

## SCI199Y Great Ideas in Computing 2008-2009

Instructor: A. Borodin

TAs: Mark McCartim-Lim and possibly an additional 1/2 TA

**Meeting Times:** seminar Thursday 3-5; tutorial Monday 4

**Meeting Place:** BA3000

**Text:** There is no text but rather selected readings will be posted on the **course web site** [www.cs.toronto.edu/~bor/199y08](http://www.cs.toronto.edu/~bor/199y08).

**What are 199 courses?** The Arts and Sciences Calendar gives the following introduction to all first-year seminar courses in the Faculty of Arts and Sciences: First-Year Seminars (199 courses) are open only to newly admitted students. They are full-credit or half-credit courses that focus on discussion of issues, questions, and controversies surrounding a particular discipline (or several disciplines) in a small-group setting that encourages the development of critical thinking, writing skills, oral presentation, and research methods. Full credit courses are offered as HUM199Y1Y, INX199Y1Y, SCI199Y1Y and SSC199Y1Y. Half credit courses are offered as HUM199H1F/S, INX199H1F, SCI199H1F/S and SSC199H1S.

**Brief Description of Great ideas in Computing:** We will pursue the general (and very debatable) theme of GREAT IDEAS in COMPUTING (including some interesting algorithms). The ambitious goal is to try to identify the great ideas that have significantly influenced the field. We will concentrate on mathematical, algorithmic and software ideas with the understanding that the importance and usefulness of these ideas depends upon (and often parallels) the remarkable ideas and progress in computing and communications hardware. The list of topics we shall discuss will depend to some degree on the background and interests of the class. There may be a “service learning” component in the course. What is service learning? “It’s an effort to expose students to socially conscious scholarship and give them the tools to enhance their critical thinking and problem-solving skills.”

### Course evaluation:

- 7 assignments ( with 10% for each assignment) for a total of 70%. Late submission policy: 20% penalty for late submissions (without medical or other emergency justification) within one week of due date; no credit afterwards. Due dates: 29/9, 20/10, 10/11, 4/12, 19/1, 9/2, 9/3
- Project/service learning 15%. No late submissions (without medical or other emergency justification). Due date: April 6, 2009
- Class participation (including tutorials) 15%. Participation entails active discussion that reflects critical thinking as stated in the Faculty 199 Introduction.

**Email Policy:** I try to read emails ([bor@cs.toronto.edu](mailto:bor@cs.toronto.edu)) regularly but I do NOT promise to reply to all emails. In particular, some questions may require a detailed answer and I will often answer such questions in class so that everyone can benefit. I welcome

questions and comments at all times and especially in class. If you are confused/disagree, there is a good chance others are also confused/disagree. You are also welcome to use the **forum** which you can access via the web page.

**Office hours (SF 2303B):** To be announced. Beyond any posted office hours, students are always welcome to make appointments and/or drop by to see if I am available. In general, I much prefer speaking to people in person than via email!