

# Course Syllabus



## Hello!

Welcome to CSC110! This course, and its follow-up course CSC111, serve as a first-year introduction to the rich and wonderful field of computer science. In this course, you'll learn key programming and theoretical foundations of computer science, and get a taste of how they can be applied to many different areas of computer science, and society at large. We hope you have a great time in CSC110 and CSC111 this year, and are very much looking forward to teaching you!

The material posted on Quercus is required reading. It contains important information: assignment handouts, the policy on missed work, links to all course tools, the announcements page, and more. You are responsible for all announcements made in lecture and on Quercus.

Please read through this course syllabus carefully to familiarize yourself with the content, logistics, and policies of CSC110.

All course announcements will be made on Quercus on the [Announcements](https://q.utoronto.ca/courses/353095/announcements) (<https://q.utoronto.ca/courses/353095/announcements>) page. **You are responsible for reading all course announcements.**

---

## What is this course about?

An introduction to the field of computer science combining the tools and techniques of programming (using the Python programming language) with rigorous mathematical analysis and reasoning. Topics include: data representations; program control flow (conditionals, loops, exceptions, functions); mathematical logic and formal proof; algorithms and running time analysis; software engineering principles (formal specification and design, testing and verification). Prior programming experience is not required to succeed in this course.

This course is restricted to students in the first year Computer Science admission category, and is only offered in the Fall term. Other students planning to pursue studies in computer science should enrol in CSC108H1, CSC148H1, and CSC165H1/CSC240H1.

## Learning outcomes

In this course, you learn to:

1. Analyze a problem domain written in English; represent key definitions and properties using mathematical logic; and design, implement, and evaluate computational solutions to solve a problem.
  2. Understand and write programs using standard features of the Python programming language.
  3. Understand and use a variety of professional software development skills, including: programming using an Integrated Development Environment (IDE); writing clear documentation; debugging and testing programs; reading technical documentation and source code to learn how to use an external program or library.
  4. Analyse the running time of a program.
  5. Define and implement common abstract data types and algorithms.
  6. Create a mathematical proof or disproof of a given statement in new and familiar domains, choosing from among different proof techniques to use. Apply proofs of mathematical statements to justify the correctness of algorithms.
- 

## What is on this page

There is quite a lot of information on this page, and we get it, reading this much at once can be hard! So, we are splitting it up for you in multiple sections, with links to each section below:

- [About the teaching team \(https://q.utoronto.ca/courses/353095/assignments/syllabus/#team\)](https://q.utoronto.ca/courses/353095/assignments/syllabus/#team)
- [Contact Information \(https://q.utoronto.ca/courses/353095/assignments/syllabus/#contact\)](https://q.utoronto.ca/courses/353095/assignments/syllabus/#contact)
- [Lectures \(https://q.utoronto.ca/courses/353095/assignments/syllabus/#lectures\)](https://q.utoronto.ca/courses/353095/assignments/syllabus/#lectures)
- [Office Hours \(https://q.utoronto.ca/courses/353095/assignments/syllabus/#oh\)](https://q.utoronto.ca/courses/353095/assignments/syllabus/#oh)
- [Assessments \(https://q.utoronto.ca/courses/353095/assignments/syllabus/#assessments\)](https://q.utoronto.ca/courses/353095/assignments/syllabus/#assessments)
  - [Checkpoint Quizzes \(during Friday tutorials\) \(https://q.utoronto.ca/courses/353095/assignments/syllabus/#checkpoints\)](https://q.utoronto.ca/courses/353095/assignments/syllabus/#checkpoints)
  - [Assignments \(https://q.utoronto.ca/courses/353095/assignments/syllabus/#assigns\)](https://q.utoronto.ca/courses/353095/assignments/syllabus/#assigns)
  - [Tests and Exam \(https://q.utoronto.ca/courses/353095/assignments/syllabus/#tests\)](https://q.utoronto.ca/courses/353095/assignments/syllabus/#tests)
  - [Practice Problems \(https://q.utoronto.ca/courses/353095/assignments/syllabus/#practice\)](https://q.utoronto.ca/courses/353095/assignments/syllabus/#practice)
- [Technology requirements \(https://q.utoronto.ca/courses/353095/assignments/syllabus/#technology-requirements\)](https://q.utoronto.ca/courses/353095/assignments/syllabus/#technology-requirements)
  - [Software setup \(https://q.utoronto.ca/courses/353095/assignments/syllabus/#technology-requirements\)](https://q.utoronto.ca/courses/353095/assignments/syllabus/#technology-requirements)
  - [Department of Computer Science Teaching Labs \(https://q.utoronto.ca/courses/353095/assignments/syllabus/#technology-requirements\)](https://q.utoronto.ca/courses/353095/assignments/syllabus/#technology-requirements)
- [Textbooks and resources \(https://q.utoronto.ca/courses/353095/assignments/syllabus/#textbooks-and-resources\)](https://q.utoronto.ca/courses/353095/assignments/syllabus/#textbooks-and-resources)
- [Accommodations and accessibility services \(https://q.utoronto.ca/courses/353095/assignments/syllabus/#accommodations-and-accessibility-services\)](https://q.utoronto.ca/courses/353095/assignments/syllabus/#accommodations-and-accessibility-services)

