

Course Syllabus



Edit

Welcome to CSC148! This course, *Introduction to Computer Science*, introduces you to how computer scientists think in a systematic way about computing. Our goal is to provide you with skills for approaching program design in a principled way, using techniques such as encapsulation, modularity, information-hiding, comparing different implementations for efficiency, and building powerful data structures.

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

Contact Information

Bahar Aameri is the instructor for both sections of this course. Bahar and Instructional Support staff deal with all administrative issues such as missed work, the course website, and TA issues. Sophia Huynh is Lab Coordinator, which means she deals with all issues related to the weekly preps and labs.

Instructors	Lectures	Office Hours	Email
Bahar Aameri  (https://www.cs.toronto.edu/~bahar/)	L0101: M 10:10 - 11:00am (MP 202 (https://map.utoronto.ca/?id=1809#!m/494490)) W9:10 - 11:00am (MP 203 (https://map.utoronto.ca/?id=1809#!m/494490))	Mon 4-5:30pm, BA4231 Wed 3:30-5:30pm, BA4231	csc148-2024-09@cs.toronto.edu (mailto:csc148-2024-09@cs.toronto.edu)

L0201: M 1:10 - 2:00pm ([PB B250](https://map.utoronto.ca/?id=1809#!m/494476)
([https://map.utoronto.ca/?](https://map.utoronto.ca/?id=1809#!m/494476)
[id=1809#!m/494476](https://map.utoronto.ca/?id=1809#!m/494476))._)

W 1:10 - 3:00pm ([PB B250](https://map.utoronto.ca/?id=1809#!m/494476)
([https://map.utoronto.ca/?](https://map.utoronto.ca/?id=1809#!m/494476)
[id=1809#!m/494476](https://map.utoronto.ca/?id=1809#!m/494476))._)

Lectures

All lectures start at 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.

Active Learning

During lectures, we will present material and demonstrate problem-solving for part of the time. There will also regularly be exercises that you complete. Be prepared to get your gears turning in class! There is very strong evidence, and our experience also shows, that active learning works better than passively listening to a lecture. We also think it's a lot more fun!

Lecture Recordings

We are participating in the University of Toronto's *Opencast Content Capture Pilot*, which will automatically record lectures and post them on the [OCCS Student App](https://q.utoronto.ca/courses/353223/external_tools/11190) (https://q.utoronto.ca/courses/353223/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/353223/assignments/syllabus?wrap=1#copyright-notice) (<https://q.utoronto.ca/courses/353223/assignments/syllabus?wrap=1#copyright-notice>) below).

Labs






After lectures each week, you will participate in an in-person two-hour lab, where you will reinforce and extend your learning from lecture that week. Like lectures, all labs start at 10 minutes past the hour. **You must register for a lab section (TUT____) on ACORN, separate from your lecture section.** You are allowed to pick any lab time independent of your lecture time.

We have designed the labs 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. For more information about the labs, check out [Policies and Guidelines: Weekly Labs](https://q.utoronto.ca/courses/353223/pages/policies-and-guidelines-weekly-labs?wrap=1) (<https://q.utoronto.ca/courses/353223/pages/policies-and-guidelines-weekly-labs?wrap=1>).

Prerequisites

CSC108 or equivalent programming experience is assumed. We'll be using Python in the course, but comfort with other imperative programming languages like Java or C should be fine. There will be a **ramp-up session** during the first weekend of term for students whose background is not in Python or who feel they need a refresher. Find out more on our [Ramp-Up Session](https://q.utoronto.ca/courses/353223/pages/ramp-up-session-updated-sept-14-with-materials-slash-recordings?wrap=1) (<https://q.utoronto.ca/courses/353223/pages/ramp-up-session-updated-sept-14-with-materials-slash-recordings?wrap=1>) page.


Here are some links to CSC108 materials and general advice:

- [Coursera course 1](https://www.coursera.org/course/programming1)  (<https://www.coursera.org/course/programming1>) and [Coursera course 2](https://www.coursera.org/course/programming2)  (<https://www.coursera.org/course/programming2>) (based on CSC108 materials)
- [Information about the CSC108 textbook](https://pragprog.com/titles/gwpy3/practical-programming-third-edition/)  (<https://pragprog.com/titles/gwpy3/practical-programming-third-edition/>)
- [CSC108 Youtube channel](https://www.youtube.com/channel/UCu8NnRGtGxHe96Le0xqLrNQ/videos)  (<https://www.youtube.com/channel/UCu8NnRGtGxHe96Le0xqLrNQ/videos>)
- [Advice on choosing your first-year courses](https://web.cs.toronto.edu/undergraduate/first-year-courses)  (<https://web.cs.toronto.edu/undergraduate/first-year-courses>) (skip down to "Which introductory course is right for you?")

