DEPARTMENT OF MATHEMATICAL AND COMPUTATIONAL SCIENCES
UNIVERSITY OF TORONTO MISSISSAUGA

CSC108H5F LEC0106
Introduction to Computer Programming
Course Outline - Fall 2019

Class Location & Time	Mon, 12:00 PM - 01:00 PM MN 1270 Wed, 12:00 PM - 01:00 PM MN 1270 Fri, 12:00 PM - 01:00 PM MN 1270
Instructor	Michael Liut
Office Location	DH3017
Office Hours	Mon 1-2, Wed 1-3
E-mail Address	108- INSTRUCTORS-UTM-L@listserv.utoronto.ca
Course Web Site	https://q.utoronto.ca

Course Description

Structure of computers; the computing environment. Programming in a language such as Python. Program structure: elementary data types, statements, control flow, functions, classes, objects, methods, fields. List: searching, sorting and complexity. [36L, 24P]

Prerequisite: Grade 12 Advanced Functions (MHF4U).
Exclusion: CSC108H1, CSC120H1, CSC148H5, CSC148H1, CSC150H1, CSCA08H3, CSCA20H3 (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 CSC108H5F, an Introduction to Computer Programming! By the end of this course, you should be comfortable with procedural programming in Python and will have been exposed to software development topics like testing, design, and documentation. You will also be exposed to some core computer science ideas, such as complexity, abstraction, and the use of algorithms.

Successful students from past terms agree that the keys to this course are (1) frequent practice and (2) being active in the community. First, read or write Python code every day - if only for a few minutes - rather than cramming the exercises and assignments into full-day sessions. This will make lectures easier to understand, will give you plenty of time to ask questions, and utilizes spaced repetition, which has been shown to improve learning. Second, make friends with your peers in lecture and labs. You will see the people in this class also taking MAT102, calculus, and in later computer science courses. Communicate with each other on the discussion board, form study groups, and look for departmental seminars and social events to get engaged early.

Textbooks and Other Materials

Textbook: Course materials are provided online.

Software: The software required for this course has been installed in the computer science labs (DH2010/2020/2026). If you wish to install it on a personal machine, links to the required packages are found on the course webpage. However, the course staff will not be able to help you install software on your own machines.

Assessment and Deadlines

Type	Description	Due Date	Weight
Other	Weekly Practice (Prep and Review)	On-going	8%
Lab	Lab Participation	On-going	5%
Assignment	Assignment 0	2019-09-23	2%
Assignment	Assignment 1	2019-10-07	5%
Assignment	Assignment 2	2019-11-11	10%

Assignment	Assignment 3	2019-12-02	10%
Term Test	Midterm	2019-10-28	20%
Final Exam	Exam	TBA	40%
		Total	100%

More Details for Assessment and Deadlines

Weekly Practice (Prep and Review)

Research consistently shows us that students remember only a small fraction of what is presented in lecture. It is not easy to make sense of material that you see for the first time in a fast-paced lecture environment, let alone to stay focused for 50 minutes. It's also important to space out your studying (spaced repetition). To prime you for what we will discuss, you will view a set of videos and complete exercises by Sunday night, before lecture. These are the "Prepare" exercises in PCRS. Then, you will complete a more challenging set of online exercises by Friday night to test your understanding of the week's material. These are the "Perform" exercises.

Although these exercises are marked, the important point is not that you get full marks but that you emerge with an understanding of what you do and do not know. Use these exercises as formative feedback: if you are struggling to answer the questions, go to the lab, ask questions in lecture, or visit office hours to get help early, before you are stuck.

Lab Participation

While we will be practicing new content in each lecture, the practicals (labs) are where you will practice on your own, with peers and TAs nearby to help if you get stuck. Each week, there will be a set of tasks that are assigned as practice; you will be given credit for attending the lab (yes, you must attend!) and working hard on the assigned work. Due to the size of the labs, you are required to attend the PRA you are enrolled in on Acorn. Labs will start the week of September 16.

Assignments

You must work by yourself on all the assignments. Assignment handouts will be made available on the course website. Assignments are due at 22:00 on the specified day, and the results of our tests will normally be emailed to you within 24 hours. You may choose to resubmit, fixing any errors detected by our tests, or to submit a late submission without the benefit of tests; these "resubmissions" will be accepted up to 48 hours after the initial submission date with a 20% deduction. No later assignments will be accepted. In a serious emergency, send an email to the course coordinator as soon as possible; be prepared to meet during office hours and to present documentation of the emergency.

Penalties for Lateness

No late submissions will be accepted beyond the resubmission date for assignments.

Procedures and Rules

Missed Term Work

For a missed test, contact the instructor by email within 72 hours of the date of the test. However, it is far easier to negotiate an accommodation well before the due date, so please inform the instructor as soon as you are aware that accommodation will be required

Missed Final Exam

Students who cannot write a final examination due to illness or other serious causes must file an online petition **within 72 hours of the missed examination**. Original supporting documentation must also be submitted to the Office of the Registrar **within 72 hours of the missed exam**. Late petitions will **NOT** be considered. If illness is cited as the reason for a deferred exam request, a U of T Verification of Student Illness or Injury Form must show that you were **examined and diagnosed at the time of illness and on the date of the exam, or by the day after at the latest**. 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

Honesty and fairness are fundamental to the University of Toronto’s mission. Plagiarism is a form of academic fraud and is treated

very seriously. The work that you submit must be your own and cannot contain anyone elses work or ideas without proper attribution. You are expected to read the handout How not to plagiarize (http://www.writing.utoronto.ca/advice/using-sources/how-not-to-plagiarize) and to be familiar with the Code of behaviour on academic matters, which is linked from the UTM calendar under the link Codes and policies.

All of the work you submit must be done by you alone, and your work must not be submitted by someone else. Plagiarism is academic fraud and is taken very seriously. The department uses software that compares programs for evidence of similar code. Please read the Rules and Regulations from the U of T Calendar (especially the Code of Behaviour on Academic Matters):

http://www.governingcouncil.utoronto.ca/policies/behaveac.htm

Please don't cheat. It is unpleasant for everyone involved, including us. Here are a couple of general guidelines to help you avoid plagiarism:

• Never look at another student's assignment solution. Never show another student your 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 assignments before the due date with anyone but your instructor and your TAs.

Final Exam Information

Duration:	2 hours
Aids Permitted:	None

Additional Information

The course website is required reading and can be found through Quercus or directly at this address:

https://mcs.utm.utoronto.ca/~108

The website contains important information: links to grades, exercises, and assignments; lecture materials; a link to a discussion board; etc.

The course announcements on Quercus and the discussion board are required reading. We will post important updates and announcements on the board, so make sure to visit it often. In addition, each of you can post questions (and answers!) so the discussion board will typically be the fastest way to get help with course material or an administrative question.

Please use the discussion board to ask general course-related questions. The board will be very busy, so to make it easier for everyone to find answers to their questions, please use good forum etiquette. Use informative titles for your posts, so that people can find relevant information. Read the posts already on the board before posting a question so that you don't post a duplicate. Finally, be professional in tone and behaviour.

Please do not post solution code on the board. If you have a question about assignment code, please generate new code to demonstrate your question, rather than posting the assignment code. Alternately, phrase your question without posting the code itself.

Due to the size of the course, email is reserved for personal issues, such as needing to report an illness or discussing an alternate test date. Due to volume, questions about course content should be directed to the discussion board and will be ignored if sent to email. Email should be sent to the course list (108- INSTRUCTORS-UTM-L@listserv.utoronto.ca) and must be sent from a U of T address.

Last Date to drop course from Academic Record and GPA is November 7, 2019.