

CSC207 - Software Design

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Summer 2015

Welcome to CSC207

- ▶ Introduction to large-scale software design.
 - ▶ Practice agile methods for designing software.
 - ▶ Practice a fully-featured IDE and a version control system.
 - ▶ Learn and use UML diagrams.
- ▶ Learn Java, and understand object-oriented structures in depth.
- ▶ Data abstraction, inheritance, polymorphism
- ▶ Interfaces, abstract classes, unit testing, design patterns
- ▶ Representation of floating-point numbers and intro to numerical computation.
- ▶ Comments or questions during class? Let me know!
- ▶ Prerequisite: CSC148 (or a solid understanding of data structures).

Meet your instructor



ILIR DEMA

E-mail: ilir.dema@mail.utoronto.ca

Office hours: BA3289 R16:00-18:00

Who am I:

- ▶ MSc. Math (UofT)
- ▶ BSc. Math
- ▶ Software engineer for a long time
- ▶ Taught various Math/CompSci courses
- ▶ Research interests:

Algebraic Geometry

Homological Methods in CompSci

CompSci Teaching

How Lectures Work

- ▶ The key principle is interactive delivery
 - ▶ I present a short summary of a key topic and then ask a question
 - ▶ You think about it for a minute, on your own, and report your answer
 - ▶ We discuss your answer in class
 - ▶ I start writing the code and ask a question how to continue
 - ▶ You think for a minute and suggest the next line(s) of code
 - ▶ I run the suggested code
 - ▶ We discuss the outcome

Course website

- ▶ We will use the following web site for this course:
<http://www.cdf.toronto.edu/~dema/csc207/>
- ▶ Please bookmark it and check it on a regular basis
- ▶ Course materials will be posted on the Blackboard as well.
- ▶ Your grades will be posted regularly on the Blackboard
- ▶ Sign up for the discussion board:
<https://piazza.com/utoronto.ca/summer2016/csc207h1/home>
- ▶ Post your questions on the discussion board. Answer to your classmates questions.

Textbook

There is no required textbook in this course.

All required readings will be posted on the course website.

However, if you wish to own a good book on object-oriented software design, you may find the following book useful:

Barbara Liskov, John Guttag, *Program Development in Java: Abstraction, Specification, and Object-oriented Design*, Addison-Wesley, 2001.

Course Evaluation

Labs (8%)

Attendance is mandatory to get the credit. No makeup will be offered for the labs.

Three exercise sets:

Exercise Set 1, (1%), due on Jun 3, 2016.

Exercise Set 2, (3%), due on Jun 10, 2016.

Exercise Set 3, (3%), due on Jul 8, 2016.

A single assignment, (8%), due on Jun 30, 2016.

Midterm (17%), scheduled on Jun 23, 2016.

Final Project (20%), to be delivered in stages as follows:

Phase I, due Jul 15, 2016.

Phase II, due Jul 22, 2016.

Phase III, due Jul 29, 2016.

Final Exam (40%)

You must earn 40% or above in the exam to pass the course

Coursework handouts and submission

- ▶ All work will be submitted using subversion - you will learn more about subversion soon.
- ▶ You will have your own individual repository, and repositories for your teams.
- ▶ You will get the assignment/exercise/project handouts by checking the out from the repository.
- ▶ You will submit your work by checking it in into your repository.
- ▶ You will not submit online using MarkUs.

Academic Integrity

In brief:

- ▶ Never look at someone else's assignment work (not even a draft)
- ▶ Never show other student's your assignment work (not even a draft)
- ▶ Discuss how to solve an assignment only with the course TAs and instructors
- ▶ for more information, see <http://www.cs.toronto.edu/~fpitt/documents/plagiarism.h>

Academic Offences

- ▶ Waste of your time and mine
- ▶ Doesn't help you learn the course material
- ▶ Results in mark penalties and transcript annotations

If you have questions on appropriate conduct, please get in touch, **now**, before assignments start!

Checklist for this class

- ▶ Read the syllabus
- ▶ Bookmark the course website and discussion board
- ▶ Log in to the online discussion board and post a practice message
- ▶ If you plan on working on your own computer, install software listed on course website
- ▶ Drop by office hours and introduce yourself