School of Computer Science

Fall 2020

COMP 3110- 01

Introduction to Software Engineering

https://www.computerhope.com/jargon/s/softengi.htm

Instructors
Dr. Kalyani Selvarajah
Email: kalyanis@uwindsor.ca
Office: MS Teams
Office Hours: Thr 4:00pm to 6:00pm

Lectures
Tuesday and Thursday,
2:30PM to 3:50PM

@ BB virtual classroom

Course Website:
https://blackboard.uwindsor.ca
Prerequisites: COMP-2120 and COMP-2540
GA Consulting Hours: Please see the course website for details.

Course Objectives

This course introduces the fundamental concepts, common principles, and general techniques of software engineering. It discusses the main issues involved in the development life cycle of nontrivial software systems, including process models, feasibility studies, requirements elicitation and definition, rapid prototyping, design methodologies, verification and validation, and software evolution. Students taking this course are required to work on projects, which are designed to go through the major phases of large-scale software system development.

Recommended Reference Books

- Software Engineering, 10th Edition, Ian Sommerville, University of St Andrews, Scotland ©2016
- System Analysis Design (7th ed), Alan Dennis, Barbara Haley Wixom, David Tegarden, 2019. 3. System Analysis Design UML Version 2.0 An Object-Oriented Approach (4th ed), Alan Dennis, Barbara Haley Wixom, David Tegarden, 2012.

Evaluation: The following shows the course components and their weights.

Mid Exam	10 %	November 3rd, 2020, Tuesday
Final Exam	20%	TBA
Assignments	24%	Individual Assignments
Project	40 %	Group work (please see the course website for details)
Feedback to other teams and students	6%	

Group Project:

The goal of this project is to develop great ideas about how to improve software development or maintenance. You can propose a project that you think is interesting and valuable, which will enhance the lives of software professionals. The project needs to be developed by a group of 5 students (Mandatory). A group of 4 members is acceptable in an unexpected scenario. All members of a group will receive the same grade on group work. Therefore, it is in your interest to choose other group members who have the same goal in the class as you do. Further information will be provided in the course website.

NOTE: The University of Windsor allows students to take a course only twice. If a student fails to get the specified minimum grade in a required course after two attempts, the student may be asked to withdraw from the program. The Dean's office must grant permission to take a course more than twice. Students must note that such permission is granted only under exceptional circumstances. Any student who is taking a course for the second time and having difficulties with the course must seek counseling before the last day to withdraw voluntarily from a course.

Course Schedule: (**schedule may vary):

Weeks	Dates	Topics	Important Dates	Deadlines
0	Sep 10	Course Outline and Introduction		
1	Sep 15, 17	Software Engineering concept and Processes		Assignment 1
2	Sep 22, 24	Software Requirements Engineering	Sep 23 Last Day to Add Course	Pro1: Project Proposal
3	Sep 29, Oct 1	Agile Development		
4	Oct 6, 8	System Modelling	Oct 7 Final drop	Assignment 2
5	Oct 13, 15	Reading Week (No Classes)		
6	Oct 20, 22	Architecture design		Pro2: Milestone I
7	Oct 27, 29	Design and Implementation		Assignment 3
8	Nov 3, 5	Software Testing		Mid Exam
9	Nov 10, 12	Software Evolution		Pro3: Milestone II
10	Nov 17, 19	Software Security	Nov 18 VW	
11	Nov 24, 26	Software Reliability		Assignment 4
12	Dec 1, 3	Group Project Demonstration		Pro4: Demo
13	Dec 8	Course Wrap-up		

Teaching Evaluation: Student Evaluation of Teaching (SET) forms will be administered during the last two weeks of the class schedule.

Preparation for lectures:

Attendance at all lectures is recommended. Due to COVID19, the classes will be online through BB or MS Teams. It will be synchronous and asynchronous learning. Some of the concepts covered are difficult and the instructor will attempt to present the concepts in such a way as to make them easier to understand. You will find recorded lectures after the lectures on OneDrive. Students should keep the instructor informed if they have any problems or difficulties with the course contents or others.

