CSC104, Fall 2012 course information sheet

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CSC104, "The why and how of computing" 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 2012. Please visit the course web page www.cdf.toronto.edu/~heap/104/F12/often.

Contact: I'll meet you each Wednesday, 6-8 pm, in SF1101 for lectures, discussion, worked examples, and programming demonstration. Wednesday from 8-9 pm will be tutorial (locations will be posted on the course web page), where you can get your Teaching Assistant's help understanding weekly exercises. If you have questions that aren't answered in class, I'll be available from 5-6 pm Wednesdays, in either BA4270 or SF1101 (depending on numbers), or by appointment.

Textbook and computing: I will provide slides and links to readings online, and I will use *Picturing Programs*, available from www.picturingprograms.com in PDF form. I think you should pay \$4.99 for *Picturing Programs*, and we can argue about why when we discuss intellectual property.

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 programming.

Marking scheme: The marking scheme is designed to place a low weight (35%) 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: 9 quizzes at the start of (most) lectures, two term tests (50 minutes each, also in class), two projects, a blog, and a Wikipedia entry. These are timed, and weighted, as follows:

| Work | Due | Weight |
|---------------|---|-------------|
| 9 Quizzes | September 19th and 26th, October 3rd, 6:10-6:17 | 15% (total) |
| | October 17th, 24th, and 31st, 6:10-6:17 | |
| | November 14th, 21st, and 28th | |
| | Quizzes are brief, and meant to verify basic concept acquisition. | |
| 4 Assignments | Wikipedia, September 21st, October 19th, November 23rd | 30% (total) |
| | Project #1, November 9th, 11:59 p.m. | |
| | Project # 2, November 30th, 11:59 p.m. | |
| | courSe bLOG (SLOG), December 3rd, 11:59 p.m. | |
| 2 Term tests | Term test #1, October 10th, 6:10-7:00 p.m. | 20% (total) |
| | Term test #2, November 14th, 6:10-7:00 p.m. | |
| Final exam | Some time during exam period | 35% |

Nuances: Everybody has better and worse days. I aim to give higher weight to your better work. For example, the weights of the four projects sum to 30%, so your best project will have weight 9%, next best 8%, next best 7%, and least-best 6%. Similarly, the total weight of the quizzes is 15% and the total weight of the term tests is 20%. However, if your performance is stronger on quizzes than term tests, I will switch the weight so that the quizzes are, collectively, worth 20%, and the tests are worth 15%. The 35% 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.