University of Toronto. The University's policies and procedures that deal with cases of cheating and plagiarism are designed to protect the integrity of the institution. As a result, the University treats cases of cheating and plagiarism very seriously. Any student accused of committing an academic offence will find that the accusation is dealt with formally and that the penalties can be severe if it is determined that they did, in fact, cheat."