- [Mental Health and wellness \(https://q.utoronto.ca/courses/353095/assignments/syllabus/#mental-wellness\)](https://q.utoronto.ca/courses/353095/assignments/syllabus/#mental-wellness)
- [Special consideration for term tests \(https://q.utoronto.ca/courses/353095/assignments/syllabus/#special\)](https://q.utoronto.ca/courses/353095/assignments/syllabus/#special)
- [Special consideration for other homework \(https://q.utoronto.ca/courses/353095/assignments/syllabus/#special\)](https://q.utoronto.ca/courses/353095/assignments/syllabus/#special)
- [Remark requests \(https://q.utoronto.ca/courses/353095/assignments/syllabus/#remark-requests\)](https://q.utoronto.ca/courses/353095/assignments/syllabus/#remark-requests)
- [CSC110 Community Code of Conduct \(https://q.utoronto.ca/courses/353095/assignments/syllabus/#csc110-community-code-of-conduct\)](https://q.utoronto.ca/courses/353095/assignments/syllabus/#csc110-community-code-of-conduct)
- [Copyright notice \(https://q.utoronto.ca/courses/353095/assignments/syllabus/#assigns\)](https://q.utoronto.ca/courses/353095/assignments/syllabus/#assigns)
- [Copyright notice \(https://q.utoronto.ca/courses/353095/assignments/syllabus/#copyright-notice\)](https://q.utoronto.ca/courses/353095/assignments/syllabus/#copyright-notice)
- [Switching to CSC108 \(https://q.utoronto.ca/courses/353095/assignments/syllabus/#switching-into-csc108\)](https://q.utoronto.ca/courses/353095/assignments/syllabus/#switching-into-csc108)

We also highlighted key parts throughout. :)

---


## CSC110 Teaching Team

Hi! I'm Sadia Sharmin, the instructor for LEC0201 and the course coordinator this term (as well as CSC111 next term!):



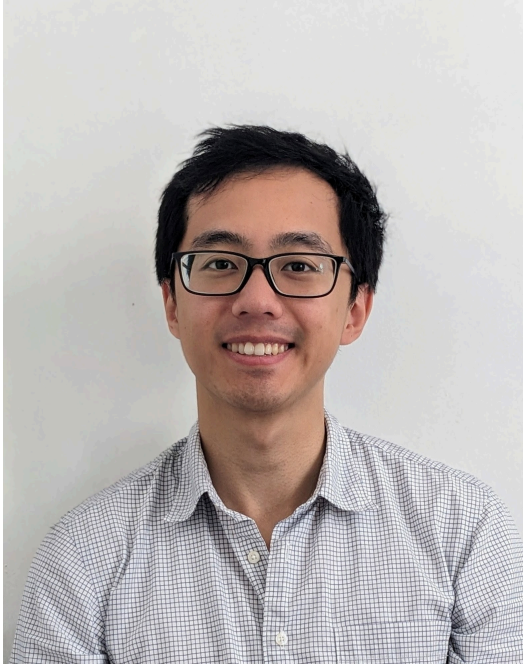
Here is me with my parrotlet, Dr. Chirly (pronunciation: CHUR-lee), on top of my head.

I am also the first-year CS faculty advisor, which means you can feel free to ask me for advice or request one-on-one appointments with me to discuss anything related to your first-year experience, even outside this course. My research interests are pedagogy of kindness, mental wellness and making CS more accessible, engaging and inclusive, especially for beginner students. When I'm not at U of T, I'm

probably watching Netflix (K-dramas and Bollywood movies included), trying out a new restaurant (recommendations for good places with vegan options are welcome!), or contemplating about life, the universe, and everything ([yes, I know the answer to this is 42](https://www.scientificamerican.com/article/for-math-fans-a-hitchhikers-guide-to-the-number-42/)  [\(https://www.scientificamerican.com/article/for-math-fans-a-hitchhikers-guide-to-the-number-42/\)](https://www.scientificamerican.com/article/for-math-fans-a-hitchhikers-guide-to-the-number-42/)).

-

Hello! I'm Paul, the instructor for LEC0101.



Like you, I'm also a first-year at UofT and I hope we can all learn a lot together this year! Before coming here, I did my PhD at the University of Pennsylvania, where I worked in the area of programming language theory and learned that I love teaching. Before that, I did my bachelors at the University of Waterloo in CS, and before that, I grew up here in Toronto—it's good to be home! Outside of work, I like rock climbing and exploring the city on my bike. I look forward to seeing you on campus!

