

Course 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

Instructor	Sections	Lectures	Office Hours	Email*
Kuei (Jack) Sun	LEC0101	Tues/Thurs 10-11am @ EM 001 (https://map.utoronto.ca/?id=1809#!m/494601?s/)	Tues/Thurs 11:30-12:30 @ BA 4290 (https://map.utoronto.ca/?id=1809#!m/494470?s/)	sunk@cs.toronto.edu (mailto:sunk@cs.toronto.e)
	LEC0201 LEC0202	Tues/Thurs 3-4pm @ MY 150 (https://lsm.utoronto.ca/ws/f?p=210:1:::~:)		
Demetres (dee) Kostas	LEC5101	Tues 6-8pm @ RW 110 (https://lsm.utoronto.ca/ws/f?p=210:1:::~:)	Tues 16:30-17:30 @ BA 2270 (https://map.utoronto.ca/?id=1809#!m/494470?s/)	demetres@cs.toronto.e (mailto:demetres@cs.torontoc)

*Note these are personal emails for correspondence. All course organization (marking, special considerations, etc.) should be directed to csc209-2024-01@cs.toronto.edu (<mailto:csc209-2024-01@cs.toronto.edu>), and content questions will only be considered on Piazza. Remember that you can make private posts on piazza. Office hours begin the week of Jan 15th.

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. The primary purpose of the labs

are to help you complete the weekly *lab assignments*. Announcements will be made ahead of time if any room will be unavailable. Labs occur weekly, starting first week of class. There will be a total of 11 labs (excluding week 11, due to Good Friday).

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 [Code of Student Conduct](#)

(<https://governingcouncil.utoronto.ca/secretariat/policies/code-student-conduct-december-13-2019>).

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) ↗ (<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 [Linux Programming Interface](http://man7.org/tlpi/index.html) ↗ (<http://man7.org/tlpi/index.html>), Michael Kerrisk, No Starch Press, 2010 ([errata](http://man7.org/tlpi/errata/index.html) ↗ (<http://man7.org/tlpi/errata/index.html>)). 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 [Piazza discussion board](https://piazza.com/class/lr04m5y3web1yr/) ↗ (<https://piazza.com/class/lr04m5y3web1yr/>) is the best place to ask technical questions, and general questions about the course, assignments and labs. For in-person help, please make use of the instructor's office hours or the [TA's office hours](https://q.utoronto.ca/courses/337029/pages/ta-office-hour-schedule) (<https://q.utoronto.ca/courses/337029/pages/ta-office-hour-schedule>).

Email

Please use the course email address csc209-2024-01@cs.toronto.edu (<mailto:csc209-2024-01@cs.toronto.edu>) 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)	4% (best 10 of 11)	Tuesdays before 10:00am (weeks 2 - 12)
Lab Exercises	8% (best 10 of 11)	Sundays before 11:59pm (weeks 1 - 10, week 12)
A1	5%	Wednesday Jan. 31 before 5:00pm
A2	10%	Wednesday Feb. 14 before 5:00pm
Midterm Test	13%	Tuesday Feb. 27 - LEC0101: 10-11am, ROOM TBA - LEC0201+0202: 3-4pm, ROOM TBA - LEC5101: 8-9pm*, ROOM TBA
A3	10%	Wednesday Mar. 13 before 5:00pm
A4	10%	Wednesday Apr. 3 before 5:00pm
Research Surveys	0.5% x 2	1st survey: due end of first lecture - LEC0101: Jan 9th, 11am - LEC0201/LEC2001: Jan 9th, 4pm - L05101: Jan 9th, 7pm 2nd survey: due end of class - Apr 5th, 11:59pm
Final Exam	39%	Exam period (Apr. 10-30) Minimum grade of 40% required to pass this course

*LEC5101 only: on the week of Feb 26, the lab hour is moved to 19:00-19:30 because of the midterm. You should leave early to make sure you arrive the exam room(s) at least 5 minutes before 8pm.

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:

<https://pcrs.teach.cs.toronto.edu/csc209-2024-01/> ↗ (<https://pcrs.teach.cs.toronto.edu/csc209-2024-01/>)

Test

Detailed information about the test will be published in advance of the test. To pass the course, you must receive at least 40% on the final exam. To apply for special consideration on a missed midterm, please submit the midterm special consideration form **ASAP**. You will receive an email response to your request within 1-2 business days.

