COMP 251 — Fall 2009
McGill University

Instructor: Phuong Nguyen. Office: McConnel 309. Phone 514 398 7073.
E-mail: pnguyen at cs.mcgill.ca. For e-mails please include in the subject "COMP251".

Lectures: Tuesday and Thursday 10 – 11:30 in ENGTR 1100.

Instructor Office Hours: Tuesday and Thursday 4–5 in McConnell 309. There will be office hours by TAs before the due dates of the assignments, time and place will be announced.

Teaching assistants: Raphael Mannadiar raphael.mannadiar at mail.mcgill.ca, Ryan Faulkner ryan.faulkner at mail.mcgill.ca, Zhentao Li zhentao.li at mail.mcgill.ca.

Course website: `http://www.cs.mcgill.ca/~pnguyen/251F09/`
Refer to this site frequently for assignments, tests, announcements, etc. I will also follow discussions on myCourse.

Textbook: Cormen, Leiserson, Rivest, Stein "Introduction to Algorithm" (2nd edition) McGraw-Hill (2001), ISBN: 0-07-013151-1.
Available online at `http://library.books24x7.com/` (with McGill ID). The book ID is 3444.

Prerequisite: COMP 250 or COMP 203. Restrictions: Not open to students who have taken or are taking COMP 252.

Course Contents (tentative): Data structures:

- Linked list, stack, queue (Chapter 10)
- Heap (Chapter 6)
- Tree (Chapter 12,13)
- Hash table (Chapter 11)

Algorithms:

- Amortized analysis (Chapter 17)
- Divide-and-conquer (Chapter 7)
- Greedy algorithms (Chapter 16)
- Dynamic programming (Chapter 15)
- String matching (Chapter 32)
- Graph search (Chapter 22)

Some mathematical background: Chapters 3,4 and Appendices A,B.

Marking Scheme:

- 4 assignments worth 10% each, due at the beginning of lectures on September 17, October 1, October 29, and November 12.

- 2 closed-book midterm tests (60 minutes each) worth 10% each, in lecture on October 6 and November 17.
- final exam (3 hours, closed-book) worth 40%. You must obtain at least 40% to pass the course.

Additional information on marking scheme: If you miss the test on October 6 then use the mark of the test on November 17; if you miss the test on November 17 then use the mark of the final exam. You must inform me if you plan to submit the assignment late; there will be a penalty of 10% of the orignal mark for each day. Remarking requests should be written and handed in within one weeks.

NOTES: In accord with McGill Universitys Charter of Students Rights, students in this course have the right to submit in English or in French any written work that is to be graded.

McGill University values academic integrity. Therefore all students must understand the meaning and consequences of cheating, plagiarism and other academic offences under the Code of Student Conduct and Disciplinary Procedures (see `www.mcgill.ca/integrity` for more information).