-

Other than your instructors, you may also hear from our administrative support **[TBA]**, our head TA Mohi Reza, our MarkUs and auto-testing administrator Sophia Hyunh, or your classroom and tutorial TAs who you will be seeing regularly throughout the course. :)

---


## How to get in touch with us

### What not to do

Do **NOT** use Quercus messaging for anything related to CSC110. Your message will likely not be received. Do **not** send emails to course instructor's personal email addresses either, where they are

likely to get lost in our usually flooded inboxes. Instead you can do any of the below, depending on your situation –

## For personal issues/emergencies


To contact the course instructors regarding personal issues and emergencies, please post a **private post** on our [Ed discussion board](https://edstem.org/us/join/yJmvNJ)  (<https://edstem.org/us/join/yJmvNJ>). Private posts should be reserved for *personal questions* (making appointments, remarking requests, missing class, etc.). Otherwise, please post publicly (you can make yourself anonymous to your peers on a public post, if you would like) so that the rest of the class can benefit from the discussion as well :)

If you do not feel comfortable with Ed, you can also get in touch via this email address: [csc110-2024-09@cs.toronto.edu](mailto:csc110-2024-09@cs.toronto.edu) (<mailto:csc110-2024-09@cs.toronto.edu>). Sign your email with your **full name, student number, and UTORid**.

We will try to respond to email by the end of the next business day. However, it may take longer, especially near due dates. If you do not hear back after a few days, please do not hesitate to send a follow-up email. (Note: Sadia is better at monitoring Ed more regularly, so responses via Ed may be slightly faster.)

**Tip:** sometimes students may be nervous about emailing a professor for the first time. We've prepared a [an advice page on emailing your professors](https://q.utoronto.ca/courses/160038/pages/emailing-your-professors?module_item_id=3748253) ([https://q.utoronto.ca/courses/160038/pages/emailing-your-professors?module\\_item\\_id=3748253](https://q.utoronto.ca/courses/160038/pages/emailing-your-professors?module_item_id=3748253)) that you might want to check out!

## General course-related questions

For general course-related questions such as clarifying a concept, asking about an assignment, etc., please always use [Ed Discussion](https://edstem.org/us/join/yJmvNJ)  (<https://edstem.org/us/join/yJmvNJ>) instead of email. This is our course online discussion forum and chatroom. Please post all of your questions about the course material and assignments on Ed so that everyone can benefit from your questions. We will monitor the discussion board regularly, but please answer questions from other students—helping someone else learn is one of the most effective ways of truly mastering a subject.

## General questions, personal questions, and sometimes just to chat

Last but not least, come see us during our weekly office hours – more on that [below](https://q.utoronto.ca/courses/353095/assignments/syllabus/#oh) (<https://q.utoronto.ca/courses/353095/assignments/syllabus/#oh>)! You can come in on a drop-in basis with any general course-related questions (or – during less busy weeks – even just to chat).

---

## Lectures

The first lecture is on **Tuesday, September 3**. All lectures start at "U of T time", which is 10 minutes past the hour, and end on the hour. This allows for 10 minutes of travel/break time if you have back-to-back classes.

Lectures	LEC0101	LEC0201
Meeting Time and Location	Mondays 11:10am - 1:00pm (Location: <a href="#">MY 150</a> ( <a href="https://map.utoronto.ca/?id=1809#!m/494495">https://map.utoronto.ca/?id=1809#!m/494495</a> ) )	Mondays 11:10am - 1:00pm (Location: <a href="#">MY 150</a> ( <a href="https://map.utoronto.ca/?id=1809#!m/494495">https://map.utoronto.ca/?id=1809#!m/494495</a> ) )
	Tuesdays & Thursdays 9:10am - 11:00am (Location: <a href="#">MC 102</a> ( <a href="https://map.utoronto.ca/?id=1809#!m/494474?s/">https://map.utoronto.ca/?id=1809#!m/494474?s/</a> ) )	Tuesdays & Thursdays 3:10pm - 5:00pm (Location: <a href="#">HS 610</a> ( <a href="https://map.utoronto.ca/?id=1809#!m/494459?s/">https://map.utoronto.ca/?id=1809#!m/494459?s/</a> ) )
Instructor	Paul He	Sadia Sharmin (course coordinator)

**Note:** On Mondays, both lecture sections will be combined into a single room, MY 150. This will let you get to meet and interact with students across lecture sections, and allow us to run events for the entire first-year computer science cohort.

Our lectures will alternate between instructors presenting new concepts and you actively engaging with course material through problem-solving exercises. Attendance in lecture is not graded, but is considered a mandatory part of the course.

## Lecture recordings

Most lecture sessions will be recorded using the University of Toronto's *OpenCast Content Capture Pilot*, which automatically records lectures and posts them on the [OCCS Student App](#) ([https://q.utoronto.ca/courses/353095/external\\_tools/11190](https://q.utoronto.ca/courses/353095/external_tools/11190)). However, because of the amount of active learning that will take place during lecture, please note that simply watching these videos is *not* a substitute for attending class! Our recommendation is to use these recordings for review purposes only, or if you miss a lecture due to extenuating circumstances. If you did miss the lecture, we strongly recommend working through the in-class exercises (which are posted separately on Quercus) when we reach those points in the lecture, so that your experience is as close to the live classroom experience as possible. These recordings are meant for your personal learning, and you may *not* distribute these recordings or make your own (please see the [Copyright notice](#) (<https://q.utoronto.ca/courses/353095/assignments/syllabus/#copyright-notice>) below).

