Instructor: S. Cook: Office SF2303C, Tel 416-978-5183, e-mail: sacook@cs.toronto.edu
Instructor office hours: MW 3:15-4:00. Or make an appointment, or drop in, or send a question via email.
Lectures: MW 2 in MP 137
Tutorials: TBA Tutors: TBA

Prerequisites: CSC 236H/238H/240H

Course Web Site: http://www.cs.toronto.edu/~sacook/csc463h/
Refer to this site periodically for problem sets, notes, solutions, important announcements, and other information.


Notes: Notes supplementing the text are posted on the course web site.

References:


Course Contents:
- Computability Theory (5 weeks): Turing machines, Church’s Thesis, decidability and semi-decidability, diagonal arguments, the Halting Problem and other undecidable problems, reductions, complete problems.

- Computational Complexity (7 weeks): The classes P and NP, polynomial time reducibility, NP-completeness, Cook-Levin Theorem, various NP-complete problems, time and space complexity, intractable problems, other topics.

Marking Scheme:
4 assignments worth 15% each (Due beginning of tutorial)
Jan 29, Feb 12, March 11, April 1
1 closed book test worth 10% (Feb 26: In tutorial)
final exam worth 30%.

Assignments are due at the beginning of tutorial/lecture, since solutions will be discussed during the tutorial/lecture.

The work you submit must be your own. You may discuss problems with each other; however, you should prepare written solutions alone. Copying assignments is a serious academic offence and will be dealt with accordingly.