# Syllabus

# Calendar Description

Software techniques in a Unix-style environment, using scripting languages and a machine-oriented programming language (typically C). What goes on in the operating 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.

### **Instructors**

	Sections	Lectures	Email
	L0101	Tuesday	
Demetres		2-3,	csc209-2023-09@cs.toronto.edu
(dee) Kostas		Thursday	(mailto:csc209-2023-09@cs.toronto.edu)
		2-3	

### Office Hours

Thurs ~3:00-4:00 (BA 2272) -- if there was class before this\* there will be an office hour.

\*Lecture is immediately prior to this, and we can walk towards Bahen together. Otherwise, meet for office hours in BA2272 roughly 10 mins after 3.

### Labs

You have signed up on ACORN for a tutorial/lab time slot. These labs are held in person in a teach.cs lab in the Bahen building in BA 2200, BA 3175, BA 3185 and BA 3195. We will try to have a TA in each room for the first few labs, but the number of available TAs may be changed based on attendance patterns, there will always be at least one. The primary purpose of the labs are to help you complete the weekly *lab assignments*. Please check the <a href="Labs">Labs</a> (<a href="https://q.utoronto.ca/courses/309775/pages/lectures-and-labs">https://q.utoronto.ca/courses/309775/pages/lectures-and-labs</a>) link to the left each week to confirm the location of your lab based on your family name.

### Professionalism in CSC209

We are committed to creating a respectful learning environment in CSC courses for all students and expect that you will adhere to the University of Toronto <a href="Code of Student Conduct">Code of Student Conduct</a> (<a href="https://governingcouncil.utoronto.ca/secretariat/policies/code-student-conduct-december-13-2019">https://governingcouncil.utoronto.ca/secretariat/policies/code-student-conduct-december-13-2019</a>). 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.

### **Course Materials**

- C Programming: A Modern Approach → (http://knking.com/books/c2/index.html), K.N. King, W. W. Norton and Company, 2008. Note: The C book (or another similar) should be considered required. This is a particularly good book for learning C and online resources are not as good or plentiful as they are for other languages.
- The <u>Linux Programming Interface</u> ⇒ (<a href="http://man7.org/tlpi/index.html">http://man7.org/tlpi/index.html</a>), Michael Kerrisk, No Starch Press, 2010 (<a href="http://man7.org/tlpi/errata/index.html">errata</a>). This book is recommended. Some students like to have the additional resource for the systems programming part of the course, and other get by fine without it. This book won't be references until about halfway through the course

Handouts, assignments, marks, and important course information will be posted periodically on Quercus. You should visit regularly to check. Important assignment announcements will be posted on the discussion board (Piazza). You are responsible for announcements made in class, on the web page, and on pinned instructor posts on Piazza.

### Discussion Board - Piazza

The discussion board is the best place to ask technical questions, and general questions about the course, assignments and labs.

### **Email**

Please use the course email address <a href="mailto:csc209-2023-09@cs.toronto.edu">csc209-2023-09@cs.toronto.edu</a> for personal questions and the discussion board for all other course-related questions. Please send email from your UofT email address and include your full name and UTORid.

# **Course Prerequisites**

To take CSC209, you must have previously completed CSC207 (or CSCB07 at UTSC) or have the permission of the instructor. Students who do not have the prerequisite will receive email from the undergrad office regarding their options.

# Marking Scheme and Schedule

Work	Weight	Deadline
Lecture Preparation (PCRS)	5% (best 10 of 11)	Tuesdays before 10:00am (weeks 2 - 12)
Lab Exercises	7% (best 10 of 11)	Fridays before 6:30pm (weeks 1 - 11)
A1	5%	Wednesday 27 September before 4:00pm

Work	Weight	Deadline
A2	10%	Wednesday 18 October before 4:00pm
Midterm Test	13%	Tues 24 October during class time (room TBA)
A3	10%	Wednesday 15 November before 4:00pm
A4	10%	Wednesday 6 December before 4:00pm
Final exam	40%	Minimum grade of 40% required to pass this course

<sup>\*</sup>Note -- The class on Sept. 7th is considered week 0.

### Lecture Prep and Exercises

Research consistently shows us that students remember only a small fraction of what we present in lecture. It is not easy to make sense of material that you see for the first time in the first half-hour of a fast-paced lecture environment, let alone to stay focused for two hours. 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 10 am Tuesdays. These are the "Preparation" exercises hosted on PCRS: <a href="https://pcrs.teach.cs.toronto.edu/csc209-2023-09/">https://pcrs.teach.cs.toronto.edu/csc209-2023-09/</a>].

