

**UNIVERSITY OF GUELPH
SCHOOL OF ENGINEERING**

ENGG*4450: LARGE-SCALE SOFTWARE ARCHITECTURE ENGINEERING

COURSE OUTLINE - FALL 2010

COURSE OBJECTIVES

This course caps a series of several software development and programming courses that started with CIS*1500 and included courses on object oriented, data structure, and operating systems. This course introduces software engineering processes and tools to deal with the complexity involved in designing, implementing and testing of large scale software systems that may involve tens of developers.

COURSE FORMAT AND ORGANIZATION

- The course is delivered through 3 lectures/week: MWF in MACK 314, 11:30 – 12:20 and a lab once a week in THRN 2313.
- Assignments will be given intermittently throughout the course. Assignment questions will be based on lecture and course text material. Five assignments should be expected.
- There are several labs in the course meant to familiarize students with software engineering tools. The labs will be followed by a lab exam which will test the proficiency in software tool use. If needed additional labs will also be scheduled to support the project.
- Students are expected to use software engineering practices they learn in lectures, together with the tools presented in labs, to complete a software engineering project. The project will consist of 4-5 weeks of group work, of no more than 2 students per group. The project grading is based on (1) an in-class presentation by Week 9/10 and (2) a final deliverable consisting of the software product and documents produced progressively during development. Success in completing the project is based largely on your adherence to software engineering principles and project workflows.

PREREQUISITES

(CIS*2420 or CIS*2520), ENGG*2100

TEXTBOOK

Timothy Lethbridge and Robert Laganière, “Object-Oriented Software Engineering”, 2nd edition, McGraw Hill

EVALUATION

Assignments	15%	Throughout the term
Lab Test	20%	Week 8
Project	30%	Week 12
Test	35%	Week 11

CONTACT

Instructor:

Dr. Dalia Fayek
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Lab Technician:

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Teaching Assistant:

Antony Savich
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Office Hour schedule will be posted on the course website

NOTES

- Course website: <http://courselink.uoguelph.ca/>
- Electronic communication is through the Discussion Board on the course website and the listserv: engg4450@listserv.uoguelph.ca
- Confidential topics related to marks or any other concerns to be emailed directly to dfayek@uoguelph.ca
- The School of Engineering operates on a zero-tolerance policy regarding plagiarism. Please refer to the Undergraduate Calendar, Section VIII “Undergraduate Degree Regulations and Procedures – Academic Misconduct”
- Late submission penalty for the assignments is 10% of the deliverable grade per day including weekends. No submission will be accepted after 3 days delay.
- Special consideration will be granted on a religious grounds basis or other circumstances provided the instructor is informed by email (dfayek@uoguelph.ca) within the first two weeks of classes, that is, by **September 24, 2010**.