

CSC165 Mathematical expression and reasoning for computer scientists — Fall 2014

Short version: Welcome to CSC165, “Mathematical expression and reasoning for computer science.” We’ll have 34 lecture hours, nine tutorials (with quizzes), three assignments, two tests, a course LOG (SLOG), and a three-hour final exam. You’ll find more details on the [course web page](#). Please read your U of T email regularly, since we use it to announce course events.

Lectures: Lectures are Monday, Wednesday, and Fridays 11–noon, noon–1 p.m., or Tuesdays 6–9 p.m.

There will be nine 90-minute tutorials for you to work through published exercises with your teaching assistant, and then take a brief quiz based closely on the exercises.

Contact information:

MWF 11–noon or 12–1: Danny Heap, heap@cs.toronto.edu, BA4270 (fourth floor of Bahen, behind the elevators), 416-978-5899. Office hours Wednesday 2–4 in BA4270.

T 6–9: Larry Zhang, ylzhang@cs.toronto.edu, BA4262/BA5206. Office hours Thursday 4–6 in BA4262.

Prerequisites: Check the prerequisites for this course in the [Arts & Science Calendar](#). If you don’t satisfy these, the registrar may remove you from the course.

Textbook and computing: There is no required textbook for this course. Instead, we offer you [course notes](#) authored by several instructors of this course. Each student enrolled in the course has an account on CDF (Computing Discipline Facility) to tinker with programs, and to electronically submit assignments and exercises. Questions about the management of your CDF account should be addressed to admin@cdf.toronto.edu.

Syllabus: We’ll discuss the following topics:

- logic and expression
- proof techniques
- complexity, program running time
- halting problem and computability

Course work: You’ll be responsible for seven (!) pieces of term work, spread through the twelve weeks: nine quizzes (counting as one “piece”), three assignments, two tests, and a course LOG (SLOG).

Item	Due	Weight
Assignment #1	Friday October 3rd, 10:00 p.m.	32% (in total)
Assignment #2	Friday October 31st, 10:00 p.m.	
Assignment #3	Friday November 28th, 10:00 p.m.	
SLOG (courSe LOG)	September 19th–December 3rd, 10:00 p.m.	
Quizzes	Weeks 2, 3, 4, 5, 7, 8, 9, 10, 12 Quizzes are brief, and take place at end of tutorial	12% (in total)
Term test #1	Tuesday October 7th or Wednesday October 8th	16% (in total)
Term test #2	Tuesday November 4th or Wednesday November 5th	
Final exam	Some time in December	40%

Nuances: Each of us has better or worse days, and (through the magic of computers) we will weight your grades to reflect this. The three assignments and SLOG are worth, collectively, 32%, so we will weight your best piece 10%, your worst piece 6%, and your two middling pieces 9% and 7%, respectively. Your best term test will have weight 10% and your worst 6%. No modification of the exam weight is possible: it will be 40% of your final grade, and you must achieve at least 40% of the possible marks on the exam in order to pass this course.

Late work, re-marks: We can't accept late or missed work. However, if you have a valid, documented reason for missing a deadline, you won't be penalized for events that are beyond your control. If you feel a piece of your work has been graded unfairly, please submit a written re-mark form within a week of receiving the work back.

Academic integrity: Our university, including you, is a community of scholars. That means we share ideas here, and we have to do so in a responsible manner. A key ingredient is to always give generous, detailed, credit to others whose work you use, and never attempt to pass off somebody else's work as your own. Assignments and tests are meant to be the work of their authors, either individually (in the case of tests and quizzes), or in teams of up to three persons (in the case of assignments). Here are tips to avoid passing off others work as your own, or (just as bad) having your work passed off as somebody else's.

- Don't use other teams' partial or complete solutions. You may discuss **general** approaches, take no notes (paper or electronic), and leave an hour of mindless activity between discussions with others and authoring your own work.
- Don't show your work to another team.
- Don't interfere with university computers, other person's files, accounts, or programs.

Lecture notes, email: We will occasionally have draft versions of lecture slides posted ahead, so that you can print and annotate them with your own observations. Email is, by design, asynchronous. That means that at the particular time of day or night that you send email, we may be eating, sleeping, listening to music, or attending to other responsibilities. It could take 24 hours, or longer, to respond. Here are tips to make email correspondence about this course more effective:

- Use your utoronto.ca or cdf.toronto.edu email address.
- Put "CSC165" somewhere in the subject line.
- Compose a short message on a single topic. An open-ended question such as "what's wrong with this proof" is unlikely to receive a useful response.