Student recording of lectures:

Course materials prepared by the instructor (Live/Streamed lectures, Lecture notes, assignments, Exams, Quizzes, Projects and, supplemental materials or other digital course materials) are considered by the University to be an instructor's intellectual property covered by the Copyright Act, RSC 1985, c C-42. These materials are made available to you for your own study purposes and cannot be shared outside of the class or "published" in any way. Students who do not have the necessary accommodations are not permitted to record lectures in any format (audio, video, photograph, etc.). Posting course materials or any recordings you may make to other websites without the expressed permissions of the instructor will constitute copyright infringement and subject to legal action.

Missed Test Make-up Policy:

For missing a mid-exam, no make-ups will be considered. If a student misses the mid exam for a valid reason, the corresponding mark will be carried over to the final exam.

Students who miss the **Final Exam** for a valid reason (as per the Senate bylaws) which is given to the instructor before (if possible) or within 48 hours after the exam date, will be allowed to take a makeup exam. The Registrar will assign a date and time for writing a make-up Final Examination. Missing the **Final Exam** without a valid reason will result in a score of **zero**.

Late Assignment Policy:

Late assignments due to a valid medical reason that has been accepted will be provided a deadline extension at the instructor's discretion. If you are in need of a medically related extension – you must make arrangements in advance of the original due date/time. If not, the students will be penalized **5% per day**, including weekends and holidays, for overdue assignments.

Policy on Cheating:

The instructor and teaching assistants for COMP-3110 will put a great deal of effort into helping students to understand and to learn the material in the course. However, they will not tolerate any form of cheating. The instructor and teaching assistants will report any suspicion of cheating to the Director of the School of Computer Science. Please read the link carefully for further information: http://www.uwindsor.ca/academic-integrity/.

A **plagiarism-detection** software may be used for some or all of the student homework assignments and for your project report in this course, as the case may be, at the instructor's discretion as deemed necessary. Note that students' homework assignments that are submitted to such software become part of their database. This assists in protecting your intellectual property. Please read the link carefully for further information: http://www.uwindsor.ca/academic-integrity/306/student-resources.

Conversion of Marks: The University of Windsor uses a 100% grading system. Therefore, the final grades consist of raw scores (numeric values) and all grades below 50% are considered failures. For more details, please check the University of Windsor Senate policy document: Grading and Calculation of Averages.

Student Accessibility Services: Student Accessibility Services (SAS) is committed to working with the entire campus community in creating equal access to higher education for all academically qualified students who may have disabilities. Please read http://www.uwindsor.ca/disability/.

Students with mental health issues: "Feeling Overwhelmed? From time to time, students face obstacles that can affect academic performance. If you experience difficulties and need help, it is important to reach out to someone. For help addressing mental or physical health concerns on campus, contact (519) 253-3000 and please check this site for further details: Click here!

Sexual misconduct: If you have experienced sexual misconduct or violence you deserve help and support. Please check further information at http://www.uwindsor.ca/sexual-assault

Academic integrity:

You are expected to do all of your work in any of the labs, exams and project individually, without the help of others. In cases of academic misconduct as defined in Senate Bylaw 31, instructor is required to report misconduct for necessary disciplinary action. In such cases, you will get zero points for that lab, project and/or question in exam. This will be irrespective of who cheated from whom. You are responsible to protect your work from others. Plagiarism includes, but is not limited to:

a) Copying material, for example, from the Internet, or purchasing material and submitting it as one's own.

b) Paraphrasing (changing some words) the ideas and concepts of others without proper referencing.

c) Using passage(s) of any length from published or unpublished work of others without placing the passage(s) in quotation marks (or using indentation for long quotation(s)) and acknowledging their source.

d) Submitting work completely or largely identical to that of other students, unless group work and joint submissions are explicitly permitted by the instructor."

Remember availability of information on the Internet or you are being able to **Google** it, **doesn't** automatically **makes it copyright free**. You still need to check the terms of agreement (or end user agreement or something similar) for that site. Google or other search engines simply provide it to you but may not own the copyrights.

Please include the following declaration with **EACH submission** (Assignment, project, quiz, exam). In the absence of such declaration, **your submission will NOT be evaluated**.

I, _____, verify that the submitted work is my own, original work, that all sources are cited accurately, and that I have not submitted any portion of this work for any other university course.

_____
Signature   Date