

# CS 3415 Software Engineering

## Fall, 2017

### **General information:**

Instructor: Dr. Ruizhong Wei (AT 5021, Ex. 8227, [rwei@lakeheadu.ca](mailto:rwei@lakeheadu.ca))

Text: T. C. Lethbridge and R. Langanier, Object-Oriented Software Engineering, McGraw Hill, 2nd Ed 2005.

Lecture time and location: WF 2:30 - 4:00p.m., AT 2004

Labs: For team project

Office hours: Thursdays 2:30 - 3:30 p.m. AT 5021

Course webpage: <http://ccc.cs.lakeheadu.ca/cs3415.html>

**Prerequisite:** CS 2412, CS 2477

### **Description:**

An introduction to main concepts of software engineering for computer science students: software requirement and specification, project planning and design, software development and testing, software process management, and software maintenance. Instead of exploring details of all the above topics, we will focus on several topics of software design and software testing after an overview of software engineering.

Object-oriented methodology and UML will be used in this course. The main computer language used for this course is Java. Team project and class discussion will be an integral part of the course.

### **Materials:**

Based on lecture notes, though the text book will be referred frequently. Some supplementary materials will be distributed in class or put on the course web.

### **Software:**

All the software used in this course will be open source based. Students are supposed to download software to their personal computers and to use them for assignments and projects. See course web for the details.

### **Assignments:**

There will be 4 - 5 assignments in this term. Late assignments will be penalized and will not be accepted after 3 days. The assignment will also include a personal project which requires Java programming.

**Quizzes:** There will be 3 - 4 short quizzes during lectures. The purpose of a quiz is for understanding lecture materials.

**Examinations:**

The regulation of examinations and related matters is described on University Calendar.

**Team project:**

Detailed information of team project will be distributed in separate sheets and discussed in class.

**Course grade:**

To determine the final grade of the course, the following weights will be applied:

- Team project: 20%
- Assignments: 25%
- Quizzes: 5%
- Mid-term test: 20%
- Final exam: 30%