Overview. This is the course information sheet for the Fall 2016 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 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 CSC263H1 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/CSC265F16/

We will use Piazza as a course forum:

http://piazza.com/utoronto.ca/fall2016/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


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: 42%
- Midterm Exam: 15%
- Final Exam: 43%

The midterm exam will be one hour long, and will take place on October 27, 2016, 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 6 assignments. 1 of them will be an individual assignment, and 5 will be 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: Sept 20, due: Oct 4, Group Assignment
2. out: Oct 4, due: Oct 18, Group Assignment
3. out: Oct 18, due: Nov 1, Group Assignment
4. out: Nov 1, due: Nov 15, Group Assignment
5. out: Nov 15, due: Nov 29, Group Assignment
6. out: Nov 29, due: Dec 6, Individual Assignment

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. To use the credit the student must notify the instructor within 24 hours of the assignment deadline that they were late, and give a brief justification. The submission will not be accepted without such a notification. After the credit is used, no other late submission from the same student will be accepted for the remainder of the course. If the assignment is a group assignment, 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. Remark requests will be accepted up to a 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!