Dropping down to CSC108

Students may request to drop down to CSC108 until Monday September 23, provided there is space available in CSC108. To make this request, please contact your [College Registrar \(https://www.artsci.utoronto.ca/current/academic-advising-and-support/college-registrars-offices\)](https://www.artsci.utoronto.ca/current/academic-advising-and-support/college-registrars-offices).

Textbook

There is no course textbook. Your required reading will be a set of free online [CSC148 Course Notes](https://www.teach.cs.toronto.edu/~csc148h/notes/)  (<https://www.teach.cs.toronto.edu/~csc148h/notes/>), written by Diane Horton and David Liu.

Course Software

For information about the software we'll use for this course, please see the [Software Guide](https://q.utoronto.ca/courses/353223/pages/software-guide) (<https://q.utoronto.ca/courses/353223/pages/software-guide>) page for instructions on installing the necessary software onto your computer.

Assessments and Course Grading Scheme

You will complete four major kinds of assessments in this course: weekly preparation exercises, labs, assignments, and tests/exams. You will also complete a module on *Embedded Ethics in computing*. All assessments except the labs, midterm test, and final exam can be completed online. **The labs, midterm test, and final exam will be held in-person, with no exceptions.**

Assessment	Weight	Due Date/Date Held (Eastern Time)
10 weekly preparation exercises	8% (1% each, best 8 of 10 counted)	Wednesdays before 9:00am, starting Sep 4
10 labs	8% (1% each, best 8 of 10 counted)	Thursdays during your TUT section. In person.

Assignment 0	5%	Comprehension quiz: Tuesday, Sep 24, before 11:00pm Code submission: Tuesday, Oct 1, before 11:00pm
Midterm Test	17%	Wednesday Oct 9, during class time. In person.
Assignment 1	10%	Comprehension quiz: Tuesday, Oct 22 before 11:00pm Test suite submission: Tuesday, Oct 22 before 11:00pm Complete code submission: Tuesday, Nov 5 before 11:00pm
Assignment 2	10%	Comprehension quiz: Tuesday, Nov 12 before 11:00pm Code submission: Tuesday, Nov 26 before 11:00pm
Embedded Ethics Module	2% total: <ul style="list-style-type: none">• 2 surveys: 0.5% each• Written exercise: 1%	<ul style="list-style-type: none">• Pre-module survey due Wednesday November 20 before 10:00am• Written exercise due Monday December 2 before 5:00pm

		<ul style="list-style-type: none"> • Post-module survey Monday December 2 before 5:00pm
Final Exam	40%	During the final assessment period. In person.

Details:

- [Weekly preparation exercises](https://q.utoronto.ca/courses/353223/pages/policies-and-guidelines-weekly-preparation-exercises) (<https://q.utoronto.ca/courses/353223/pages/policies-and-guidelines-weekly-preparation-exercises>) ("preps", 8%) consist of a few readings and short exercises that you complete before each week of lecture. 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 lab.
- [Weekly labs](https://q.utoronto.ca/courses/353223/pages/policies-and-guidelines-weekly-labs) (<https://q.utoronto.ca/courses/353223/pages/policies-and-guidelines-weekly-labs>) (8%): During each weekly lab you will complete and submit some programming exercises which will be graded automatically. We expect every student who attends the lab and puts in an honest effort for the whole lab session will receive full grade each week.
- [Assignments](https://q.utoronto.ca/courses/353223/pages/policies-and-guidelines-assignments) (<https://q.utoronto.ca/courses/353223/pages/policies-and-guidelines-assignments>) (25%) are larger pieces of programming work that span multiple course topics, and require you to apply and synthesize your knowledge and skills from multiple areas in computer science. All assignments must be completed **individually**.
- **Midterm (17%)** and **Final Exam (40%)** are used to evaluate your learning in a focused setting in the middle of the semester (Midterm) and at the end of the course (Final Exam). The *Midterm* will take place during *lecture time* on the scheduled date, replacing the regular lecture.
 - **IMPORTANT NOTE:** You must receive a grade of at least **40%** on the final exam to pass CSC148. Students who do not meet this threshold (including students who do not write the final exam) will have their course grade lowered to 47%.

