DEPARTMENT OF MATHEMATICAL AND COMPUTATIONAL SCIENCES
UNIVERSITY OF TORONTO MISSISSAUGA

CSC148H5Y LEC0101
Introduction to Computer Science
Course Outline - Summer 2022

Class Location & Time	Tue, 01:00 PM - 04:00 PM MN 1270
Instructor	Bahar Aameri
Office Location	DH-3019
Office Hours	Mondays, 3--4pm, Wednesdays 4:30-6pm
E-mail Address	bahar@cs.toronto.edu
Course Web Site	https://mcs.utm.utoronto.ca/~148

Course Description

Abstract data types and data structures for implementing them. Linked data structures. Encapsulation and information-hiding. Object-oriented programming. Specifications. Analyzing the efficiency of programs. Recursion. This course assumes programming experience in a language such as Python, C++, or Java, as provided by CSC108H5. Students who already have this background may consult the Computer Science faculty advisor for advice about skipping CSC108H5. [36L, 24P]

Prerequisite: CSC108H5
Exclusion: CSC148H1 or CSC150H1 or CSCA48H3 or 1.5 CSC credits at the 200-level or higher (SCI)
Distribution Requirement: SCI

Students who lack a pre/co-requisite can be removed at any time unless they have received an explicit waiver from the department. The waiver form can be downloaded from here.

Detailed Course Description

Welcome to CSC148! This course, **Introduction to Computer Science**, introduces you to how computer scientists think in a systematic way about computing. Our hope is to provide you the basics for approaching program design principles such as encapsulation, modularity, and information-hiding, comparing different program implementations for efficiency, and building powerful data structures. Please visit the course web page and discussion board often, and read email sent to your University of Toronto email for important announcements.

Important notes:

- All lectures and labs are **in-person** and **will not be recorded**.

- Our **first lecture** is on May 10 for LEC0101 and May 11 for LEC0102.

- You must go to the lecture section you are enrolled in, otherwise we cannot guarantee we can accommodate you and you may be asked to leave.

- Labs start in the **first week** of classes.

- Lab room assignments are according to your ACORN enrollment.

Learning Outcomes

Learning outcomes are specified on the course website.

Textbooks and Other Materials

No books or other course materials are required. All material is online and posted on the course website.

Assessment and Deadlines

Type	Description	Due Date	Weight
Assignment	Assignment 1	2022-07-07	15%

Assignment	Assignment 2		2022-08-12	15%
Lab	Labs		On-going	4%
Other	Prep exercises		On-going	8%
Term Test	Midterm, 5-6pm		2022-07-21	13%
Final Exam	Final Exam		TBA	45%
			Total	100%

More Details for Assessment and Deadlines

=== Assignment and Prep Deadlines ===

Assignments are due at 11PM on deadline date.

Preps are due each week on Tuesday morning at 11am. The preps must be completed before the first lectures section starts as we may discuss partial solutions as part of in-class activities, so we cannot extend prep deadlines under any circumstances.

See further details under Late Policy.

=== Exam Autofail rule ===

You need to score at least a 40% on the final exam to pass the course. Students scoring less than 40% on the final exam will receive a maximum final grade of 47%.

=== Prep grade ===

Preps are all mandatory to make sure you are prepared to work on problem-solving in lecture. Prep 1 is not for credit, while the rest of the 9 preps are graded. We will take your **best 8 out of the 9 graded preps for 1% each, totalling 8%**.

=== Lab grade ===

Labs are important to further develop skills so you must participate in the labs each week. We will take the **best 8 out of 10 labs for marks, for 0.5% each, totalling 4%**.

=== Individual Work Policy ===

All assignments and weekly preps must be done individually.

Labs may be done with a partner, except for the lab quiz which is individual. See details under Lab Policies below.

=== Lab Policies ===

For CSC148, labs are scheduled time for you to get hands-on experience applying the concepts you learn each week. Each one consists of a few tasks that range from design on pencil-and-paper, implementing functions in Python, writing tests, and even learning some new material! There will also be an informal quiz activity at the end of lab, to give you some experience working in an exam-like environment as the quiz will test your individual grasp of the material.