## Office hours



Each week, your instructors will hold drop-in office hours that provide an informal setting for students to drop in and ask questions or just chat about the course material (or, during less busy weeks, we can just chat about cats, board games, and other good things in life). You are welcome to attend any of the scheduled office hours (Please attend, even just to say hi!)

Regular schedule is in the table below. During busier times within the semester, we will announce additional TA and instructor office hours as well.

Instructor	Sadia Sharmin (Course Coordinator)	Paul He
Office Hours	<p>Mon 1:30 - 2:30pm (in-person, private office hours – <i>by appointment*</i>)</p> <p>Tue 1:30pm - 2:30pm (in-person, group office hours in <a href="https://map.utoronto.ca/?id=1809#!m/494470">BA 4290</a> (<a href="https://map.utoronto.ca/?id=1809#!m/494470">https://map.utoronto.ca/?id=1809#!m/494470</a>)</p> <p>Thur 1:00pm - 2:30pm (online, both private &amp; group available**)</p>	<p>Wed 10:30am - 11:30am (in-person, group office hours in <a href="https://map.utoronto.ca/?id=1809#!m/494470">BA 4290</a> (<a href="https://map.utoronto.ca/?id=1809#!m/494470">https://map.utoronto.ca/?id=1809#!m/494470</a>) (<a href="https://map.utoronto.ca/?id=1809#!m/494470?s/">https://map.utoronto.ca/?id=1809#!m/494470?s/</a>)</p> <p>Fri 2:30pm - 3:30pm (in-person, group office hours in <a href="https://map.utoronto.ca/?id=1809#!m/494470">BA 4290</a> (<a href="https://map.utoronto.ca/?id=1809#!m/494470">https://map.utoronto.ca/?id=1809#!m/494470</a>) (<a href="https://map.utoronto.ca/?id=1809#!m/494470?s/">https://map.utoronto.ca/?id=1809#!m/494470?s/</a>)</p>

**Notes:**

Office hours begin from the week of September 9-13, 2024.


\* Private one-on-one appointment times to discuss personal matters will be available on most Mondays. Please see the booking link **[TBA – to be posted soon]** for exact dates and to sign up for an appointment.

\*\*Online office hours will be held on **Zoom** at <https://utoronto.zoom.us/j/84245010690>  (<https://utoronto.zoom.us/j/84245010690>) (Passcode: 110110)

Our office hours are *student-driven*, meaning teaching team members won't have any material prepared. Instead, the discussion will be based on whatever questions you'd like to ask. Most office hours are also *group-based*, meaning we generally stick to questions that aren't specific to any particular student, but rather to course concepts and answers that every student can benefit from.

If you have a personal matter to discuss, you may attend Sadia's online office hour session on Thursday where you can request a private breakout room for a one-on-one conversation, or use this link **[TBA]** to book an in-person one-on-one appointment. If you have such a matter to discuss but none of the

available times work for you (or you wish to set up an appointment with Paul), feel free to send an email to the course account to request an appointment (let us know your availability for the week within the email, being as flexible as possible).

When you come to office hours, you should fill out this form – [Office Hours Sign-up Form](https://forms.office.com/r/Xk4DwrXeb1)  (<https://forms.office.com/r/Xk4DwrXeb1>) (note: the form data resets 10 minutes before scheduled office hours, so don't fill it out until the office hours are almost about to begin, or else you may lose your spot in the queue once the form resets). This will add you to the 'queue' and I will call on you in order. For online hours, I will likely invite you into a breakout room. Please join the room and **wait in the room** until I get to you, based on the queue order. :)

# Assessments

**Note:** All quizzes, tests and exam will be held in-person on campus, with no exceptions.

The following table summarizes the course assessments:

Assessment	Percent	Details	Due Date
Checkpoint Quizzes	18%	10 chapter quizzes, 2 quizzes every other week (more information below) – 2% for each chapter's quiz. Lowest scoring chapter quiz is dropped.	All quizzes take place during your registered tutorial session on Friday. Tutorials begin from Week 2.
Assignments (+ Assignment Quiz)	15%	2 assignments – 3% each, 2 assignment quizzes – 4.5% each	Assignment 1: Monday September 30 before 9:00am  Assignment 1 Quiz: Monday October 7 from 11:15am - 12:00pm (during lecture)  Assignment 2: Monday November 11 before 9:00am  Assignment 2 Quiz: Monday November 18



Assessment	Percent	Details	Due Date
			from 11:15am - 12:00pm (during lecture)
<b>Problem Sets</b>	9%	2 Problem sets – 4.5% each. These will typically involve writing (rather than coding) questions and will accompany each assignment	Problem Set 1: Monday September 30 before 9:00am ( <i>same as Assignment 1</i> )  Problem Set 2: Wednesday November 20 before 9:00 am
<b>Term Tests</b>	22%	Higher scoring term test will be worth 12% and the other worth 10%	<i>Both tests will take place during your regular lecture time (but may be in a different room! Be sure to check test info page – to be made available closer to test date – for details.)</i>  Test 1: Monday October 21, during your lecture session  Test 2: Monday November 25, during your lecture session
<b>Feedback Surveys</b>	2%	2 surveys - worth 1% each	<i>TBA</i>
<b>In-Person Final Exam</b>	34%	You must receive a grade of at least <b>40%</b> on the final exam to pass CSC110. Students who do not meet this threshold (including students who do not write the final exam) will have	Final Exam Period – will be announced by the Faculty of A&S later in the semester

Assessment	Percent	Details	Due Date
		their course grade lowered to no more than 48.	