#### **Test**

The midterm test will be held during your regular lecture time slot but not in the regular lecture roomon **October 24th**. Detailed information about the test will be published in advance of the test on the <u>Tests (https://q.utoronto.ca/courses/309775/pages/tests)</u> page. To pass the course, you must receive at least 40% on the final exam.

# **Assignments**

Assignments will be programming assignments in C and will be done individually. Assignments will be submitted using MarkUs and Git. You are expected to have working knowledge of Git from CSC207 or prior experience. Assignment code must execute correctly on the teach.cs machines.

### Submission and Late Policies

Minimum Standards for Submitted Work: For your assignment to be graded, it must
meet the minimum standards of a professional computer scientist. All files required to build
the program must be committed to the repository, and the program must compile without
warnings or errors. Your submission will receive a grade of 0 if it doesn't compile. Your
submission will receive a 10% deduction in the total marks if it compiles with

#### warnings.

Late Work: The late policy is strict. All exercises and assignments will be submitted
electronically. Lab exercises are due before 6:30 pm on the Fridays. Labs submitted late
will not be counted. Lecture preparation completed after 10 am Tuesdays will not be
counted.

<u>Assignments</u> are due before 4:00 pm on the due date. We recognize that unexpected problems sometimes make it difficult to submit assignments on time. For this reason we will accept limited late assignments with a penalty. There is a one hour grace period after the assignment is due in which no late penalty is applied. For the next five hours after the deadline, the deduction will be 5% (of the total possible mark) per hour. For the next five hours, the additional deduction will be 15% per hour. Here it is broken down by hour:

On time	no penalty
up to 1 hour late	no penalty
up to 2 hours late	5% penalty
up to 3 hours late	10% penalty
up to 4 hours late	15% penalty
up to 5 hours late	20% penalty
up to 6 hours late	25% penalty
up to 7 hours late	40% penalty
up to 8 hours late	55% penalty
up to 9 hours late	70% penalty
up to 10 hours late	85% penalty
after 10 hours late	100% penalty

Please note that 4:00:01 p.m. will be considered late (but within the grace period), and ensure that your work is not submitted at the very last second. Because you will be using version control, it is very easy to commit regularly to avoid running into the deadline.

If you are at risk of missing a deadline due to a busy week, you should hand in a working (and tested) version of a simpler program. This will be easy to do if you have written and debugged a series of programs that accomplish more and more of the assigned problem.

In the event of an illness or other catastrophe, contact your instructor (by email or in person) **as soon as possible**. Do not wait until the due date has passed. It is always easier to make alternate arrangements before the due date or test day.

Since your assignments are submitted electronically and will often be (partially) tested using an automated testing program, you must follow the submission instructions exactly. If you do not, you will most likely lose substantial marks on the assignment. Check your submission carefully.

- Religious Holidays: If a religious holiday will keep you from completing any assigned work, please let your instructor know as soon as possible (but no later than two weeks before the due date), and we will work out a mutually agreeable accommodation.
- Remark Requests: All remark requests must be submitted on MarkUs within two weeks of the marks being returned. No late requests will be accepted. There are two different types of remark requests:
  - Remarking requests due to mis-marking.
    - If a piece of work has been mis-marked, you may request a remark. For a remark to succeed, you must clearly and concisely express what you believe was mis-marked.
      - 1. To request a remark for an assignment, submit the remark request on MarkUs. Instructions regarding any *mis-marking of the midterm test* will be provided when the marked tests are returned.
      - 2. Provide a clear and concise description of the marking errors that you have found. Please be aware that your entire assignment/test may be remarked.
  - Remarking requests due to incorrect submissions. This type of remark request is only for Assignments; Remarks of this type are not permitted for labs (instead, labs have a best 10 of 11 marking policy).
    - If you lost a considerable number of marks for what you have determined is a small error:
      - You can submit a remark request on MarkUs that includes a very clear explanation of the error and describes how one or two lines of code should be changed in order to fix the error.
      - 2. You should re-submit your assignment with the changes described above made to fix the error (again, this should only involve a line or two of code).
      - 3. There will be a 20% penalty for this fix, so you should only ask for it if you think you will gain more than 20% of the total marks.

