Faculty of Science

CSCI 2020U: Systems Development and Integration
Course outline for Winter 2016

1. Course Details & Important Dates*

Term	Course Type	Day	Time
Winter 2016	Undergraduate	Mondays	8:10am – 9:30am
		Thursdays	9:40am – 11:00am

Location	CRN #	Classes Start	Classes End	Final Exam Period
UA 2220	70120	Mon. Jan. 11, 2016	Mon. Apr. 11, 2016	Apr. 13 – 24, 2016

* for other important dates go to: www.uoit.ca >Current Students >Important Dates and Deadlines

2. Instructor Contact Information

Instructor Name	Office	Phone	Email
Randy J. Fortier	UA 2032	905-721-8668 x2114	randy.fortier@uoit.ca
Office Hours: Tuesdays, 9:30am – 10:30am, UA 2032 Fridays, 11:00am – 12:00pm, UA 2032			

Laboratory/Teaching Assistant Name	Email
Joseph Heron	Joseph.Heron@uoit.ca

3. Course Description

This course is an introduction to the tools and techniques used in modern software development. Topics covered include configuration management, software design, coding standards, software testing and maintenance, basic software tools, software libraries, graphical user interfaces and network programming.

4. Learning Outcomes

On the successful completion of the course, students will be able to:
- Use build tools, IDEs, and version control software
- Create complex user interfaces
- Read from, and write to, files
- Read from, and write to, other programs via the network
- Use popular software libraries
- Write multi-threaded programs
- Unit test programs

5. Course Design

Lectures in this course will include both presented material, and interactive elements. The classroom interaction will be designed to solidify concepts and techniques learned in the lectures. Examples for this course could include programs, diagrams, and pseudocode.

In order to achieve success in this course, students must attend all lectures and labs. Regular absences mean that you miss critical information and just are not able to catch up. The instructor will provide the majority of classroom materials on the Blackboard site. The TAs will supervise the laboratories, while you complete an assignment designed by the instructor. The instructor and the TAs will collaborate on the marking of some course components (e.g. tests).

6. Outline of Topics in the Course

1. Version control
2. Built tools
3. Graphical user interfaces and 2D graphics
4. File input and output
5. Socket input and output
6. Software libraries
7. Multi-threaded programming
8. Unit testing

7. Required Texts/Readings

There are no required textbooks for this course. However, the instructor will periodically expect you to read documentation and other materials online.

8. Evaluation Method

Component	Weight
Labs	5%
Assignment #1	10%
Assignment #2	10%
Midterm	20%
Group project	20%
Final exam	35%

Final course grades may be adjusted to conform to program or Faculty grade distribution profiles. Further information on grading can be found in Section 5 of the UOIT Academic Calendar.

9.   Assignments and Tests

Component	Due Date	Weight
Labs	Every week	5%
Assignment #1	March 10, 2016 (due by 11:59pm)	10%
Assignment #2	March 24, 2016 (due by 11:59pm)	10%

Midterm	March 14, 2016 (in class)	20%
Group project	March 31, 2016	20%
Final exam	TBA, April 2016	35%

Any student who misses an examination without a valid medical reason and documentation will receive zero for that examination. Those who submit medical documentation, or otherwise notify the instructor, within 24 hours will either be given a makeup exam or will have the weight of the examination redistributed.

For assignments and lab assignments, a late penalty of 10% per day late will be applied, in the absence of a medical note, to a maximum of 3 days late. After 3 days, the assignment will not be accepted.

Lab assignments are due within 24 hours of the beginning of your lab period, but it is recommended that you finish the labs during the lab period itself in order to ensure proper feedback.

10. Students with Disabilities

Accommodating students with disabilities at UOIT is a responsibility shared among various partners: the students themselves, SAS staff and faculty members. To ensure that disability-related concerns are properly addressed during this course, students with documented disabilities and who may require assistance to participate in this class are encouraged to speak with me as soon as possible. **Students who suspect they have a disability that may affect their participation in this course are advised to go to Student Accessibility Services (SAS) as soon as possible.** Maintaining communication and working collaboratively with SAS and faculty members will ensure you have the greatest chance of academic success.

- Students taking courses on the North Campus Location can visit Student Accessibility Services in the U5 Building located in the Student Life Suite
- Students taking courses on the Downtown Oshawa Campus Location can visit Student Accessibility Services in the 61 Charles St. Building, 2nd Floor, Room DTA 225 in the Student Life Suite.

Disability-related support and accommodation support is available for students with mental health, physical, mobility, sensory, medical, cognitive, or learning challenges. Office hours are 8:30am-4:30pm, Mon-Fri. For more information on services provided, you can visit the SAS website at http://uoit.ca/studentaccessibility

Students may contact Student Accessibility Services by calling 905-721-3266, or email studentaccessibility@uoit.ca

Students who require the use of the Test Centre to write tests, midterms, or quizzes MUST register online using the SAS test/exam sign-up module, found here www.uoit.ca/SASexams. Students must sign up for tests, midterms or quizzes AT LEAST seven (7) days before the date of the test.
Students must register for final exams by the registration deadline, which is typically 2 weeks prior to the start of the final examination period. SAS will notify students of the registration deadline date.