## Checkpoint Quizzes – Friday Tutorials (18%)

Throughout the term, you will have several **checkpoint quizzes**.

These quizzes will offer **consistent feedback on your progress and understanding** of the course material. They will **help you gauge your readiness for larger assessments** such as midterms and the final exam, and **identify any gaps in your understanding** of core course concepts so you can address them early on.

These checkpoint quizzes will take place during your **tutorial sessions**, which means attending your registered tutorial session is mandatory.

They will take place during the following weeks:

- Week 2 (Friday, September 13) – Chapters 1 + 2 Quizzes (*two short quizzes, worth 2% each*)
- Week 4 (Friday, September 27) – Chapters 3 + 4 Quizzes
- Week 6 (Friday, October 11) – Chapters 5 + 6 Quizzes
  - *Note: Chapters 1-6 will be tested on your first term test, taking place during lecture time on Monday October 21*
- Week 9 (Friday, November 8) – Chapters 7 + 8 Quizzes
- Week 11 (Friday, November 22) – Chapter 9 + 10 Quizzes

**NO TUTORIAL QUIZZES DURING THE FIRST WEEK OF CLASS.** The first tutorial quiz is **Friday, September 13**. Like lectures, all tutorials start at "U of T time", which is 10 minutes past the hour.

### Competency-based Grading

Each chapter's quiz is worth 2% of your course grade, and the lowest scoring quiz is dropped. This means the checkpoint quizzes are worth a total of 18% of your course grade (your best 9 out of 10 quizzes contribute to your grade).

They are graded based on "competency" rather than "mastery." Scoring a B+ (77%) or higher on any quiz will count as "passing the checkpoint" and give you the full 2% for that quiz.

Anything below 77% will count as "not passing" the checkpoint, and opportunities for retakes will be available (see more below).

### Retake or Jumpstart Days

We recognize that you are all complex human beings, with complex lives. Not everyone is starting off with the same CS knowledge, and not everyone will learn at the same pace, and that's perfectly okay! We don't want to pressure you with these quizzes – rather, they should be a way for you to evaluate your own understanding and progress throughout the course.

With this in mind, you will be provided several opportunities to prove your competency of each chapter's material.

Firstly, if you do not "pass" (i.e. earn 77%+) on a checkpoint quiz, you will be given an opportunity to re-attempt a different quiz testing the same concepts during the upcoming week's tutorial session.

In alternating weeks, the tutorial session will be a "Retake or Jumpstart Day," during which you will have the opportunity to either:

1. Retake the checkpoint quiz **from the previous week** (with different questions testing the same topics), or
2. Take an upcoming quiz **from the next week** ahead of time to cross checkpoints early (freeing up your time later in the course).

The following weeks will have these "re-take / jumpstart" days: Weeks 3, 5, 7, 10, and 12.

### **Third attempts**

If you do not pass the checkpoint after both the first and second attempt, a third attempt will be available in a different format – a verbal interview with one of the instructors. We will email you an invitation for a one-on-one meeting to discuss the chapter's core concepts and ask you questions verbally. Based on your performance during the interview, we will provide advice and guidance to help you pass the checkpoint and address any misconceptions with the chapter material.

### **Academic Integrity**

Tutorials take place throughout the day. If you complete the quiz earlier in the day, please refrain from sharing any questions or solutions publicly (e.g., do not post on Ed) or discussing it with your classmates until everyone has finished writing the quiz by 5 pm. This ensures that all students have a fair chance to assess their own understanding independently, which is the primary purpose of these quizzes. Knowing the answers beforehand will not provide you with the valuable feedback needed to best prepare for the midterm and final exams.

## **Assignments + Problem Sets (24%)**

Assignments are larger pieces of work that span multiple course topics, and require you to apply and synthesize your knowledge and skills from multiple areas in computer science. They are a mixture of written tasks (problem sets) and programming tasks (assignments), and will be graded for both correctness and clarity of communication. Assignments will be posted online, and will be submitted to the MarkUs application. Assignments must be completed individually.

Each programming assignment will be accompanied by an in-person quiz which tests your understanding of the assignment content.

### **Assignments: Late Policy**

There is a one-hour grace period after an assignment deadline, during which no penalty will be applied. Assignments submitted after this one-hour grace period are late and will be accepted only under the policy on special consideration and accommodations below.

### **Assignments: Special Consideration and Accommodations Policy**


We recognize that unexpected problems, illness and disability-related barriers sometimes make it difficult to submit assignments on time. *(Note: Remember to value both your physical and mental health! We recognize that feeling emotionally unwell can be just as debilitating toward getting coursework completed on time.)* So, we are adopting a policy aiming to be as flexible as possible for a course of this size: You may request an extension of **up to one week** for one or more of the major assignment submissions by completing this form [TBA].

