CSCB09H3 Y

Software Tools and Systems Programming

Summer 2025 Syllabus

Course Meetings

CSCB09H3 Y

Section	Day & Time	Delivery Mode & Location
LEC01	Thursday, 3:00 PM - 5:00 PM	In Person: IA 2150
TUT0001	Tuesday, 12:00 PM - 1:00 PM	In Person: IA 3010
TUT0002	Tuesday, 1:00 PM - 2:00 PM	In Person: IA 3010
TUT0003	Tuesday, 2:00 PM - 3:00 PM	In Person: IA 3010
TUT0004	Wednesday, 4:00 PM - 5:00 PM	In Person: IA 3010

Refer to ACORN for the most up-to-date information about the location of the course meetings.

No tutorials in the first week.

Course Contacts

Course Website: https://www.cs.utoronto.ca/~trebla/CSCB09-2025-Summer/

Instructor: Albert Lai
Office Hours and Location: Tuesday and Friday 14:00-15:30, IA 3180 (CS Help Centre)

Course Overview

Software techniques in a Unix-style environment, using scripting languages and a machine-oriented programming language (typically C). What goes on in the system when programs are executed. Core topics: creating and using software tools, pipes and filters, file processing, shell programming, processes, system calls, signals, basic network programming.

Course Learning Outcomes

Ability to use Unix as a programming environment and write and understand programs written for Unix.

Prerequisites: CSCA48H3 and [CGPA of at least 3.5, or enrolment in a CSC Subject POSt, or enrolment in a non-CSC Subject POSt for which this specific course is a program requirement]
Corequisites: None
Exclusions: CSC209H
Recommended Preparation: None

Credit Value: 0.5

Course Materials

Required textbook: (free PDF download): William Shotts, The Linux Command Line.
Required textbook: Michael Kerrisk, The Linux Programming Interface.
Optional: If you need further help with C, try:
Programiz C tutorial (has more examples)
learn-c.org (has more topics and embedded try-out)

Required websites to check:

- The course website.
- Quercus: Announcements, forum, past tests and exams.
- MarkUs: Handing in and returning assignments.
- Gradescope: Returning tests.

Marking Scheme

Assessment	Percent	Details
Term Test 1	12%	1 hour 15 minutes. 1 aid sheet allowed (letter or A4 size, 2 sides).
Term Test 2	12%	1 hour 15 minutes. 1 aid sheet allowed (letter or A4 size, 2 sides).
Assignments	36%	4 assignments.
Tutorial exercises	5%	11 tutorial exercises. The best 10 are chosen.
Final Exam	35%	3 hours. 2 aid sheets allowed (letter or A4 size, 2 sides). A final exam mark of at least 40% is required to pass the course.

There is no provision for replacing a low mark on a term test by a high mark on another term test or the final examination.

Late Assessment Submissions Policy

While I would like to be accomodating when there is a legitmate reason, you must discuss with me and obtain my agreement on an alternative arrangement. This includes Absence Declaration —until you initiate a discussion, I will do nothing and make no change.

If the reason is foreseeable, you must obtain my agreement in advance.

I honour requests from AccessAbility.

When you don't have a good case, there are 4 grace credits for the whole term at your disposal. You may use at most 2 grace credits per assignment. This is automated on MarkUs, so just submit late when you need to. These cannot be used for tutorial exercises.

Policies & Statements

Academic Integrity

The University treats cases of cheating and plagiarism very seriously. The University of Toronto's Code of Behaviour on Academic Matters (http://www.governingcouncil.utoronto.ca/policies/behaveac.htm) outlines the behaviours that constitute academic dishonesty and the processes for addressing academic offences.

Potential offences in papers and assignments include using someone else's ideas or words without appropriate acknowledgement, submitting your own work in more than one course without the permission of the instructor, making up sources or facts, obtaining or providing unauthorized assistance on any assignment.

On tests and exams, cheating includes using or possessing unauthorized aids, looking at someone else's answers during an exam or test, misrepresenting your identity, or falsifying or altering any documentation required by the University.

Accommodations

Students with diverse learning styles and 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 the AccessAbility Services Office as soon as possible.

AccessAbility Services staff (located in Rm IA5105, Sam Ibrahim Building) are available by appointment to assess specific needs, provide referrals and arrange appropriate accommodations 416-287-7560 or email ability.utsc@utoronto.ca. The sooner you let us know your needs the quicker we can assist you in achieving your learning goals in this course.

Generative Artificial Intelligence Tools

Students must submit only work of their own; the use of generative artificial intelligence tools, including ChatGPT and other AI writing and coding assistants, for the completion of, or to support the completion of, an examination, term test, assignment, or any other form of academic assessment, may be considered an academic offense in this course.

Maturity Requirement

Normally CMS instructors are supportive and lenient, in good faith that students are diligent in return (co-op thinking: they help more, you do more); inevitably, some students misunderstood it (tug-war thinking: they help more, you do less). And since the Internet (humans or otherwise) is so eager to explain everything, students have forgotten that learning CS consists of a large part

of practicing, and only a small part of receiving guidance. So I need to be strict before I can be collegial:

This is a 2nd-year course, requiring a commensurate level of intellectual maturity, independence, reading comprehension, due diligence, and sense of responsibility. Quality of my answers to your questions is proportionate to quality of your questions.

Anti-Piazza position statement: Piazza encourages instant gratification, high-frequency spoon feeding, and fishing for answers. Those are anti-theses to learning. I will use a much simpler course forum, where possibly no single post is “the answer”, and you will have to study the whole conversation and think for yourself.

Re-Grades

Re-grades are for instructors' and graders' errors, not for yours. Especially not the kind you can easily check right before or even after submission, such as: wrong files, wrong filenames, lateness by a few seconds or minutes, (for program code) compile-time errors.

The Mathlab server is the only platform for resolving disputes over auto-testing; “my code passes test cases elsewhere” is not a sufficient condition to earn marks.

Leniency can still be offered, but only if you speak up ASAP.

Residency

This is an in-person course. I encourage you to come out and meet people because it is good for your mental health, and to attend classes and office hours because you have paid for them so you may as well get your money's worth.

This is not a mail-order course, unless declared online by the University under emergency circumstances. If you choose not to attend classes or office hours, you assume your own risk, and you forfeit the right to receive guidance or to complain that the assessments are too difficult and/or unfair.