

COMP 360, Fall 2021

Course Information:

Section: 002	Time: Monday-Wednesday 8:35 -9:55
Room: Adams Building AUD	Web: http://www.cs.mcgill.ca/~hatami/comp360-F2021

Instructor:

Instructor: Hamed Hatami	Email: hatami@cs.mcgill.ca
Office: McConnell 308	Phone:
Office Hours: Tuesday 11:00-12:00 on zoom. (also by appointment)	

Teaching Assistants: Tsun Ming Cheung, Zhong Sheng Hu, Stefan Grosser, Tal Elbaz.

Evaluation: Final grade is whichever of (Homework 20% + Midterm 20% + final 60%) or (Homework 20% + Midterm 10% + final 70%) that results in a better grade. However you must still receive a grade higher than 30% in the final exam (before applying any curves) in order to pass this course. The exams are closed-book, and closed-notes.

1 Course Description

We will cover the following topics.

- Network flows.
- Linear programming.
- NP-completeness.
- Pspace.
- Approximation algorithms.
- Randomized algorithms.
- Online algorithms.

2 Textbook

The textbook of the course is

Jon Kleinberg and Eva Tardos *Algorithm Design* Pearson Education (2006).

3 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.

4 Midterm

The midterm is a 1:20min in class exam.

5 Assignments

There will be 5 assignments. The due dates are going to be announced. The homework and the exams will be graded based on correctness rather than effort alone. Each assignment will be posted on the course web page. Your grades will be posted on mycourses.

Late homeworks can be submitted until 48 hours after the deadline. There will be a penalty of -10 (out of 100) points for one-day delays, and -20 points for two-day delays on late homeworks unless a valid reason is provided by the student. Some personal circumstances for which accommodation may be warranted include, but are not limited to: Student illness (mental/physical), Family/partner illness, Death in the immediate family or of a person with whom the student has a similarly close relationship, Religious Observances, Pregnancy, Delivery of a child, Parenting issues.

The following are reasons for which an extension request will normally NOT be granted: Employment reasons, Travel/vacation/social plans, Airline flights and schedules, Other assignments and exams due on or about the due date.

6 Academic Integrity

McGill University values academic integrity. Therefore all students must understand the meaning and consequences of cheating, plagiarism and other academic offenses under the Code of Student Conduct and Disciplinary Procedures (see <http://www.mcgill.ca/integrity> for more information). Most importantly, work submitted for this course must represent your own efforts. Copying assignments or tests from any source, completely or partially, allowing others to copy your work, will not be tolerated.

7 Submission of written work in French

In accord [sic] 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.