# **Special Consideration**

One reason that we allow students to count the best 10 of 11 (for prepare exercises and labs) is so that they can miss a submission due to illness or other unexpected circumstances, *not to maximize their grades*. This policy is **also intended** to cover students who enrol late to the course. Students who are ill for **more than one prepare exercise or lab**, can email the course email (csc209-2023-09@cs.toronto.edu (mailto:csc209-2023-09@cs.toronto.edu)) to request special consideration on the weighting of their completed work. Special consideration will not be granted for students who are only ill for a single prepare or lab exercise.

If you find that illness or other emergency is preventing you from being able to complete an assignment on time, or write a test, please follow these two steps:

- 1. Fill in the <u>Absence Declaration Form (https://registrar.utoronto.ca/policies-and-guidelines/absence-declaration/)</u> on ACORN
- Email the course account (<u>csc209-2023-09@cs.toronto.edu</u>) (<u>mailto:csc209-2023-09@cs.toronto.edu</u>) from your UofT email address. We will try to respond to your request within 1-2 business days. We hope to have a form available to expedite this process, and we will update this bullet point when this is ready.

You will be required to affirm that you are abiding by the <u>Code of Behaviour on Academic Matters (http://www.governingcouncil.utoronto.ca/Assets/Governing+Council+Digital+Assets/Policies/PDF/ppjun011995.pdf)</u>, in particular that it is an 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, that you are truly experiencing an emergency, and acknowledge that to falsely claim so is an academic offence. *Please note that a heavy workload or coinciding due dates do not constitute an emergency.* Applying does not guarantee that you will be granted special consideration.

**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.

### **Lecture Recordings**

We are participating in the University of Toronto's *Opencast Content Capture Pilot*, which will automatically record lectures starting in week 1 and make them available through the OCCS Student App. (https://q.utoronto.ca/courses/300838/collaborations). 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! We expect 50% or so of each video to be largely background noise of us discussing things 1-on-1. 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/300838/pages/syllabus#Copyright-notice)\_ below).

# **Academic Integrity**

All of the work you submit must be done by you 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 <u>Rules and Regulations (http://www.governingcouncil.utoronto.ca/policies/behaveac.htm)</u> from the U of T Calendar (especially the Code of Behaviour on Academic Matters). Here are a couple of guidelines to help you avoid plagiarism:

- If you find snippets of code or examples on the web that you want to use in your work, you must cite your sources. In other words, include in a source code comment, a link to where you found the code you are using.
- Maintain absolute control of your work including notes and partial solutions at all times.
   We encourage you to discuss course concepts and to study for exams with other students, but any work that is submitted should be your own. The easiest way to avoid plagiarism is to only discuss submitted work with your instructors and TAs. Similarly, Google (and Wikipedia) may help you with course material, but do not use the internet to look for solutions to the assignment problems.

# Generative AI (ChatGPT, copilot, etc.)

While snippets of code from the web are considered an academic offense, the personal and specific prompting of Al/deep-learning driven coding assistants are welcome and encouraged. As the university acclimates to this new reality, I encourage you to save the prompts and responses you used to generate your code as well as note with in-line comments whenever an IDE-bound autocomplete system (e.g. copilot) did more than complete a line or two of code as you otherwise mostly intended to write it, thus there will be evidence to point to if the current cheating tools are confused by these consistently changing systems. It will not be sufficient to simply say "copilot did that, not me" in an academic offense interview.

Specific prompting above means, not simply putting the entire assignment instructions into a tool like ChatGPT, but carefully directing the design of specific functions, refactoring, or code skeletons.

This being said, I strongly **do not recommend** the use of any AI coding tools for Assignment 1 and the first several labs. The purpose of these are not to totally stump you, but to start getting you familiar with a new language. As such, it is in your interest to complete these assignments on your own and start feeling comfortable. Without doing so, the midterm test and exam will be extremely difficult to pass, and you'll end up suffering for it in the long run.

### **Accessibility Needs**

Our course is committed to accessibility. If you require accommodations for a disability, or have any accessibility concerns about the course, the classroom or course materials, please contact Accessibility Services as soon as possible: accessibility.services@utoronto.ca or <a href="https://www.studentlife.utoronto.ca/as">https://www.studentlife.utoronto.ca/as</a> (https://www.studentlife.utoronto.ca/as). Please do not hesitate to speak with me if you have an accessibility request, but overall, making

accommodations with accessibility services' support is highly preferable, so please do contact them.

# 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.

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