

COMP 360 — Winter 2011
McGill University

Instructor: Phuong Nguyen. Office: McConnell 303. Phone 514 398 7080.
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Lectures: Monday and Wednesday 11:30 – 13:00 in ENGTR 0060.

Instructor Office Hours: Monday and Wednesday 4–5 in McConnell 303.

Teaching assistants: Neil Girdhar and Andie Sigler.

Course website: <http://www.cs.mcgill.ca/~pnguyen/360W11/>

Refer to this site frequently for assignments, tests, announcements, etc. I will also follow discussions on myCourse.

Textbooks:

- [KT] Jon Kleinberg and Eva Tardos “Algorithm Design” Pearson Education (2006), ISBN: 0-321-29535-8.
- [CLRS] Cormen, Leiserson, Rivest, Stein “Introduction to Algorithm” (3rd edition) McGraw-Hill (2009), ISBN-10: 0-262-53305-7, ISBN-13: 978-0262033848.
Available online at <http://library.books24x7.com/> (with McGill ID). The book ID is 3444.

Prerequisite: COMP 251 or COMP 252, and either MATH 240 or MATH 235 or MATH 363.
Restrictions: Not open to students who have taken or are taking COMP 362.

Topics:

- NP-completeness (CLRS Chapter 34, KT Chapter 8)
- Greedy Algorithms (KT Chapter 4, CLRS Chapter 16)
- Dynamic Programming (KT Chapter 6, CLRS Chapter 15)
- Network Flows (KT Chapter 7, CLRS Chapter 26)
- Linear Programming (CLRS Chapter 29)
- Approximation Algorithms (KT Chapter 11, CLRS Chapter 35)

Grading Scheme:

- final exam (3 hours, closed-book) worth 50%, you must obtain at least 40% to pass the course;

- 2 closed-book midterm tests (60 minutes each) worth 10% each, in lecture on February 28 and April 4;

Missing test: there is no replacement test, so if you miss any test due to a medical reason, we will use the grade of the final exam provided that you submit necessary documents. Under other circumstances your grade is 0.

- 8–10 weekly assignments of total worth 30%, due at the beginning of lectures on Monday starting from January 17.

Late assignment policy: There is a penalty of 30% for late submission on the same day of deadline, 50% on the following day, and no late submission is allowed two days after the deadline.

If you are sick, you have to provide necessary documents. There's no penalty in this case, but you cannot submit the assignment once the solution is out, or one week after the deadline (whichever comes first).

NOTES: In accord with McGill University's 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).