

ENGG*4450: Large-Scale Software Architecture Engineering Fall 2008

1 Teaching staff

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2 Course Format and Organizational Details

The course will be delivered through 3 lectures/week. Labs will be used to help students get familiar with the software engineering tools used in this course. Students are required to complete a project at the end of the course using these tools, software engineering practices and some programming.

- Lectures:** MACK 228, MWF 9:30-10:20am
Labs: THRN 2313, M or F 1:30-3:20pm
Final Exam: December 12, 2008, 2:30-4:30pm (tentative)
Course website: <http://courselink.uoguelph.ca/>

⇒ **Textbook:**

1. Timothy Lethbridge and Robert Laganieri, Object-Oriented Software Engineering, 2nd Edition, McGraw Hill, 2005

Additional resources:

1. Bruegge and Dutoit, Object-Oriented Software Engineering, 2nd Ed., Prentice-Hall, 2004
2. Schach, Object-Oriented and Classical Software Engineering, McGrawHill, 2001.
3. Any good UML manual.

⇒ **Evaluation**

1. Assignments 15%
2. Lab Test 15%
3. Project 25%
4. Final Exam 45%

3 Objectives

This course introduces students to the complexity involved in designing, implementing and testing a large scale software system. Topics will include:

- An overview of current software engineering processes
- Review of current tools and techniques for documentation, analysis and implementation of a software system.

Students will also be required to design and implement a software product using the tools and techniques reviewed in the lectures.

4 Deliverables and Course Flow

One week take home 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 four labs in the course meant to familiarize students with software engineering tools. The labs will be followed by a lab exam which will test student proficiency in software tool use.

Project topic and objectives will be announced following the lab exam. 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 3-4 weeks of group work (typically two students per team) with the final deliverable consisting of the software product and documents produced during workflow. Success in completing the project is based largely on your adherence to software engineering principles and project workflows.

The course will conclude with a final exam which will be primarily multiple choice with the option of several written questions.

5 Lateness and Plagiarism

The penalty for late submissions is 10% of grade per day, with maximum 5 school days lateness. Beyond 5 days late, submissions will not be considered. If you have trouble with material presented, please make sure you address this ahead of deadlines. We will be more than happy to accommodate your learning needs. On the other hand, plagiarism is ignorance, and ignorance is not welcome. We will strictly enforce University guidelines on plagiarism. The general idea is that it's better not to submit a work than to submit a reproduction of your peers' work.

6 Electronic Communication

- Course website: <http://courselink.uoguelph.ca/>
- Course forum: part of Blackboard. Please post all questions and discussion there. Separate private project team threads will be available as the project starts. Confidential questions or concerns should be e-mailed directly to asavich@uoguelph.ca.
- This course will facilitate electronic communication wherever possible.

Please check course website regularly.