## **Term Tests (22%) and Final Exam (34%)**

Tests are used to evaluate your learning in a focused setting periodically throughout the semester (term tests) and at the end of the course (final exam). Each term test will take place in-person, during a Monday lecture time, replacing the regular lecture.

**IMPORTANT NOTE:** You must receive a grade of at least **40%** on the final exam to pass CSC110. Students who do not meet this threshold (including students who do not write the final exam) will have their course grade lowered to no more than 48.

## **Practice problems**

Aside from the graded assessments mentioned above, we will also be posting several practice problems throughout the term to help you evaluate your understanding and build your skills. Preparation exercises will be posted prior to each week and consist of a few readings from the [CSC110/111 Course Notes](https://www.teach.cs.toronto.edu/~csc110y/fall/notes)  (<https://www.teach.cs.toronto.edu/~csc110y/fall/notes>), a short comprehension quiz on Quercus, and some programming exercises that you will download and submit to using the online **MarkUs** application. We have designed these preps to help you stay on track and learn simpler concepts independently so that we can focus on more complex content and skills in lecture and tutorial.

At the end of most weeks, we will post larger programming exercises that you can use to reinforce and extend your learning from lecture that week. We have designed these exercises to not simply be a repeat of work you did in lecture, but to give you different kinds of opportunities to problem-solve and practice what you've learned.

---

# Technology requirements


To participate in this course, you must have reliable access to a personal computer to complete course work. A desktop computer or laptop are required; other computing devices, such as Chromebooks, tablets, and smartphones, are **NOT** sufficient to run the software required for this course.

We recommend bringing a laptop to lectures, so that you can experiment with and complete various programming-related exercises. However, if you do not have access to a laptop you will still be able to participate and complete almost every exercise on paper, though you will be responsible for printing out exercise handouts and bringing them to class. (See below for information about accessing our department's on-campus computer labs.)

## Software setup


You need to complete the CSC110 [Software Installation Guide](https://q.utoronto.ca/courses/160038/pages/setting-up-your-computer-start-here?module_item_id=1346385) ([https://q.utoronto.ca/courses/160038/pages/setting-up-your-computer-start-here?module\\_item\\_id=1346385](https://q.utoronto.ca/courses/160038/pages/setting-up-your-computer-start-here?module_item_id=1346385)) on your personal computer to make sure you have all the required software for this course. *Note:* we are using PyCharm to display, write, and run Python programs in this course. While we are not grading your use of PyCharm, if you choose to use a different program for Python programming, it will be your responsibility to translate instructions we give for using PyCharm, and your instructors and TAs may be unable to assist you. It is **highly recommended** to use PyCharm for this course, even if you have previously used different software before.

## The Department of Computer Science Teaching Labs

As first-year computer science students, you have access to our department's Teaching Lab rooms, located in the Bahen Centre, 40 St. George Street. These lab rooms are a popular study and work location for CS students, and have both computers and printers that you can access. For more information about the teaching labs, please check out [the CS Teaching Lab website](https://www.teach.cs.toronto.edu/resources/introduction-for-new-students-using-the-teach-cs-labs/https://www.teach.cs.toronto.edu/resources/intro_for_new_students.html)  ([https://www.teach.cs.toronto.edu/resources/introduction-for-new-students-using-the-teach-cs-labs/https://www.teach.cs.toronto.edu/resources/intro\\_for\\_new\\_students.html](https://www.teach.cs.toronto.edu/resources/introduction-for-new-students-using-the-teach-cs-labs/https://www.teach.cs.toronto.edu/resources/intro_for_new_students.html)).

---

## Textbooks and resources

There is no required textbook for this course. We'll be making use of a set of Course Notes that we have prepared for CSC110/CSC111, available for free online at <https://www.teach.cs.toronto.edu/~csc110y/fall/notes>  (<https://www.teach.cs.toronto.edu/~csc110y/fall/notes>). Roughly half of these chapters will be assigned as prep throughout this term, and these are all required readings for the course.

Here are a few supplementary books and resources that you may useful for this course:

- [Practical Programming](https://pragprog.com/titles/gwpy3/) ↗ (<https://pragprog.com/titles/gwpy3/>) by Paul Gries, Jennifer Campbell, and Jason Montojo.
  - [How to Think Like a Computer Scientist](http://www.openbookproject.net/thinkcs/python/english3e/) ↗ (<http://www.openbookproject.net/thinkcs/python/english3e/>) by Peter Wentworth, Jeffrey Elkner, Allen B. Downey, and Chris Meyers.
  - [How to Prove It](https://librarysearch.library.utoronto.ca/discovery/search?query=any,contains,how%20to%20prove%20it%20daniel%20velleman&tab=Everything&search_scope=U) ([https://librarysearch.library.utoronto.ca/discovery/search?query=any,contains,how%20to%20prove%20it%20daniel%20velleman&tab=Everything&search\\_scope=U](https://librarysearch.library.utoronto.ca/discovery/search?query=any,contains,how%20to%20prove%20it%20daniel%20velleman&tab=Everything&search_scope=U)) by Daniel J. Velleman.
  - [Discrete Mathematics: An Open Introduction](http://discrete.openmathbooks.org/dmoi3.html) ↗ (<http://discrete.openmathbooks.org/dmoi3.html>) by Oscar Levin.
- 

