CSC265H1 Fall 2019: Course Information Sheet

	Lecture	**Tutorial**
Instructor	Aleksandar Nikolov	Lily Li (TA)
Email	anikolov@cs.toronto.edu	xinyaun@cs.toronto.edu
Room	Wallberg Building 219	Wallberg Building 219
Time	Tuesday 2pm - 4pm	Thursday 3pm - 4pm
Instructor's Office	Sandford Fleming 2301B	N/A
Office Hours	Wednesday 10am-12 noon, or by appointment	N/A

Overview. This is the course information sheet for the **Fall 2019** offering of **CSC265: Enriched Data Structures and Analysis**. The topics we will cover are:

> Algorithm analysis: worst-case, average-case, and amortized complexity. Standard abstract data types, such as graphs, dictionaries, priority queues, and disjoint sets. A variety of data structures for implementing these abstract data types, such as balanced search trees, hashing, heaps, and disjoint forests. Design, implementation, and comparison of data structures. Introduction to lower bounds.

This course is an "enriched" version of CSC263, Data Structures and Analysis. While we cover roughly the same topics, we will go at a faster pace, in greater depth and with more rigour, and with more challenging assignments. Greater emphasis will be placed on proofs, theoretical analysis, and creative problem-solving. Certain topics briefly mentioned in CSC263 may be covered in more detail in this course, and some additional topics may also be covered.

Website and Forum. The course website is:

> http://www.cs.toronto.edu/~anikolov/CSC265F19/

We will use Piazza as a course forum:

> http://piazza.com/utoronto.ca/fall2019/csc265

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

Textbook. The textbook is

> Cormen, Leiserson, Rivest, and Stein. *Introduction to Algorithms*, 3rd edition. 2009, MIT Press.

An electronic copy of the textbook is also available through the University of Toronto Libraries website. Check the course website for additional lecture materials.

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

- Homework Assignments: 36%
- Midterm Exam: 18%
- Final Exam: 46%

The *midterm exam* will be one hour long, and will take place on **October 22**, in the second half of the regular lecture 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 6 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.

For any assignment problem, one member of the group is responsible for writing the solution, and the other student is responsible for proof-reading and revising it. *You submission must clearly indicate which student wrote and which student revised a problem solution.* Each student in the group must *fully understand* the solution of *every problem* in the group submission.

The schedule of assignments is as follows:

1. **out:** Sept 13, **due:** Sept 27

2. **out:** Sept 27, **due:** Oct 11

3. **out:** Oct 11, **due:** Oct 25

4. **out:** Oct 25, **due:** Nov 8

5. **out:** Nov 8, **due:** Nov 22

6. **out:** Nov 22, **due:** Dec 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 (if working on a group assignment).

Lateness. Every student has **one** late submission 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. When 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 a week after the 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. Your mark may decrease in response to a remarking request if we determine that the initial mark was too high because of a grading mistake.

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!*