# Syllabus

# Calendar Description

Software techniques in a Unix-style environment, using scripting languages and a machineoriented 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  |
|-------------------|--------------------------|---|--|
| Michelle<br>Craig | L0101<br>L0201,<br>L0202 | Tuesday 10-11, Thursday 10-11 Tuesday 3-4, Thursday 3-4 | csc209-2023-01@cs.toronto.edu (mailto:csc209-2023-01@cs.toronto.edu) |
| David Liu         | L5101                    | Tuesday<br>6-8  |  |

### Office Hours

Michelle - Tues 1:10-2 (BA 2270), 4:10-5:00 (BA 4290); Thurs 1:30-2:30 (BA 2270)

David - Mon 4:10-5:00 (BA 4290)

#### Labs

You have signed up on ACORN for a separate tutorial/lab time slot. These labs are held in person in a teach.cs lab in the Bahen building. The number of different sessions in each time slot may change based on attendance patterns. The primary purpose of the labs is to help you complete the weekly labs. Please check the <a href="Labs">Labs</a> (<a href="https://q.utoronto.ca/courses/300838/pages/lab-schedule">https://q.utoronto.ca/courses/300838/pages/lab-schedule</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="http://www.viceprovoststudents.utoronto.ca/publicationsandpolicies/codeofstudentconduct.htm">http://www.viceprovoststudents.utoronto.ca/publicationsandpolicies/codeofstudentconduct.htm</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> <u>(http://man7.org/tlpi/index.html)</u>, Michael Kerrisk, No Starch Press, 2010 (<u>errata</u> <u>(http://man7.org/tlpi/errata/index.html)</u>). 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 used 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:csc209-2023-01@cs.toronto.edu">csc209-2023-01@cs.toronto.edu</a> (mailto:csc209-2023-01@cs.toronto.edu) (mailto:csc209-2022-01@cs.toronto.edu) for personal questions and the discussion board for all other course-related questions. We will try to respond to email by the end of the next business day. However, due to volume, it may take longer.

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              | 10% (best 10 of 11)    | Fridays before 6:30pm (weeks 1 - 11)              |
| A1                         | 5%                     | Thursday 26 January before 6:30pm                 |
| A2                         | 10%                    | Wednesday 15 February before 6:30pm               |
| Midterm Test               | 10%                    | Tues 28 February during class time                |
| A3                         | 10%                    | Wednesday 15 March before 6:30pm                  |
| A4                         | 9%                     | Wednesday 5 April before 6:30pm                   |
| Research Surveys           | 1% (0.1% x 10 surveys) | Fridays before 6:30 pm (weeks 2 - 11)             |
| Final exam                 | 40%                    | Minimum grade of 40% required to pass this course |

# 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/csc209-2023-01/">https://pcrs.teach.cs.toronto.edu/csc209-2023-01/</a>].

#### **Test**

The midterm test will be held during your regular lecture time slot but not in the regular lecture room. Detailed information about the test will be published in advance of the test on the <a href="Tests">Tests</a>

(<u>https://q.utoronto.ca/courses/300838/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.

### **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.

Assignments are due before 6:30 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 |

| On time             | no penalty   |
|---------------------|--------------|
| up to 10 hours late | 85% penalty  |
| after 10 hours late | 100% penalty |

Please note that 6:30:01 p.m. will be considered late, 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 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.
      - 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. 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 (<a href="mailto:csc209-2023-01@cs.toronto.edu">csc209-2023-01@cs.toronto.edu</a> (<a href="mailto:csc209-2023-01@cs.toronto.edu">mailto:csc209-2023-01@cs.toronto.edu</a>) 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://www.artsci.utoronto.ca/covid19-artsci-student-faqs#fw2021-absence-declaration-accordion-2) on ACORN</u>
- 2. Complete the <a href="mailto:specialConsiderationForm.pdf">SpecialConsiderationForm.pdf</a> (<a href="https://q.utoronto.ca/courses/300838/files/23940509">https://q.utoronto.ca/courses/300838/files/23940509</a> /download?download\_frd=1) and email it to the course account (<a href="mailto:csc209-2023-01@cs.toronto.edu">csc209-2023-01@cs.toronto.edu</a> (<a href="mailto:mailto:mailto:csc209-2023-01@cs.toronto.edu">mailto:csc209-2023-01@cs.toronto.edu</a>) from your UofT email address. We will try to respond to your request within 1-2 business days.

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 and post them on the <u>OCCS Student App. (https://q.utoronto.ca/courses/300838/collaborations)</u> 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 <u>Copyright notice</u> (<a href="https://q.utoronto.ca/courses/300838/pages/syllabus#Copyright-notice">https://q.utoronto.ca/courses/300838/pages/syllabus#Copyright-notice</a>) 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 <a href="Rules and Regulations">Rules and Regulations</a> (<a href="http://www.governingcouncil.utoronto.ca/policies/behaveac.htm">http://www.governingcouncil.utoronto.ca/policies/behaveac.htm</a>) 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.
- You may not use code generated from Al tools (e.g., ChatGPT) to complete any course work.
- 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.

# **Accessibility Needs**

The University of Toronto 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> (<a href="https://www.studentlife.utoronto.ca/as">https://www.studentlife.utoronto.ca/as</a> (<a href="https://www.studentlife.utoronto.ca/as">https://www.studentlife.utoronto.ca/as</a>).

### Copyright notice

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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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