Please consult ACORN to find your assigned lab section and room. The list of lab sections and rooms is also provided on the course website. If you are not enrolled in a lab (PRA) section yet, please make sure to do so asap, otherwise you will get a 0 on the labs.

To avoid situations where some students do not get a seat in the lab, you **must attend the lab room and timeslot that you enrolled in on ACORN**.

NOTE: **If you show up to a PRA you are not enrolled in, your work will NOT be graded, as you will not be on the TA's grading list for that lab section, and we will not have a quiz printed for you.**

--- Lab participation and other guidelines: ---

You are not marked on the work you complete. Instead, labs are marked **participation in three parts**: the programming activity (which is done with partners), the individual quiz, and the discussions on the quiz.

As long as you do the following, you will get the lab grade each week:

- Join the lab within at most **10 minutes** of it starting (20 minutes past the hour is the "cutoff")
- Put in a solid effort each lab (not just goofing off) during the lab activity
- Complete the quiz activity at the end of the lab and the discussions

NOTE: **Labs are not for asking assignment questions, they are dedicated for working on the lab activity!**

=== Lab Tips: ===

1. Your TAs are there to help! Don't be afraid to ask them questions about the lab - that's why they're there.
2. If you happen to finish the regular lab tasks early, you have a few options:

   - Discuss the lab exercises with your partner, to make sure both of you are not left with misconceptions.
   - Try to implement a different approach, where applicable. Thinking of alternative solutions is good practice.
   - Help the other students, where applicable! This is a great way to get to know other students and make sure you really understand the material.
   - Work on the additional and/or challenge exercises on the lab.

3. We tend to give *more* work than can be completed in a two-hour period, so that you have lots of opportunities for practice even after the lab is over. Don't feel bad if you don't complete a lab, try to finish each one for homework!
4. While you may be able to access the lab handouts ahead of your lab's start time, there's really no benefit to doing so. Remember that the primary goal of the lab is for you to learn with your TA there, and work with another student, and that you earn marks based on participation, not completion.
5. Participation grades will appear on MarkUs around a week (or a few weeks, depending on busy times during the term) after the lab has completed. **Please wait for at least 1-2 weeks before asking about a missing attendance grade.**

Penalties for Lateness

For weekly preps, **no late submissions will be graded**. The whole point of the preps is to be ready for active problem-solving in lecture. Additionally, we often may discuss prep content in class (potentially including partial solutions) and it would be unfair if students in earlier sections in the day/week are at a disadvantage.

However, for the two larger assignments (A1 and A2), we recognize that unexpected problems sometimes make it difficult to submit them on time. For this reason, we will be using grace tokens to give you flexibility with assignment deadlines.

Each student will receive **ten grace tokens**; each grace token can be used for a **two-hour extension** for an assignment. For example, you may choose to use all ten grace tokens on the assignment A1, extending its deadline by twenty hours. Or, you may wish to use five tokens for each of A1 and A2, extending each deadline by ten hours.

MarkUs automatically deducts grace tokens when you submit an assignment late---you do *not* need to explicitly say you are using a grace token, just submit your work within the grace token two-hour periods.

Note: It is your responsibility to submit your work on time. Assignments submitted at 11:00:01PM or after, are considered late in MarkUs and a grace token is deducted automatically, if you have any remaining. So, we cannot give you back a grace token that MarkUs already deducted for work submitted close to the deadline yet after it had passed, even if it's just a few seconds past the deadline! Similarly, preps submitted at 11:00:01AM or after on the due date, will not be graded.

Procedures and Rules

Missed Term Work

In order to receive special consideration, you must email the course coordinator and declare your absence on ACORN. For more

information, visit the Office of the Registrar website (https://www.utm.utoronto.ca/registrar/utm-absence).

If you are unable to complete an assignment or if you miss a test due to major illness or other circumstances completely outside of your control,
get in touch with us *immediately* if you want to receive special consideration.

In order to receive special consideration, you must fill out a Request for Special Consideration Form, provided on the course website. Email the completed form to the instructor ***right away***, together with your supporting documentation.

IMPORTANT:
Notify us as soon as possible if you find yourself in such a situation. You can contact us even before you have filled the special consideration form; we won't be able to tell you at that point what accommodation you may receive, if any, but can answer other questions and offer advice.
It is always easier to resolve situations earlier rather than later.

