CSC104, Fall 2013
course information sheet

Danny Heap

CSC104, "Computational Thinking" introduces undergrads to Computer Science, with the aim that they should change the world of computing, rather than just observe it. Here's a summary of the administrative details for Fall 2013. Please visit the course web page http://www.cdf.toronto.edu/~heap/104/F13/ often, and read email sent to your U of T email for important announcements.

Contact: I'll meet you each Wednesday in MS 3154 (Medical Sciences building, room 3154) from 6–8 pm for discussion, worked examples, and programming demonstration. From 8:10–8:45 you will have an opportunity to meet with your teaching assistants in BA3175–BA3195, Bahen building closed labs, get some help understanding your weekly course exercises, and then at 8:45 write a short quiz based on the exercises. If you have questions that aren't answered in class, I'll be available for office hours before class in MS 3154 and Thursdays 2–3, in BA4270.

Textbook and computing: I will provide slides and links to readings online, and I will use Picturing Programs, in PDF form. I think you should pay $4.99 for *Picturing Programs*, and we can argue about why when we discuss intellectual property. You'll get email from CDF with your account and password. You'll also be introduced to the lab during your first tutorial (yikes! that's during the first week!).

Syllabus: We'll discuss the following topics:

- Problem solving and algorithms
- History of computing machines, data representation and manipulation
- Modern computers: hardware, software, operating system
- Outside the box: the internet and the web
- Computers and society: privacy, property, work, democracy

In parallel with these discussions we will be constantly messing with a programming language called **racket** and its favourite environment **DrRacket**. Your understanding of computers, and the culture associated with them, will be enhanced by a gentle introduction to program design.

Marking scheme: The marking scheme is designed to place a low weight (39%) on the final exam, since I believe this reduces a potential source of stress for students. In order to do this, I have to introduce frequent-but-smaller sources of stress: one "heartbeat", 9 quizzes during the tutorial time, two term tests (also during tutorial), two projects, a blog, and a Wikipedia entry. These are timed, and weighted, as follows:

Work	Due	Weight
Markus "heartbeat"	September 13th, 11:59 p.m.	1%
9 Quizzes	September 18th and 25th October 2nd, 16th, 23rd, 30th November 6th, 20th, 27th Quizzes are brief, and meant to verify basic concept acquisition.	12% (total)
4 Assignments	Wikipedia: September 27th, October 25th, 11:59 p.m. Project #1: November 1st, 11:59 p.m. Project # 2: November 29th, 11:59 p.m. courSe bLOG (SLOG), September 4th – December 3rd, 11:59 p.m.	32% (total)
2 Term tests	Term test #1, Wednesday October 9th, 8:10–9:00 p.m. Term test #2, Wednesday November 13th, 8:10–9:00 p.m.	16% (total)
Final exam	Some time during exam period	39%

Nuances: Everybody has better and worse days. I aim to give higher weight to your better work. For example, the weights of the assignments, projects, and Wikipedia entry sum to 32%, so your best effort will have weight 10%, next best 9%, next best 7%, and least-best 6%. Similarly, the term tests sum to 16%, so your best effort will have weight 10% and your lesser effort will have weight 6%. The 39% weight of the final is, however, not changeable.

Lateness, sickness, natural disasters: I don't accept late work, since I have to arrange in advance for grading it. However, if you have special circumstances that force you to miss a deadline, please contact me immediately (usually before the work is due) and fill out either the "Request for special consideration," or the standard medical excuse form (link on this web page) and provide all supporting documentation. I will do my best to ensure there is no penalty for a deadline missed for a valid reason.

Independent work: It is a serious academic offense to pass of somebody else's work as your own for credit. Be sure to give full and generous credit to any person or book (except this course's instructor and teaching assistants) you consult in solving assignments. If you take notes when you consult a source, quote that source in full.

If you intend to present work as your own, for credit, then you should avoid looking at similar work by other students, in written or electronic form, since looking can easily turn into plagiarism. Avoid showing your own assignments to other students. Take a couple of hours' break after even verbal discussions of the assignment before writing it up.