## Accommodations and accessibility services

### Accessibility services

Students with diverse learning styles and needs are welcome in this course. The Accessibility Services staff are available by appointment to assess specific needs, provide referrals, and arrange appropriate accommodations. The sooner you let them and us know your needs, the quicker we can assist you in achieving your learning goals in this course. For more information on services and resources available to students, including registering for accommodations, please see the U of T Accessibility Services website: <https://www.studentlife.utoronto.ca/as> (<https://www.studentlife.utoronto.ca/as>).

if you have a disability or health consideration that may require accommodations, please visit <http://www.accessibility.utoronto.ca> (<http://www.accessibility.utoronto.ca/>) **as soon as possible**.

Students who require accommodations for the term tests **need to register with Test & Exam Services**.


### Religious accommodations

As a student at the University of Toronto, you are part of a diverse community that welcomes and includes students and faculty from a wide range of cultural and religious traditions. For my part, I will make every reasonable effort to avoid scheduling tests, examinations, or other compulsory activities on religious holy days not captured by statutory holidays. Further to University Policy, if you anticipate being absent from class or missing a major course activity (such as a test or in-class assignment) due to a religious observance, please let me know as early in the course as possible, and with sufficient notice (at least two to three weeks), so that we can work together to make alternate arrangements.


---

## Mental Health and wellness



Your mental health is important. Throughout university life, there are many experiences that can impact your mental health and well-being. As a University of Toronto student, you can access free mental health and wellbeing services at Health & Wellness (<https://studentlife.utoronto.ca/departments/health-wellness/> (<https://studentlife.utoronto.ca/departments/health-wellness/>)) such as same day counselling, brief counselling, medical care, skill-building workshops, and drop-in peer support. You can also meet with a Wellness Navigation Advisor who can connect you with other campus and community services and support. Call the mental health clinic at 416-978-8030 ext. 5 to book an appointment or visit <https://uoft.me/mentalhealthcare>  (<https://uoft.me/mentalhealthcare>) to learn about the services available to you.

You can also visit your College Registrar to learn about the resources and supports available: <https://www.artsci.utoronto.ca/current/academic-advising-and-support/college-registrars-offices> (<https://www.artsci.utoronto.ca/current/academic-advising-and-support/college-registrars-offices>).

If you're in distress, you can access immediate support: <https://uoft.me/feelingdistressed>  (<https://uoft.me/feelingdistressed>)

---

## Special consideration for term tests

Students experiencing illness or other emergencies that prevent them from being able to complete homework on time, or write a term test, can request special consideration. To do so, complete the Special Consideration Request Form [TBA]. You will receive an email response to your request within 1-2 business days.

**IMPORTANT:** *Submit your request soon as possible if you find yourself in such a situation. It is easier to resolve situations earlier rather than later.* If your emergency will affect your ability to complete coursework for more than a few days, or in multiple courses, we recommend you also talk to your registrar. You should also complete the absence declaration form on ACORN.

---

## Special consideration for other homework

The flexible extension policy for assignment deadlines should cover all illness, disability-related barriers, and other special considerations for Assignments. A student who has been ill **for the entire 7 days between the assignment deadline and the extension date**, may contact us through the course email address ([csc110-2024-09@cs.toronto.edu](mailto:csc110-2024-09@cs.toronto.edu) (<mailto:csc110-2023-09@cs.toronto.edu>)).

---

## Remark requests

Mistakes sometimes happen when marking. If you feel there is an issue with the marking of an assignment or test, you may request that it be remarked.

**For problem sets:** request a remark on MarkUs for the assignment you feel there was a mistake in marking for. You must give a specific reason for the request, referring to a possible error or omission by the marker. Remark requests without a specific reason will not be accepted.

**For tests:** please see the announcement about the test result availability for details once test marks are released.

For prompt turnaround, remark requests must be received within **one week** of when the item was returned.

Please note that when we receive a remark request, we may regrade the entire submission, not just a specific question. Your mark may go up or down as a result of the remark.

---

## CSC110 Community Code of Conduct

[This section is based in part on the [Community Covenant](https://www.contributor-covenant.org/)  (<https://www.contributor-covenant.org/>).]

All members of the course staff and all students are part of the same CSC110 community, and we share the common goal of creating a safe and positive learning environment for every student. Each of us is responsible for creating this environment, and must follow the guidelines below when participating in this course.

1. *Use welcoming and inclusive language. Show empathy towards other community members.*

Call people by their preferred names and pronouns. Do not make offensive comments about an individual or group (e.g., gender, sexual orientation, disability and mental illness, or race). Avoid humour or sarcastic remarks based on such comments or stereotypes.

