

CSC301 – Introduction to Software Engineering, summer 2008

Course Information

General Information

Instructor	<i>Wael Aboulsaadat</i>		
Instructor Office:	Bahen 4261		
Instructor Email:	wael@cs.toronto.edu		
TAs:	Atalay Ozgovde and Jennifer Horkoff		
Office Hour:	Wednesday	4:00-5:00	
Lectures:	Wednesday	6:00 – 8:00	BA 1180
Tutorials:	Wednesday	8:00 – 9:00	BA 2135/BA 2139

Course Grading Scheme

- Assignments: 65%. Final: 35%.

Item	Weighting	Due Date
Assignment 1	10%	June 1st
Assignment 2	10%	June 22nd
Assignment 3	10%	July 6th
Assignment 4	15%	July 20th
Assignment 5	20%	August 4th
Final Exam	35%	examination period

- Assignments are to be done in teams of 4 or 5. Instructor will select each team members.
- You must receive at least 40% on the final exam in order to pass this course.

Course Topics

- Introduction to Software Engineering
- Object Oriented Analysis
- Object Oriented Design
- Design Patterns
- Software Development Life Cycle
- Agile Software Development
- Refactoring
- Test Driven Development
- Software Project Management

Course Web Site

The home page for this course can be found at <http://portal.utoronto.ca/>. Class announcements and all handouts, tutorials, and other information will be accessible there. Information will be updated on a regular basis, so check the web site regularly. You may also verify your marks for assignments and tests on the web site. The web site will also serve as home for a bulletin board where you can post questions about course content for discussion with your fellow students. You must not post partial or complete solutions to assignments, or detailed descriptions of solutions, on the course web site. Only TAs and instructors may do this. If you contribute to the bulletin board, remember that it is a public forum; you should not be cluttering it with material that is of unrelated to the course, and you should be careful that the content of your posts is not offensive. Be polite and professional!

Assignments

- There will be no hard copies handed out in the lectures, so make sure you check the course web site for assignment handouts. An announcement email will be send after a handout is posted.
- Teaching assistants will be available to answer any questions during tutorial and using website bulletin board.

- You may work on your assignments on your own computer, but for marking purposes we will always run your programs on CDF. Always test your programs on CDF before submitting it. If a program does not work on CDF, it is considered incorrect and you will not get full marks. There will be no exceptions to this rule.

Plagiarism

Plagiarism -- or simply, cheating -- is taken to be the handing in of work not substantially the student's own. It is usually done without reference, but is unacceptable even in the guise of acknowledged copying. It is reprehensible, and the penalty ranges from a zero on the assignment to suspension from the university.

It is not cheating, however, to discuss ideas and approaches to a problem, nor is it cheating to seek or accept help with a program or with writing a paper. Indeed, a moderate form of collaboration is encouraged as a useful part of any educational process. Nevertheless, good judgment must be used, and students are expected to present the results of their own thinking and writing. Never copy another student's work -- it is plagiarism to do so, even if the other student "explains it to you first." Never give your written work to others. Sharing work with others for the purposes of plagiarism is also a violation. Do not work together to form a collective solution, from which the members of the group copy out the final solution. Rather, walk away and recreate your own solution later. The basic premise is that you should do your own thinking, your own design, and your own coding.

We will be routinely comparing your code to that of other students for undue similarity.

Silent Policy

A silent policy will take effect 12 hours before an assignment is due. This means that no question will be answered, whether it is asked on the newsgroup, by email or in person.

Illness

In the event of an illness or other catastrophe, get proper documentation (e.g. UoT medical note signed by physician), but if you have grace days left, use them. If you need those days back later, give your documentation to me at that time.

Web sites for Software and Documentation

Integrated Development Environment: <http://www.eclipse.org/>
UML Tool: <http://www.argouml.org/>

Coding Guidelines

Correctness: The program should conform to the specifications for which it was written. It should include correct handling of special cases, except that you may assume that input will be provided in the specified format (i.e. you can use programming-by-contract)

Design and Efficiency: The program should be constructed from small, coherent, independent and loosely coupled functions. Each function should access only its own parameters. The control constructs and data structures used should be those appropriate to the problem at hand. The program should not perform unnecessary steps, use extraneous variables, nor implement the algorithm in a contorted or inefficient way.

Style and Documentation: The program should conform to generally accepted principles of style, such as a consistent pattern of indentation, use of meaningful identifiers, generous use of space, etc. Internal documentation should include program and function headers, and in-line comments to clarify the code.

Knowledge of the language: Your program should provide evidence of your familiarity with the principal control constructs, operators, built-in functions, and data structuring facilities of the Java language.

Reference books

1. Object-Oriented Software Engineering: Using UML, Patterns and Java". Bernd Bruegge and Allen H. Dutoit
ISBN: 978-0072465631
2. "Agile Software Development". Alistair Cockburn University of Toronto ISBN: 978-0201699692
3. "Head First Design Patterns". (Head First). Elisabeth Freeman, Eric Freeman, Bert Bates, and Kathy Sierra
ISBN-13: 978-0596007126

*In addition, a list of URLs to web references will be provided on the course website accessible from **External Links** section*