11. Academic Integrity

Students and faculty at UOIT share an important responsibility to maintain the integrity of the teaching and learning relationship. This relationship is characterized by honesty, fairness and mutual respect for the aim and principles of the pursuit of education. Academic misconduct impedes the activities of the university community and is punishable by appropriate disciplinary action.

Students are expected to be familiar with and abide by UOIT's regulations on Academic Conduct (Section 5.15 of the Academic Calendar) which sets out the kinds of actions that constitute academic misconduct, including plagiarism, copying or allowing one's own work to copied, use of unauthorized aids in examinations and tests, submitting work prepared in collaboration with another student when such collaboration has not been authorized, among other academic offences. The regulations also describe the procedures for dealing with allegations, and the sanctions for any finding of academic misconduct, which can range from a resubmission of work to a failing grade to permanent expulsion from the university. A lack of familiarity with UOIT's regulations on academic conduct does not constitute a defense against its application.

Further information about academic misconduct can be found in the Academic Integrity link on your laptop. Extra support services are available to all UOIT students in academic development, study skills, counseling, and peer mentorship. More information on student support services can be found in the Academic Calendar (Section 8).

Copying of assignments or lab assignments, and cheating on tests or the final exam will not be tolerated in this course. Violators will face a minimum of a zero mark for that course component, and likely further disciplinary action through the academic integrity council.

12. Turnitin

UOIT and faculty members reserve the right to use electronic means to detect and help prevent plagiarism. Students agree that by taking this course all assignments are subject to submission for textual similarity review by Turnitin.com. Assignments submitted to Turnitin.com will be included as source documents in Turnitin.com's restricted access database solely for the purpose of detecting plagiarism in such documents for five academic years. The instructor may require students to submit their assignments electronically to Turnitin.com or the instructor may submit questionable text on behalf of a student. The terms that apply to UOIT's use of the Turnitin.com service are described on the Turnitin.com website.

Students who do not wish to have their work submitted to Turnitin.com must provide with their assignment at the time of submission to the instructor a signed Turnitin.com Assignment Cover sheet:

http://www.uoit.ca/assets/Academic~Integrity~Site/Forms/Assignment%20Cover%20sheet.pdf

Further information about Turnitin can be found on the Academic Integrity link on your laptop.

13. Final Examinations

Final examinations are held during the final examination period at the end of the semester and may take place in a different room and on a different day from the regularly scheduled class. Check the published Examination Schedule for a complete list of days and times.

Students are advised to obtain their Student ID Card well in advance of the examination period as they will not be able to write their examinations without it. Student ID cards can be obtained at the Campus ID Services, in G1004 in the Campus Recreation and Wellness Centre.

Students who are unable to write a final examination when scheduled due to religious publications may make arrangements to write a deferred examination. These students are required to submit a Request for Accommodation for Religious Obligations to the Faculty concerned as soon as possible and no later than three week prior to the first day of the final examination period.

Further information on final examinations can be found in Section 5.24 of the Academic Calendar.

14. Freedom of Information and Protection of Privacy Act

The following is an important notice regarding the process for submitting course assignments, quizzes and other evaluative material in your courses in the Faculty of Science.

As you may know, UOIT is governed by the *Freedom of Information and Protection of Privacy Act* ("FIPPA"). In addition to providing a mechanism for requesting records held by the university, this legislation also requires that UOIT not disclose the personal information of its students without their consent.

FIPPA's definition of "personal information" includes, among other things, documents that contain both your name and your Banner ID. For example, this could include graded test papers or assignments. To ensure that your rights to privacy are protected, the Faculty of Science encourages you to use only your Banner ID on assignments or test papers being submitted for grading. This policy is intended to prevent the inadvertent disclosure of your information where graded papers are returned to groups of students at the same time. If you still wish to write both your name and your Banner ID on your tests and assignments, please be advised that UOIT will interpret this as an implied consent to the disclosure of your personal information in the normal course of returning graded materials to students.

If you have any questions or concerns relating to the new policy or the issue of implied consent addressed above, please contact accessandprivacy@uoit.ca

15. Course Evaluations

Student evaluation of teaching is a highly valued and helpful mechanism for monitoring the quality of UOIT's programs and instructional effectiveness. To that end, course evaluations are administered by an external company in an online, anonymous process during the last few weeks of classes. Students are encouraged to participate actively in this process and will be notified of the dates. Notifications about course evaluations will be sent via e-mail, and posted on Blackboard, Weekly News and signage around the campus.