SENG265: Software Development Methods

Course Dates

CRN(s):	Section A01 CRN: 12826 Section A02 CRN: 12827 Section A03 CRN: 12828
Term:	Fall 2019
Course Start:	2019-09-04
Course End:	2019-12-21
Withdrawal with 100% reduction of tuition fees:	2019-09-17
Withdrawal with 50% reduction of tuition fees:	2019-10-08
Last day for withdrawal (no fees returned):	2019-10-31

Scheduled Meeting Times (M=Mon, T=Tue, W=Wed, R=Thu, F=Fri)

Section:	Location:	Classes Start:	Classes End:	Days of week:	Hours of day:	Instructor:
A01	HHB 105	2019-09-04	2019-12-04	MWR	15:30-16:20	Adam Murray
A02	HHB 105	2019-09-04	2019-12-04	MWR	15:30-16:20	Adam Murray
A03	HHB 105	2019-09-04	2019-12-04	MWR	15:30-16:20	Adam Murray
B01	ELW B238	2019-09-09	2019-12-04	M	12:00-13:20	
B03	ELW B238	2019-09-09	2019-12-04	W	16:30-17:50	
B04	ELW B238	2019-09-09	2019-12-04	R	11:30-12:50	
B05	ELW B238	2019-09-09	2019-12-04	R	13:00-14:20	
B06	ELW B238	2019-09-09	2019-12-04	R	16:30-17:50	
B07	ELW B238	2019-09-09	2019-12-04	F	11:30-12:50	

Instructor(s)

Name: **Adam Murray**
Office: ECS 568
Phone: (250) 472-5772
Email: adammurray at uvic dot ca

Office Hours:		Comments
Tue	03:30pm-04:45pm	or by appointment
Thu	02:00pm-03:15pm	or by appointment

Course Overview

While the specific tools a software engineer may use are highly likely to change (perhaps several times) over the span of one's career, many of the underlying concepts, methods and techniques have enduring value. Every new software engineer learns and practices some variation of these methods. As the software engineer begins to work with others in non-trivial software projects, these methods repeatedly demonstrate their use through extensive and varied application. This course provides an introduction to this set of methods, and further courses will both use and build on the topics covered this semester.

Topics

The topics covered by this course will include:

- UNIX/Linux fundamentals
- Multi-version software development with Git
- C programming language
- Python programming language
- Inspection, testing and debugging
- Software development evolution and the software lifecycle

Course Objectives and Learning Outcomes

Students successfully completing SENG 265 will be able to:

- program with some comfort in a UNIX environment
- use Python for prototyping and to support code testing and debugging
- recognize a problem statement that can become a program specification
- use general-purpose languages such as C and Python to solve programming problems
- work with code versioning systems (git) to manage changes in your own code
- apply some general software engineering techniques to your own projects
- be ready to delve deeper into more formal software engineering approaches

Textbooks and Other Resources

This course has no required text. All resources required for this course will be posted on the course conneX site at https://connex.csc.uvic.ca

Assignments

This course includes four (4) assignments. Assignment tasks include programming, testing, design and analysis. **The due dates may change as the course proceed**s; the official due date for an assignment will be given when the assignment is handed out. (Normally two weeks are provided for assignment completion.)

Assignment	Weight	Tentative Due Date
Assignment 1	10%	September 25
Assignment 2	10%	October 9
Assignment 3	10%	October 30
Assignment 4	10%	November 18

You should start assignments early enough to allow time to seek help if you encounter difficulties. Late assignments will not be accepted.

Students are encouraged to discuss assignment problems with each other and form study groups. However, final assignment submissions must be generated independently, and you will only receive credit for your own work. On some assignments, you may be permitted to use material from other sources **with proper attribution**. Submitting the work of others without proper acknowledgement will be considered a serious academic offense and may result in failure of the course.

Please consult the instructor if you are unsure whether or not you are following these guidelines when working on an assignment.

Exams

There will be one midterm exam and one final exam.

Exam	Weight	Date
Midterm	18%	October 17 (Thursday)
Final exam	36%	(scheduled by the university)

For courses which have final exams, students are strongly advised not to make final plans for travel or employment during the exam period since special arrangements will not be made for examinations that may conflict with such plans.

Grading

Coursework	Weight (out of 100%)
Assignments	40%
Labs	6%
Exams	54%

In order to pass the course, students must **obtain a passing grade on the average of all assignments** and **obtain a passing grade on the weighted average of the two exams.**

Grading System

The University of Victoria follows a percentage grading system in which the instructor will submit grades in percentages. The University will use the following Senate approved standardized grading scale to assign letter grades. Both the percentage mark and the letter grade will be recorded on the academic record and transcripts.