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. Saying, "it works on my machine" is not an excuse, we are teaching a relatively specific approach that is tied to what kind of system is used on the teaching machines in CS. Home computers have some differences.

All exercises and assignments will be submitted electronically. Since your assignments are submitted electronically and will be mostly 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. You are expected to submit at least one full day before the actual due date. Make sure you start early and have a good understanding of the assignment requirements to avoid any foreseeable or unforeseeable issues.

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 Policies

The late policy is **strict**. Lab exercises are due before 11:59 pm on the Sundays. Labs submitted late will not be counted. Lecture preparation completed after 10 am Tuesdays will not be counted. Assignments are due before 5:00 pm on the due date. Late submissions *will not be accepted*.

Beware that 5:00:01 p.m. will be considered late. As such, you should 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.

We recognize that occasionally students will experience circumstances outside of their control that prevent them from meeting an assignment deadline. Please see the Special Consideration section below for what to do in such circumstances.

Special Consideration

[Special Consideration Request Form](https://forms.office.com/r/a9MiUMxzBX)  (<https://forms.office.com/r/a9MiUMxzBX>)

(read the policy details below carefully before submitting a request!)

Preps and Labs:

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 (csc209-2024-01@cs.toronto.edu (<mailto:csc209-2024-01@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.

Assignments and Midterm Test:

In situations where you are unable to meet the deadline for an assignment, or you miss the midterm test, please submit the Special Consideration Request Form. Note that no extensions will be granted for lab exercises and lecture preparation.

Requests for up to *two* (2) extra days to complete your assignments will *always* be granted, for every single assignment, without question.

If you find yourself in a **serious medical or emergency situation** where a 2-day extension will not be sufficient, you may request a longer extension or other accommodations:

- Submit the special consideration request form. The form will ask you to provide an explanation of your circumstances, and this will be reviewed by course staff. We may follow up to request further documentation. Note that *special consideration is NOT always granted*; such situations will be considered on a case-by-case basis. It may take 1-2 business days to receive a response.

- If appropriate, you should also complete an Absence Declaration on ACORN (see the [Arts & Science guidelines \(https://www.artsci.utoronto.ca/current/academics/student-absences\)](https://www.artsci.utoronto.ca/current/academics/student-absences)) and send the notification to the course email address.
- **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.

In submitting a special consideration request, you will be required to affirm that you are abiding by the [Code of Behaviour on Academic Matters](http://www.governingcouncil.utoronto.ca/Assets/Governing+Council+Digital+Assets/Policies/PDF/ppjun011)

(<http://www.governingcouncil.utoronto.ca/Assets/Governing+Council+Digital+Assets/Policies/PDF/ppjun011>), 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.

Accessibility Accommodations

You may also use the Special Consideration Request Form to request an extension based on your registered accommodations. If you are requesting an extension *longer than 2 days*, you must provide your Letter of Academic Accommodations from Accessibility Services. You only need to send us your accommodations letter once; if you have already emailed it or uploaded it to the form once, you do not need to do so again for subsequent requests.

Religious Holidays

If a religious holiday will keep you from completing any assigned work, please email us at csc209-2024-01@cs.toronto.edu (<mailto:csc209-2024-01@cs.toronto.edu>) 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:**
 1. 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.

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. 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 \(https://q.utoronto.ca/courses/300838/pages/syllabus#Copyright-notice\)](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 [Rules and Regulations \(http://www.governingcouncil.utoronto.ca/policies/behaveac.htm\)](http://www.governingcouncil.utoronto.ca/policies/behaveac.htm) 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 AI/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, we 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 (<mailto:accessibility.services@utoronto.ca>) or <https://www.studentlife.utoronto.ca/as> (<https://www.studentlife.utoronto.ca/as>). Please do not hesitate to speak with the course instructors if you have an accessibility request, but overall, making accommodations with accessibility services' support is highly preferable, so please do contact them.

The term work [Special Consideration Form](https://forms.office.com/r/a9MiUMxzBX) [↗](https://forms.office.com/r/a9MiUMxzBX) (<https://forms.office.com/r/a9MiUMxzBX>) is written to **also support accessibility needs**. Please fill this out if your needs include later due dates.

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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,