2. *Be respectful of differing viewpoints and experiences. Gracefully give and accept constructive criticism.*

Look for (and reflect on) ideas and perspectives that are different than your own. Make a genuine effort to thank those who share them. It is natural to disagree with something a member of our community has written, and you are permitted to voice your disagreement. However, when doing so take the following into consideration: try to understand where the other person might be coming from; do not assume the other person's motives or draw inferences from their identity; be polite in your response and state where you agree.

3. *Be professional in your conversations.*

While conversations about topics unrelated to CSC110 or even the University of Toronto are certainly permitted (and encouraged), keep these conversations professional as you would in the workplace. Do not share sexual or violent content and avoid profanity.

#### 4. *Respect the personal boundaries of each community member.*

While we encourage you to make use of this course's online platforms to meet each other to form academic and social connections, no one is obligated to do so. Everyone will have different boundaries and comfort levels that may change over time and depending on the situation. When in doubt, ask. If someone has asked you to respect one of their boundaries (e.g., not to contact them), with or without a reason, please respect their wishes. Do not reveal any person's personal information or private communications to a third person (or publicly) without receiving their explicit consent.

If you experience a violation of this code of conduct in a CSC110 space, or witness such a violation (even if it is not directed at you), or have any other concerns, please contact the course staff at [csc110-2024-09@cs.toronto.edu](mailto:csc110-2024-09@cs.toronto.edu) (<mailto:csc110-2023-09@cs.toronto.edu>). We will respond to you in a timely manner and everything you say will be confidential.

---

## Copyright notice

Course materials prepared by the instructor 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 personal use, and cannot be shared outside of the class or published (made publicly available) in any way. Posting course materials or any recordings you may make to other websites without the express permission of the instructor will constitute copyright infringement.



This notice applies to all course materials, including (but not limited to): course notes, lecture slides, lecture recordings, lecture and tutorial handouts, sample solutions, and assessment handouts, starter code, and solutions.

## Lecture and tutorial recordings

You may not make your own recordings of video, audio, or text chat, of lectures or tutorials.

## Your course work

Work that you complete for CSC110 (including exercises, assignments, and tests) may not be shared with other students or publicly published. This policy is to both protect the intellectual property of course staff (including, for example, the design and starter files for assignments), and to protect you from committing acts of academic dishonesty. For more information on this topic, see [the Department of Computer Science website](https://web.cs.toronto.edu/undergraduate/portfolio-advice) (<https://web.cs.toronto.edu/undergraduate/portfolio-advice>).

However, it should be noted that you *are* allowed to use GitHub's **private** (not public!) **repositories** to store your own work. [GitHub](https://www.github.com)  (<https://www.github.com>) is a popular option for computer science students and professionals to both collaborate in teams and publish their work online, including to develop a portfolio for potential employers. (See [GitHub's instructions for creating a repository](https://docs.github.com/en/github/getting-started-with-github/create-a-repo)  (<https://docs.github.com/en/github/getting-started-with-github/create-a-repo>) and select "Private" in Step 4.)

## Academic Integrity

All suspected cases of academic dishonesty will be investigated following procedures outlined in the [Code of Behaviour on Academic Matters](https://governingcouncil.utoronto.ca/secretariat/policies/code-behaviour-academic-matters-july-1-2019) (<https://governingcouncil.utoronto.ca/secretariat/policies/code-behaviour-academic-matters-july-1-2019>). If you have questions or concerns about what constitutes appropriate academic behaviour or appropriate research and citation methods, please reach out to the course coordinator.

Note that you are expected to seek out additional information on academic integrity from your instructors or from other institutional resources. For example, to learn more about how to cite and use source material appropriately and for other writing support, see the U of T writing support website at <http://www.writing.utoronto.ca> (<http://www.writing.utoronto.ca>). Consult the [Code of Behaviour on Academic Matters](https://governingcouncil.utoronto.ca/secretariat/policies/code-behaviour-academic-matters-july-1-2019) (<https://governingcouncil.utoronto.ca/secretariat/policies/code-behaviour-academic-matters-july-1-2019>) for a complete outline of the University's policy and expectations. For more information, please see [A&S Student Academic Integrity](https://www.artsci.utoronto.ca/current/academic-advising-and-support/student-academic-integrity) (<https://www.artsci.utoronto.ca/current/academic-advising-and-support/student-academic-integrity>) and the University of Toronto Website on [Academic Integrity](https://www.academicintegrity.utoronto.ca) (<https://www.academicintegrity.utoronto.ca>).

---

## Switching into CSC108

You will be able to switch from CSC110 to CSC108 up until the end of September. Students who are thinking about switching into CSC108 should speak with Amna ([amna.adnan@utoronto.ca](mailto:amna.adnan@utoronto.ca) (<mailto:amna.adnan@utoronto.ca>)), who is the CMP1 department advisor. Please note that if you switch to CSC108, you will also be removed from CSC111 in the winter semester, but will be given the option of taking CSC148 and CSC165 instead. You will lose the Computer Science Admission Guarantee but will be able to apply to a computer science program after completing CSC148 and CSC165.