CSC473H1 Winter 2018: Course Information Sheet

	Lecture	**Tutorial**
Instructor	Aleksandar Nikolov	Sepehr Abbasi Zadeh (TA)
Email	anikolov@cs.toronto.edu	sepehr@cs.toronto.edu
Room	Bahen 1220	Bahen 1220
Time	Monday and Wednesday 11am - 12pm	Friday 11am - 12pm
Instructor's Office	Sandford Fleming 2301B	Sandford Fleming 4306
Office Hours	Thu 10am-noon, or by appointment	N/A

Overview. This is the course information sheet for the **Winter 2017** 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/CSC473W18/

We will use Piazza as a course forum:

> https://piazza.com/utoronto.ca/winter2018/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.

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

- Homework Assignments: 30%

- Midterm Exam: 20%

- Final Exam: 50%

The *midterm exam* will be one hour long, and will take place on **March 2, 2017**, in the tutorial time slot. 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 3 assignments. All of them are *group assignments*, to be completed in groups of maximum two people each. *You are **strongly** encouraged to work with a partner on the group assignments!* Each assignment is due by midnight on its due date.

On a group assignment, one student in the group is responsible for writing the solution, and the other student is responsible for proof-reading and revising it. The first page of your submission must list the name, student ID, and UTOR email address of the group member who wrote the solution, and also the name, student ID, and the UTOR email address of the group member who proof-read and revised it, in order for the submission to be accepted.

The schedule of assignments is as follows:

1. **out:** January 31, **due:** February 14

2. **out:** February 28, **due:** March 14

3. **out:** March 21, **due:** April 4

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 due date of the homework assignment. 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!*