

Overview

Welcome to CSCC69H: Operating Systems. The course covers principles of operating systems with a focus on system programming in C. The course is structured around significant programming assignments with theory covered in a midterm test and exam. By the end of the course, you will have experience working with a large, existing C codebase; will understand the importance and difficulty of parallel programming; and will have a working understanding of system calls, processes, the virtual memory system, and the file system.

Contact Information

- **Instructor:** Bianca Schroeder
- **Email:**
 - Instructor: bianca [at] cs.toronto.edu
 - TAs: c69tas [at] cs.toronto.edu
- **Office Hours:** Monday 11am-12pm, or by appointment.
- **Website and Discussion Board:** The course website is required reading. It contains a calendar, assignment handouts, documentation and tutorials, policies, and more.
(<http://www.cdf.toronto.edu/~csc369h/fall/>)

Most importantly, the page has a link to a discussion board shared by students on both the StG and UTSC campuses. With more users, a shared discussion board will help you get a faster response to any questions – but this will only work if you participate!. The board is the best place to get answers to your questions, and we will also use it to post announcements and updates. Don't be the last to find out the midterm room has been changed – check the board regularly for announcements!

Please follow these guidelines for email correspondence:

1. Read the announcements on the discussion board to see if your question has already been answered.
2. If your question may be of interest to other students (e.g., a question about an assignment), post to the discussion board instead of sending email. If your question is personal (e.g., a question about missing a test due to illness), definitely send email.
3. Use the tutorials to ask questions. That means you should get started with an assignment before the tutorial so you can ask useful questions.
4. If you have to send email and the question is about the course material or assignments send e-mail to the TAs (c69tas [at] cs.toronto.edu). If the question is about course logistics or personal questions send e-mail to the instructor. Include the course number in your subject line (to avoid the spam filter) and an informative topic (for example, "CSCC69: Odd error when compiling OS/161").

Recommended Texts

- Andrew Tannenbaum: *Modern Operating Systems*. Prentice Hall (2001 or 2007).
- K.N. King: *C Programming: A Modern Approach*. Norton and Co (1996).

Term Schedule

The term schedule is available in iCal format on the course webpage. You may find it convenient to subscribe to the calendars using your favorite software; this will inform you of any changes to the lecture schedule or assignment due dates.

Marking Scheme

Work	Notes	Weight	Due Date
Exercise 1	Refresher and intro: C, gdb, Pthreads and OS/161	5%	Fri, Jan. 15
Assignment 1	Synchronization	10%	Fri, Jan 29
Exercise 2	Kernel Hacking Warmup	5%	Fri, Feb 5
Assignment 2	Process Management	10%	Fri, Feb 26
Midterm	50 minutes, probably in tutorial	20%	<i>TBD</i>
Assignment 3	Virtual Memory	10%	Fri, Mar 26
Final exam	You must receive at least 40% to pass	40%	<i>See exam schedule</i>

Exercises and assignments

All exercises and assignments can be done in teams of up to three students. You are expected to register your group in Exercise 1 (follow instructions included in the exercise). Start looking for a group now!

Late Policy

All assignments and exercises are submitted electronically and are due at **3 p.m.** on the due date. Each student begins the semester with five grace day “tokens”. One token per team member is required to use a grace day. A group may use up to 3 grace days for each assignment. Once the grace day tokens are used up late work will not be accepted. Note that the 3 p.m. submission time and the maximum 3 grace day policy are designed to allow us to discuss assignment solutions in the tutorial following the due date.

Don’t use all of your tokens at once. Use them wisely to manage your workload throughout the semester. Don’t keep them until the end of the semester, either; we are unable to accept work past the last day of classes. Note that Assignment 2 is due on the Friday before the midterm – it is probably not a good idea to use grace days on this assignment.

In the event of an illness or catastrophe, get proper documentation (e.g., medical certificate) and contact me (by email, phone, or in person) **as soon as possible**. It is always easier to make alternate arrangements before the due date or test day.

Remarking

Since your assignments are submitted electronically and will usually be tested with the assistance of an automated testing program, you must follow the submission instructions exactly. Assignments that are remarked due to incorrect submission (including errors or warnings that lead to a failed compile) will be assessed a 10% penalty.

Requests for remarking must be submitted via the form linked to the course web page. Requests should be submitted no later than one week after the assignment or test has been returned to the class.

Academic Offenses

All of the work you submit must be your own and your work must not be submitted by someone else. Plagiarism is academic fraud and is taken seriously. Please read the Rules and Regulations from the U of T Calendar, especially the Code of Behaviour on Academic Matters.

<http://www.artsandscience.utoronto.ca/ofr/calendar/rules.htm>

Here are a couple of general guidelines to help you avoid plagiarism:

- Never look at another student’s assignment solution, whether it is on paper or on the computer screen, and never show another student your assignment solution. This applies to all drafts of a solution and to incomplete solutions.
- We encourage you to discuss course concepts and to study for exams with other students, but the assignments should be your and your partner’s work. The easiest way to avoid plagiarism is to only discuss the assignment with your partner or the instructor. Similarly, google (and wikipedia) may help you with course material, but do not use the internet to look for solutions to the assignment problems.