Notes:

1. Extensions for preps are **not possible under any circumstance**.
2. In general, special consideration for other items may be possible, due to medical or accessibility accommodations. Other consideration may be possible only in rare and extreme personal circumstances.

Missed Final Exam

Students who cannot complete their final examination due to illness or other serious causes must file an online petition **within 72 hours of the missed examination**. Late petitions will **NOT** be considered. Students must also record their absence on ACORN on the day of the missed exam or by the day after at the latest. Upon approval of a deferred exam request, a non-refundable fee of $70 is required for each examination approved.

Academic Integrity

Academic integrity is essential to the pursuit of learning and scholarship in a university, and to ensuring that a degree from the University of Toronto Mississauga is a strong signal of each student's individual academic achievement. As a result, UTM treats cases of cheating and plagiarism very seriously. The University of Toronto's Code of Behaviour on Academic Matters outlines behaviours that constitute academic dishonesty and the process for addressing academic offences. Potential offences include, but are not limited to:

In papers and assignments:

1. Using someone else's ideas or words without appropriate acknowledgement.
2. Submitting your own work in more than one course, or more than once in the same course, without the permission of the instructor.
3. Making up sources or facts.
4. Obtaining or providing unauthorized assistance on any assignment.

On tests and exams:

1. Using or possessing unauthorized aids.
2. Looking at someone else's answers during an exam or test.
3. Misrepresenting your identity.

In academic work:

1. Falsifying institutional documents or grades.
2. Falsifying or altering any documentation required, including (but not limited to) doctor's notes.

Keep in mind that the department uses software that compares programs for evidence of similar code. Below are some tips to help you avoid committing an academic offence, like plagiarism.

- Never look at another student's lab/assignment solution(s). Never show another student your lab/assignment solution. This applies to all drafts of a solution and to incomplete and even incorrect solutions.
- Keep discussions with other students focused on concepts and examples. Never discuss labs/assignments before the due date with anyone but your Instructors and your TAs.
  Do not discuss your solution publicly on the discussion board or publicly in the lab rooms/office hours.

All suspected cases of academic dishonesty will be investigated following procedures outlined in the Code of Behaviour on

Academic Matters. If you have questions or concerns about what constitutes appropriate academic behaviour or appropriate research and citation methods, you are expected to seek out additional information on academic integrity from your instructor or from other institutional resources.

The work you submit must be your own. It is an **academic offence to copy someone else's work, with or without changes**. This includes their code, their words, and even their ideas. **Whether you copy or let someone else copy, it is an academic offence.** The department uses software that compares programs for evidence of similar code. **Academic offences are taken very seriously.**

At the same time, we want you to benefit from working with other students. Obviously, work done with your partner on the labs is a joint effort.
You are also welcome to work *appropriately* with other students. To clarify, it is appropriate to discuss course material and technology related to assignments, and we encourage you to do so. For example, you may work through examples that help you understand course material or a new technology, or help each other configure your system to run a supporting piece of software. You may also discuss assignment requirements.

However, **collaboration on preps or assignment solutions is strictly forbidden**. The most certain way to protect yourself is not to discuss solutions or the ideas behind them with other students. Certainly you must not let others see your solutions, even in draft form. Please don't cheat. We want you to succeed and are here to help if you are having difficulty.

Once again, all of the work you submit must be done only by you (and your partner, in case of labs). Plagiarism is academic fraud and is taken very seriously. Please read the Rules and Regulations from the U of T Code of Behaviour on Academic Matters.

Important: Please note that while we don't prohibit the use of private tutors, you have to be aware of what is good tutoring and bad tutoring and stay away from tutors who will do you a disservice and hurt your academic standing.

1. If you have a tutor, they are not allowed to help you solve the assignments or preps! That falls under **unauthorized help** under the Code of Behaviour on Academic Matters.
2. Tutors may show you how to debug code in general, or how to read errors in general and interpret them. However, they are **not allowed to tell you how to solve a problem or what code to write**.
3. If your tutor is telling you what to write or how to solve a problem instead of providing guidance to solving the problem yourself, then they are not helping you. Students who receive such tutoring are likely to fail the course, as they are not learning and will likely fail the midterm and final exam.
4. Most tutors help other students as well, so if your tutor is telling you what to write in your solution, it is possible your assignments will be flagged for plagiarism if other students write similar code, due to the same tutor's bad practices.