Late Work Policies

Weekly Preps:

Weekly preparation exercises generally include two graded components: a Quercus quiz and programming exercises submitted on MarkUs. **Late submissions are NOT accepted on either part of the weekly prep.** However, there are 9 preps in total, and we will only

count your best 8. If you must miss more than one prep due to extraordinary circumstances beyond your control, submit a special consideration request (see the “Special Requests” section below).

Assignments:

Each student has **12 (twelve)** grace tokens, each worth a 24-hour extension. You can use these for any assignment deadline (including the "A1 test-case submission" deadline, but not more than 4 tokens per any deadline. Each token is “atomic”, i.e., you cannot use ½ token for a 12-hour extension.

IMPORTANT: The grace token system is designed to provide some flexibility in cases where you require a minor deadline extension due to extraordinary circumstances beyond your control. We created this policy because we recognize that unexpected problems, illness, and disability-related barriers sometimes make it difficult to submit assignments on time. However, it's strongly recommended that you do **NOT overly** use your grace tokens to buy an extension, or you will be out of luck in a true emergency. If you constantly finding yourself in need of multiple days of extensions, or have difficulty managing stress and time, either contact the course instructors, or your College Registrar, who can suggest wellness counselling, academic advising, and/or learning strategist services.

Missed Midterm

You may request special consideration if you missed the midterm due to illness or other extenuating circumstances by submitting the special consideration form (see below). You will be asked to provide additional information, and this will be reviewed by the course staff. You should also complete an Absence Declaration on ACORN [when appropriate](#) (<https://www.artsci.utoronto.ca/current/academics/student-absences>), and send the notification to the course email address. *Special consideration is NOT always granted.* If it is granted, the weight of your midterm will be **transferred to the final exam**.

Special Consideration Requests:


You must use your grace tokens in cases where you require a minor deadline extension for assignments (4 days or less) due to extraordinary circumstances beyond your control. If you need a major assignment deadline extension (more than 4 days), cannot complete an assignment, or cannot write the term test due to extraordinary circumstances beyond your control, please submit a special consideration request as soon as possible (see the link below). You must provide documentations supporting your request. You can find the list of acceptable documents [here \(https://www.artsci.utoronto.ca/current/academics/student-absences\)](https://www.artsci.utoronto.ca/current/academics/student-absences). Special consideration requests will be evaluated on a case-by-case basis and are not granted automatically. Sometimes, we cannot grant you exactly the special consideration you seek. You will be required to affirm that you are abiding by the [Code of Behaviour on Academic Matters](#)

(<http://www.governingcouncil.utoronto.ca/Assets/Governing+Council+Digital+Assets/Policies/PDF/ppjun011995.pdf>), in particular, to be aware that it is an academic offence

to engage in any form of cheating, academic dishonesty or misconduct, fraud or misrepresentation not herein otherwise described, in order to obtain academic credit or other academic advantage of any kind

That is, you must be truly experiencing an emergency, and acknowledge that to falsely claim so is an academic offence. Making a request does not guarantee that you will be granted special consideration.

If you miss an assignment or the midterm test for an approved reason, the weight of the missed work will be shifted to the final exam and/or midterm test.

[Special Consideration Request Form](https://forms.office.com/Pages/ResponsePage.aspx?id=JsKqeAMvTUuQN7RtVsVSEH66rj2flYRAR4YaXISQ_8JUNK04SEFGUEIQWjhCRVJLRjE3UDAxVUtYRy4u)  (https://forms.office.com/Pages/ResponsePage.aspx?id=JsKqeAMvTUuQN7RtVsVSEH66rj2flYRAR4YaXISQ_8JUNK04SEFGUEIQWjhCRVJLRjE3UDAxVUtYRy4u)
(read the policy details above carefully before submitting a request!)

Accommodations and Accessibility Services

Students with diverse learning styles and needs are welcome in this course. In particular, if you have a disability or health consideration that may require accommodations, please feel free to approach your instructor and/or the Accessibility Services Office as soon as possible. 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).

Midterm Remark Requests

If you believe there was an error in the marking of the midterm test, you may request that it be remarked. You must give a specific reason for the request, referring to a possible error or omission by the marker. Please note that when we receive a remark request, we regrade the

entire submission, not just a specific question. Your mark may go up or down as a result of the remark.

Remark requests are accepted for **two weeks** after the midterm test is returned, and will be completed within two weeks **after** the remark request *deadline*. We will make a Quercus announcement after the test results are released with details on how to request a remark.

