

# Programming Workshop 2 (CSCI 1061U)

## Course Syllabus Winter 2017

**Instructor:** Faisal Z. Qureshi, Ph.D.

**Office:** UA4032

**Phone:** 905-721-8668 x 3626

**Communication:** we will use Slack for communication. Please sign up at <https://uoit-w17-csci1061.slack.com/signup> using your UOIT.net address.

### Teaching Assistants

- Mohammadamin Beirami
- Robert deBruyn
- Tony Joseph
- Luisa Rojas

### Lectures

- Tuesday, 11:10 am in UL9
- Friday, 12:40 pm in UL9

### Laboratory

Each student will be assigned one of the following 4 lab sections. All labs cover the same material.

- Wednesday, 6:40 pm to 9:30 pm, Simcoe Building J123-A
- Friday, 8:10 am to 11:00 am, Simcoe Building J123-A
- Friday, 5:10 pm to 8:00 pm, Simcoe Building J123-A
- Thursday, 6:40 pm to 9:30 pm, Simcoe Building J123-A

Scheduling information is available here <https://uoit.ca/mycampus/available-courses.php>

### Office Hours

- Tuesday, 12:30 pm to 2 pm in UA4032
- Or by appointment

## Description

This is a second course on computer programming that continues from CSCI 1060U and covers more advanced theory and practice. The lectures introduce modern concepts in program design and construction for larger scale programs. The laboratories provide an opportunity to apply these concepts. Topics that are covered in this course include advanced program design, design patterns, program refactoring, templates and standard template libraries, data structures, debugging and version control.

## Topics (in no particular order)

Topic	Week
Review of CSCI 1060U; IO and pointers	1 week
Project management using make utility	1 week
Cross-platform project management using cmake	.5 weeks
Inheritance and virtual functions	1.5 weeks
Error handling and exceptions	1.5 weeks
Standard template library	2 weeks
C++ libraries, such as Boost and Eigen	2 to 3 weeks

## Material

This course deals with C++ programming. There are many online C++ help resources. I encourage you to make use of these resources. As far as books are concerned, I find the following textbook to be exceedingly useful.

*Absolute C++, 6th Edition* by Walter Savitch.

Students are encouraged to take their own notes during lectures.

## Grading

Work	Weight
Class participation and exercises	10%
Lab participation and completion	20%
Midterm exams (2)	24%
Assignments (3)	20%
Final exam	26%

A student must get 40% in the final exam to pass the course.

## Important Dates

Work	Dates
Assignment 1	Jan 23 – Feb 5
Assignment 2	Feb 20 – Mar 5
Assignment 3	Mar 20 – Apr 2
Midterm 1	Feb 14 in class
Midterm 2	Mar 14 in class

## Class Participation and In-class Exercises

Student participation in lectures and laboratories is strongly recommended. It is often difficult to assign a class participation mark. At the same time; however, I feel that it is important to reward students who make lectures lively and interesting for everyone. In order to assign class participation marks, I will provide in-class exercises during the last 20 to 30 minutes during most lectures. These exercises will require programming and will cover the topic currently under discussion. These exercises are due before the end of the lecture. When grading these exercises, I will focus more on the attempt rather than the correct solution. Paying attention during lectures and taking your own notes is one way to successfully complete these exercises.

## Course Work Submission

Unless otherwise instructed, all course work should be submitted using Blackboard Learn.

## Grading

Assignments will primarily be evaluated based on the correctness of solutions; however, partial credit may be assigned for documentation, discussion, etc.

## Remarking

It is extremely important that all work is fairly graded. Please submit a remark request by email within 5 days of receiving the grade. The email must contain the reasons for which you think the work should be remarked. Please note that a remark may result in a lower grade.

### **Late Submission Policy**

Each student will have a total of 2 grace days, which he or she can use for any assignment. The penalty for each late day after these grace days have been used up is 20% of the total marks, unless the student presents a doctor's note.

### **Email Traffic**

The course will use Slack for communication (see above). Urgent emails may be sent to [faisal.queshi@uoit.net](mailto:faisal.queshi@uoit.net) with subject line containing "csci 1061 - winter 17." Email response will be slow over the weekends and in evenings. The instructor and the TA will make every effort to respond to emails in a timely manner; however, it may take up to two working days to respond to an email. It simply means that emails sent right before a deadline may not be answered in time.

### **Discussion Group**

Appropriate use of discussion groups includes clarification of lecture material and assignments and other concerns and comments about the course that might of general interest to course participants. Please do not post assignment solutions to the discussion groups.

### **Collaboration**

Assignments, exams, and quizzes are to be completed individually unless otherwise specified.

### **Course Evaluation**

It is important that every student participates in course evaluations. Course evaluations, which are completely anonymous, provide extremely useful feedback to the instructor and the TA, helping them improve as teachers. Information about how to participate in course evaluation will be provided on the Blackboard Learn.

### **Academic Integrity**

Assignments and tests must be strictly individual work. UOIT takes academic dishonesty very seriously. Please read and understand UOIT's policy on academic integrity at <https://uoit.ca/main/current-students/academics-and-programs/programs-and-resources/academic-integrity/index.php>.

## **Accessibility**

Students with disabilities may request to be considered for formal academic accommodation in accordance with the Ontario Human Rights Code. Students seeking accommodation must make their requests through the Centre for Students with Disabilities in a timely manner, and provide relevant and recent documentation to verify the effect of their disability and to allow the University to determine appropriate accommodations. More information about Student Accessibility Services (SAS) is available at <http://uoit.ca/studentaccessibility>.

## **Freedom of Information and Protection of Privacy Act**

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. To ensure that your rights to privacy are protected, I encourage you to use only your Banner ID on assignments or test papers being submitted for grading (the exception to this rule are midterm and final exams, since these are returned individually). 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. Please contact the UOIT Chief Privacy Officer at [accessandprivacy@uoit.ca](mailto:accessandprivacy@uoit.ca) for more information.