CSC473H1 Winter 2019: Course Information Sheet

	Lecture	**Tutorial**
Instructor	Aleksandar Nikolov	Calum MacRury (TA), Lily Li (TA)
Email	anikolov@cs.toronto.edu	
Room	Bahen 1170	Bahen 1170
Time	Monday and Wednesday 11am - 12pm	Friday 11am - 12pm
Instructor's Office	Sandford Fleming 2301B	N/A
Office Hours	Thu 2pm-4pm, or by appointment	N/A

Overview. This is the course information sheet for the **Winter 2019** offering of **CSC473: Advanced Algorithms**. The topics we will cover are:

> Advanced algorithm design techniques, with emphasis on the role that geometry, approximation, randomization, and parallelism play in modern algorithms. Examples will be drawn from linear programming; randomized algorithms; streaming algorithms and parallel algorithms in the Map-Reduce model.

This is a *theoretical* and *advanced* course. While we will cover algorithmic techniques useful in practice, our focus will be on proofs, theoretical analysis, and creative problem solving. Mathematical maturity, and a strong background in probability theory, linear algebra, data structures, and algorithm design are all essential.

Website and Forum. The course website is:

`http://www.cs.toronto.edu/~anikolov/CSC473W19/`

We will use Piazza as a course forum:

`https://piazza.com/utoronto.ca/winter2019/csc473/home`

Check this website and Piazza frequently to make sure you receive any course announcements. Check the website for the required reading and an up-to-date schedule of lectures

Lecture Notes. Lecture notes will be made available. There is no course textbook.

Grading Scheme. Your mark for the class will be based on the following components:

- Homework Assignments: 32%
- Midterm Exam: 20%
- Final Exam: 48%

The *midterm exam* will be one hour long, and will take place on **February 25, 2019**, in the usual lecture time slot and room. It will cover all the material in the first six weeks of the course.

You need to score at least 40% on the final exam to pass the course.

Assignments. The course has 4 assignments. All of them are *group assignments*, to be completed in groups of at most two people each. *You are encouraged to work with a partner on the group assignments.* Each assignment is due by midnight on its due date.

On a group assignment, for each assignment problem, one student in the group is responsible for writing the solution, and the other student is responsible for proof-reading and revising it. Each solution should indicate the name of the student who wrote it, and the name of the student who proofread it.

Assignments need to be typed. Using LaTeXis strongly recommended.

The schedule of assignments is as follows:

1. **out:** January 23, **due:** February 6
2. **out:** February 13, **due:** February 27
3. **out:** March 6, **due:** March 20
4. **out:** March 20, **due:** April 3

When working on assignments, you are not allowed to consult other books, solution manuals, or solutions to assigned problems or similar problems on the Internet. You should not discuss homework solutions with anyone other than the professor, the TA, and your partner.

Lateness. Every student has **one** grace credit, which allows them to be late on one assignment for up to 24 hours. After the credit is used, no other late submission from the same student will be accepted for the remainder of the course. If working in a group, the credit is taken from both members of the group, and no other late assignments will be accepted from either group member for the remainder of the course.

Remarking. Remarking requests will be accepted up to one week after the marked homework assignment is returned. A remarking request can be used to alert us to possible mistakes in the grading of an assignment, but not to question the marking scheme of the assignment.

Academic Integrity. Every student must abide by the University of Toronto academic integrity policy, and the Code of Student Conduct. *Academic misconduct is taken very seriously!*