Getting Help

Discussion Board: for sharable questions

Please post your questions about the course material and assignments on our Piazza discussion board so that everyone can benefit from your questions and answers.

The discussion board will be monitored by the instructors and TAs but can also be used for discussion among students. Helping someone else learn is one of the most effective ways of deeply learning a subject.

We will monitor the discussion board regularly, but it may take longer to get answers near due dates, so try to start assignments early in case you have questions. Answers to frequently asked questions will be posted on Piazza throughout the term. You may NOT discuss the assignment solutions on the board until 12 days after the due dates.

Course email account: for personal matters

If you have an administrative issue, please message us at the course email address above. However, if you have a remark request or special consideration request, it is sufficient to fill out the respective online form. Please avoid sending us an email unless you must provide information that cannot be included in the Special Considerations form. Please use your university email address and put “[CSC148]” in the subject line of your emails. Compose a short message and clearly describe a single topic. Email response time may be 2 business days or longer; if you do not hear back as your expectation, come to the instructor's weekly office hours.

Academic Integrity

The work you submit must be your own. It is an academic offence to copy the work of someone else. This includes their files, their words, and even their ideas. Whether you copy or let someone else copy your work, it is an offence. We want you to benefit from working with other students and will give you plenty of opportunities to do so in lectures and labs. But when it comes to course assessments, **collaboration on solutions is strictly forbidden**. Certainly, you must not let others see your solutions, even in draft form. Do not post your solutions on public online platforms like GitHub, as these can be searched and used by other students. (See the "Your course work" section below for our advice about using private GitHub repositories.)

For more information about what is and isn't allowed, please see [Academic Integrity in CSC148](https://q.utoronto.ca/courses/353223/pages/academic-integrity-in-csc148?wrap=1) (<https://q.utoronto.ca/courses/353223/pages/academic-integrity-in-csc148?wrap=1>).

Policy on Generative AI (including ChatGPT)

In this course, you may use generative artificial intelligence (AI) tools, including ChatGPT and GitHub Copilot, as learning aids and to help complete weekly preps and assignments. You will not be permitted to use generative AI on the midterm test or final exam. While some generative AI tools are currently available for free in Canada, please be warned that these tools have not been vetted by the University of Toronto and might not meet University guidelines or requirements for privacy, intellectual property, security, accessibility, and records retention. Generative AI may produce content which is incorrect or misleading, or inconsistent with the expectations of this course. These tools may be subject to service interruptions, software modifications, and pricing changes during the semester.

Generative AI is not required to complete any aspect of this course, and we caution you to not rely on these tools to complete your coursework. Instead, we recommend treating generative AI as a supplementary tool only for exploration or drafting content. Ultimately, you (and not any AI tool) are responsible for your own learning in this course, and for all the work you submit for credit. It is your responsibility to critically evaluate the content generated, and to regularly assess your own learning independent of generative AI tools. Overreliance on generative AI may give you a false sense of how much you've actually learned, which can lead to poor performance on the midterm test or final exam, in later courses, or in future work or studies after graduation.

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 lab handouts, sample solutions, and assessment handouts, starter code, and solutions.

Lecture and Lab Recordings

You may not make your own recordings of video, audio, or text chat, of lectures or labs, whether in person or online. Course staff may upload lecture recordings on the course website for your use (but you may not distribute these).

Your Course Work

Work that you complete for CSC148 (including exercises, assignments, and tests) may not be shared with other students or 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).

[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. As we said in the *Academic Integrity* section, you should not put your work publicly on GitHub. However, you may use GitHub's **private repositories** to store your own work. (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.)

Creating a Positive Learning Environment

We are committed to creating a respectful learning environment in computer science courses for all students and expect that you will adhere to the University of Toronto [Code of Student Conduct \(https://governingcouncil.utoronto.ca/secretariat/policies/code-student-conduct-december-13-2019\)](https://governingcouncil.utoronto.ca/secretariat/policies/code-student-conduct-december-13-2019). Please be mindful of how your behavior influences the atmosphere in our learning community, not just in

lectures and labs, but also in office hours, in online forums, and anywhere that you interact with other students and members of the department.

Quercus cover image credit: <https://medium.com/@Alikhan6642/object-oriented-programming-oops-in-python-1bcac7b3a986> 
(<https://medium.com/@Alikhan6642/object-oriented-programming-oops-in-python-1bcac7b3a986>)