Carleton University
School of Computer Science
COMP 5104/HCIN5406: Object-Oriented Software Development
Winter 2016
Last updated on December 21st, 2015

Class Schedule

Tuesday and Thursday 11:35-12:55 MCK 3174
Winter Break: Feb 15th to 19th 2016
No tutorials and no TAs

Instructor Info

Jean-Pierre Corriveau room: 5328 HP
email: jeanpier AT scs.carleton.ca tel. : (613)-520-2600 x1192
Office hours Tuesday 1pm-2pm or by email

Course Website

http://people.scs.carleton.ca/~jeanpier//514W16/

Brief Course Description

It is widely acknowledged that software quality is of the utmost importance. Yet, despite recent advancements in program verification, automatic debugging, assertion deduction and model-based testing (MBT), Ralph Johnson (of Gang of Four design patterns fame) and many others still view software verification as a "catastrophic computer science failure". In this course, the two general themes are **design for testability** and **software testing** (that is, on the *execution* of software in order to find errors). We will focus not as much on unit testing as on **acceptance testing**, that is, on the validation of a specification of the requirements of stakeholders against one or more implementations under test. Topics include: modeling and verifying quality in object-oriented systems, as well as model-driven and test-driven approaches to testing. Particular attention will be given to scenario testing. Time-permitting

Prerequisites

The student is assumed to have a strong background in object-oriented programming, as provided by COMP 1406, COMP 2402, and COMP 2404. **Knowledge of Java/Eclipse is required**. Basic familiarity with UML 2.0, the Gang of Four design patterns, SQL and network programming are assets.

Software

Students will have to learn and use *by themselves* some modeling and testing tools. Programming assignments must be submitted through cuLearn and run on the School's machines.

There is NO textbook for this course.

The instructor will be posting some of the material discussed in class to the course's website. Students are expected to find and master additional material as they require.

Evaluation
Students will be evaluated in this course according to the following components, which will be overviewed in the first lecture:

1) Assignments	80 %	
2) Research Project	20%	(with several deliverables)

NOTES:

1) There will be NO supplemental or grade raising exam in this course.
2) No mark (or extra work) can be substituted for another!
3) The research project and most assignments will be done **individually**. Some assignments *may involve* small teams.

Student Academic Integrity Policy

Every student should be familiar with the Carleton University student academic integrity policy. A student found violating academic integrity standards may be awarded penalties that range from a reprimand to receiving a grade of F and even being expelled from the program or University. Some examples of offences are: Plagiarism and Unauthorized Collaboration. The Academic Integrity Policy (Apr. 26, 2006) can be found at: http://www1.carleton.ca/studentaffairs/ccms/wp-content/ccms-files/academic_integrity_policy.pdf

In this course, it will be of the utmost importance for students to refer to ALL material they reuse in their assignments and project.

Assignments: Information and Late Policies
Late projects will *not* be accepted and will automatically receive a mark of 0.

Academic Accommodation

You may need special arrangements to meet your academic obligations during the term. For an accommodation request the processes are as follows:

Pregnancy obligation: write to me with any requests for academic accommodation during the first two weeks of class, or as soon as possible after the need for accommodation is known to exist. For more details visit the Equity Services website:
http://www.carleton.ca/equity/accommodation/student_guide.htm

Religious obligation: write to me with any requests for academic accommodation during the first two weeks of class, or as soon as possible after the need for accommodation is known to exist. For more details visit the Equity Services website.

Students with disabilities requiring academic accommodations in this course must register with the Paul Menton Centre for Students with Disabilities (PMC) for a formal evaluation of disability-related needs. Documented disabilities could include but are not limited to mobility/physical impairments, specific Learning Disabilities (LD), psychiatric/psychological disabilities, sensory disabilities, Attention Deficit Hyperactivity Disorder (ADHD), and chronic medical conditions. Registered PMC students are required to contact the PMC, 613-520-6608, every term to ensure that I receive your Letter of Accommodation, no later than two weeks before the first assignment is due or the first in-class test/midterm requiring accommodations. If you only require accommodations for your formally scheduled exam(s) in this course, please submit your request for accommodations to PMC by the last official day to withdraw from classes in each term. For more details visit the PMC website: http://www1.carleton.ca/pmc/

Science Student Success Centre (SSSC)

Who are they? The Science Student Success Centre is a central advising unit for students in Science courses. We help students achieve their goals by providing access to resources, workshops and activities that enhance their academic and study skills, and help them make key connections with their peers.
Their mentors can help you customize an individual study plan which includes weekly and semester work or study schedules, and they also help when you need information on developing a new study strategy, obtaining summer job opportunities, or clarifying ideas and concepts to better understand and cope with new course content. Science mentors can help you **learn how to learn what you need to learn** for your classes.
Drop by the Science Student Success Centre at 1152 Herzberg Laboratories or visit at www.carleton.ca/science/sssc. They can help you succeed!
