CSC 373H1 (St George) Course Information Sheet Fall 2018

Course: CSC 373H1S -- "Algorithm Design and Analysis"

Lectures:

Session 1: Monday, Wednesday, Friday 10-11pm in Bahen 1170
Session 2: Wednesday 6-9pm in Bahen 1180

Instructors:

Allan Borodin
Office: SF 2303B
Office hours: Thurs 10:30-11:30 AM
416–978–2789

Michael Brudno
Office: Pratt 286C
Office hours: Tues 9:30-10:30 AM
416–978–2789

In addition to the individual OH above, one of the instructors will have office hours Wednesday 3:30-5:30 PM in Pratt 266. If none of these OH work for you, please contact us by email for an appointment.

E-mail:
Please email us at csc373f18profs@cs.toronto.edu. Both of us monitor this email, and will allow us to coordinate answers. We will attempt to answer all e-mails sent to us within 24 hours during the work week (if you do not get a reply, please re-send your message). We may post responses to questions sent to me via e-mail on Piazza if we believe the answer to be of general interest. Please try to ask your questions on Piazza (unless you are asking something that is sensitive or may give away an answer to a question).

Course Website & Discussion Group:

Website/Piazza: https://piazza.com/utoronto.ca/fall2018/csc373h/home

The course website and discussion group (Piazza) will contain the most up-to-date information possible regarding the course. We will use the course website or Piazza to post handouts, information about the course reading and other announcements. We will use the discussion group to answer questions about the homework and anything else of interest to the class as a whole. We expect that everyone in the class will see announcements made on Piazza within 48 hours. You are also responsible for all material (unless otherwise stated) and announcements made in lectures.

Office Hours:
In addition to the instructor OH, TAs will have office hours before homeworks are due and before midterms. These will be announced in class and posted on Piazza. We *strongly* advise you to come to office hours if you are have any questions or problems with the material. We expect you to attend lectures and tutorials where questions are also welcome. If you cannot make any of the office hours you can request an appointment via e-mail.

Textbook:
The required textbook for the course is *Algorithms* by Dasgupta, Papadimitrou and Vazirani. The textbook will be used for readings and exercises throughout the term, and you should buy a copy of it. In some cases the book is rather terse, hence we recommend that if you do not understand something, you should try to read the corresponding material in the Kleinberg & Tardos' *Algorithm Design* book, or the Cormen et al *Introduction to Algorithms* both available at the library. We will periodically

supplement the material with other handouts.

General Outline:

1. Divide and Conquer (1 week)
2. Greedy Algorithms (2 weeks)
3. Dynamic Programming (2 weeks)
4. Network Flow & Linear Programming (3 weeks)
5. Coping with Hard Problems (2-3 weeks)
6. Approximation Algorithms; Local Search

Grading Scheme:

Your grade will be based on:

- Three Homework assignments, due October 5, November 2nd, and December 6th (7% of your grade each, 21% total)
- Two Term Tests – October 19th & November 23rd (note: Friday, 6-8pm; 20% of your grade each)
- Final Exam (39% of your grade)

Note:

- To pass this course, you must achieve a mark of 40% on the final exam.

Assignment Submission:

All assignments are due no later than 4:59pm on their due date. All assignments must be submitted as a PDF file using the MarkUs system or using the autosubmission scripts specified in the assignment. If you require special consideration for one of your assignments, please contact the instructor.

Lateness Policy:

All assignments are due by 4:59pm on their due date, unless otherwise stated. Late assignments are penalized by 2.5% per hour. After 40 hours your assignment will get a score of zero. Note that lateness penalties will be computed as a percentage of the total marks on the assignment, not of the mark you obtain. This policy will be strictly enforced.

Policy on remarking requests:

- All remarking requests must be received within **one week** of the date when the assignment or test was returned, through MarkUs (for homeworks) or by handing the test back to one of the instructors (for midterms).
- Please submit a detailed written explanation of why you believe you received too low a mark.
- Your mark will decrease if we find something that was incorrectly awarded too high a mark.

Plagiarism:

Please read the Guidelines for Avoiding Plagiarism for full details of the course policies and the Faculty's rules. Plagiarism is a form of academic fraud and is treated very seriously. The assignments you hand in must not contain anyone else's work or ideas, without proper attribution. In particular, the actual write-up of your assignments must be done in isolation from others (and without copying from notes or other sources). This ensures that your solution is truly your own, that you understand the course material, and that your grade reflects your own understanding.

The purpose of this course is for you to learn the material, and by committing plagiarism you are hurting yourself. So if you are having trouble with the course, come speak to us, that's why we're here!