F	D	C	C+	B-	B	B+	A-	A	A+
0-49	50-59	60-64	65-69	70-72	73-76	77-79	80-84	85-89	90-100

Grades	Description
A+, A, A-	**Exceptional**, **outstanding** or **excellent** performance. Normally achieved by a minority of students. These grades indicate a student who is *self-initiating*, *exceeds expectation* and has an *insightful* grasp of the subject matter.
B+, B, B-	**Very good**, **good** or **solid** performance. Normally achieved by the largest number of students. These grades indicate a *good* grasp of the subject matter or *excellent grasp in one area balanced with satisfactory grasp in the other areas*.
C+, C	**Satisfactory**, or **minimally satisfactory**. These grades indicate a *satisfactory performance and knowledge* of the subject matter.
D	**Marginal Performance**. A student receiving this grade demonstrated a *superficial grasp* of the subject matter.
F	**Unsatisfactory performance**. Wrote final examination and completed course requirements; no supplemental.

Posting of Grades

Typically marks for assignments, examinations, and provisional final grades, are made available through conneX, or CourseSpaces where each student will be able to view only their own grades. Sometimes numerical marks/grades may be posted publicly to the entire class. In that case, full student numbers or names will not be included with the posted information.

Course Experience Survey (CES)

I value your feedback on this course. Towards the end of term you will have the opportunity to complete a confidential course experience survey (CES) regarding your learning experience. The survey is vital to providing feedback to me regarding the course and my teaching, as well as to help the department improve the overall program for students in the future. When it is time for you to complete the survey, you will receive an email inviting you to do so. If you do not receive an email invitation, you can go directly to the CES site

You will need to use your UVic NetLink ID to access the survey, which can be done on your laptop, tablet or mobile device. I will remind you closer to the time, but please be thinking about this important activity, especially the following three questions, during the course.

- What strengths did your instructor demonstrate that helped you learn in this course?
- Please provide specific suggestions as to how the instructor could have helped you learn more effectively.
- Please provide specific suggestions as to how this course could be improved.

Csc Student Groups

The Computer Science Course Union (https://onlineacademiccommunity.uvic.ca/cscu/) serves all students who are either in a computer science program or taking a class in computer science. Please sign yourself up on their mailing list if you would like to be informed about their social events and services.

The Engineering Students' Society (ESS) serves all students registered in an Engineering degree program, including Software Engineering (BSEng). For information on ESS activities, events and services navigate to http://www.engr.uvic.ca/~ess .

Course Policies And Guidelines

Late Assignments: No late assignments will be accepted unless prior arrangements have been made with the instructor **at least 48 hours before** the assignment due date.
Coursework Mark Appeals: All marks must be appealed **within 7 days** of the mark being posted.
Attendance: We expect students attend all lectures and labs. It is entirely the students' responsibility to recover any information or announcements presented in lectures from which they were absent.
Electronic devices in labs and lectures: No unauthorized *audio* or *video* recording of lectures is permitted.
Electronic devices in midterms and exams: Calculators are only permitted for examinations and tests if explicitly authorized and the type of calculator permitted may be restricted. No other electronic devices (e.g. cell phones, pagers, PDA, etc.) may be used during examinations or tests *unless explicitly authorized*.
Plagiarism: Submitted work may be checked using plagiarism detection software. Cheating, plagiarism and other forms of academic fraud are taken very seriously by both the University and the Department. You should consult the link given below for the UVic policy on academic integrity. Note that the university policy includes the statement that "A largely or fully plagiarized assignment should result in a grade of F for the course."

The Faculty of Engineering Standards for Professional Behaviour are at
http://www.uvic.ca/shared/shared%5fengineering/docs/professional-behaviour.pdf
U.Vic guidelines and policy concerning fraud and academic integrity are at
http://web.uvic.ca/calendar/undergrad/info/regulations/academic-integrity.html
U. Vic Privacy Policy: If any student has concerns about their private information being stored or accessed outside of Canada, they are required to inform the course instructor about their concerns before the end of second week of classes.

Equality

This course aims to provide equal opportunities and access for all students to enjoy the benefits and privileges of the class and its curriculum and to meet the syllabus requirements. Reasonable and appropriate accommodation will be made available to students with documented disabilities (physical, mental, learning) in order to give them the opportunity to successfully meet the essential requirements of the course. The accommodation will not alter academic standards or learning outcomes, although the student may be allowed to demonstrate knowledge and skills in a different way. It is not necessary for you to reveal your disability and/or confidential medical information to the course instructor. If you believe that you may require accommodation, the course instructor can provide you with information about confidential resources on campus that can assist you in arranging for appropriate accommodation. Alternatively, you may want to contact the Centre for Accessible Learning (formerly the Resource Centre for Students with a Disability) located in the Campus Services Building.

The University of Victoria is committed to promoting, providing, and protecting a positive, and supportive and safe learning and working environment for all its members.