Plagiarism Detection

Normally, students will be required to submit their course essays to the University's plagiarism detection tool for a review of textual similarity and detection of possible plagiarism. In doing so, students will allow their essays to be included as source documents in the tool's reference database, where they will be used solely for the purpose of detecting plagiarism. The terms that apply to the University's use of this tool are described on the Centre for Teaching Support & Innovation web site (https://uoft.me/pdt-faq).

Students may wish to opt out of using the plagiarism detection tool. In order to opt out, contact your instructor by email no later than two (2) weeks after the start of classes. If you have opted out, then specific information on an alternative method to submit your assignment can be found below.

Final Exam Information

Duration: 3 hours
Aids Permitted: None

Additional Information

=== Contact Information ===

All announcements will be made on the course discussion board linked on the course website. If you cannot access the discussion board, then please directly go to piazza.com and find your course under University of Toronto.

You are responsible for reading all postings made by the instructor and the TAs. We may provide clarifications or additional information, when necessary, so it is your responsibility to read the announcements carefully and to periodically skim over your classmates' posts.

Please post all of your questions about the course material and assignments on MarkUs so that everyone can benefit from your questions. We will monitor the discussion board regularly, but feel free to answer other students' questions too! Helping someone

else learn is one of the most effective ways of truly mastering a subject. Please note that only student answers which are accurate will be endorsed by instructor or TAs.

Please do not commit academic offences on the discussion board. Both when asking and answering questions, you are not to post your solution (even partial code), nor your approach to solving a problem. You may provide hints to guide someone in the right direction, but you are not to discuss solutions or the ideas behind them with other students, as you are depriving them of valuable steps in their learning process.

Please contact the course instructor if you have additional questions about using the discussion board.

For *personal questions* (special considerations and illness forms, missing class, etc.), please email the instructor from your UofT address.
Please **include "CSC148" in the subject line**, and your full name and UTORid in the body of the email. Otherwise, your message might be marked as spam!

We will try to respond to email and discussion board postings *within 48 hours*. However, it may take longer, especially near due dates. If you do not hear back quickly, we are always available during office hours to help.

IMPORTANT NOTES:
1. You must start working on assignments early, in case you have questions, as we may not get back to you on time around the deadline when the discussion board is typically very busy.
2. We will not answer assignment-related questions via email. You must post your question on the discussion board.
3. Do not post parts of your solution code for assignments, preps, or labs on the discussion board! If you have a question that requires disclosing code, you must come to office hours or go to the Help Centre (see details on the course website).

=== Remark Requests ===

If you feel there was an error in the marking of an assignment, you may request a remark directly on MarkUs.

You must give a specific reason for the request, referring to a possible error or omission by the marker. Stating the specific potential grading errors for your remark request is **mandatory for us to consider your request**. However, we **will review your entire work, not just the items you pointed out**.

Please keep in mind that your grade **may stay the same, may increase, or may even decrease**, after your remark request is assessed.

=== 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.
Please be mindful of how your behaviour influences the atmosphere in our learning community, not just in classes, but also in computer labs, in online forums, and anywhere that you interact with other students and members of the department.

=== Accessibility Needs ===

The University provides academic accommodations for students with disabilities in accordance with the terms of the Ontario Human Rights Code. This occurs through a collaborative process that acknowledges a collective obligation to develop an accessible learning environment that both meets the needs of students and preserves the essential academic requirements of the University's courses and programs.

Students with diverse learning needs are welcome in this course. In particular, if you have a disability/health consideration that may require accommodations, please feel free to approach me and/or Accessibility Services as soon as possible. Accessibility staff (located in Room 2037, Davis Building) are available by appointment to assess specific needs, provide referrals and arrange appropriate accommodations. Please call 905-569-4699 or email access.utm@utoronto.ca. The sooner you let us know your needs the quicker we can assist you in achieving your learning goals in this course.

Last Date to drop course from Academic Record and GPA is July 24, 2022.