Course Information CSC 263H1 F: Data Structures and Analysis Fall 2007

Instructor

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Web Site http://www.cs.utoronto.ca/~krueger/csc263h/

The web site is the primary source of information about the course, including assignments, notes, marks and announcements. You are responsible for all announcements posted to the course web site, so please check it regularly.

Lectures Tuesdays and Thursdays, 10:10am-11:00am in room LM 158

Tutorials Thursdays, 11:10am–12:00pm (First tutorial on September 13)

- in room BA 3008 for students with last names from \mathbf{A} to \mathbf{J} ,
- in room BA 3012 for students with last names from **K** to **Z**,

Attendance in tutorials is as mandatory as attendance in lectures. Formal attendance is not taken in either venue; however, there will be new material that is presented only in tutorials (and not in lectures) for which you are responsible and on which you may be tested in homework or exams.

Required Textbook

Cormen, Leiserson, Rivest & Stein, *Introduction to Algorithms* (2nd edition). MIT Press and McGraw-Hill (2001), ISBN: 0-262-03293-7.

Online access to this text is available free to UofT students through the library website at http://main.library.utoronto.ca/eir/resources.cfm

Course Topics

Algorithm analysis: worst-case, average-case, and amortized complexity.

Standard abstract data types: priority queues, dictionaries, disjoint sets, graphs.

Common data structures: heaps, balanced search trees, hashing, disjoint forests.

Basic graph traversal algorithms. Introduction to lower bounds.

Prerequisites: CSC207, CSC236/CSC240, STA247/STA257, [CGPA 2.5 or CSC POSt]

Marking Scheme and Schedule

| Item | Weight | Dates |
|---------------|----------------|------------------------------|
| 4 assignments | 40% (10% each) | Oct 2, Oct 23, Nov 13, Dec 4 |
| Midterm test | 15% | Oct 30 |
| Final exam | 45% | Dec 10–Dec 21 |

NOTE: To pass the course, students must obtain a minimum mark of 40% on the final exam.

Course Policies

Homework: Each homework assignment will consist of a written "pencil-and-paper" component and a programming component. Assignments are due at the beginning of class on the date specified. The written portion should be submitted directly to the instructor; to prevent disruption, assignments will not be accepted after the first 5 minutes of class. The programming portion must be submitted electronically: paper printouts will not be accepted.

Group work: In each homework you may collaborate with at most one other student who is currently taking CSC263H. If you choose to work with another student on a homework, you and your partner must submit only one copy of your solution (write both your names on the cover sheet of the written component and also include both names in the header of your program files you submit). The solution will be graded in the same way whether it was completed alone or with a partner. Collaboration involving groups of more than two students is not allowed.

It is critically important that both group members understand every problem. A divideand-conquer approach is a poor idea as it will leave members at a distinct disadvantage in learning the material and passing the exams. Instead, plan to work out the problems together, discussing it until you agree on a solution.

Consultation: For help with your homework you may consult only the instructor, TAs, your homework partner (if you have one), your textbook and your class notes. You may not consult any other source! In particular, you may not use the Internet to research the problems.

Lateness, Absence and Extensions: Late assignments will not be accepted. In the case of a missed test, a mark of zero will be recorded: no make-up test will be provided. Only in exceptional circumstances will requests for extensions for assignment deadlines or excuses for missed tests be entertained. Any request for special consideration must be presented to the course instructor (not a TA) with all supporting documentation as soon as possible. For medical excuses, only the official UofT medical certificate will be accepted.

Remarking: Any dispute over the grading of an assignment or test should be stated in writing (using the form on the website) and submitted along with the original copy of your work.

Plagiarism and Academic Honesty

The work you submit must be your own and cannot contain anyone else's work or ideas, without proper attribution. Plagiarism is a form of academic fraud and is treated very seriously.

Note that it is a serious offense to help someone commit plagiarism. Do not let others look at your solutions, even in draft form. If you are unsure whether an activity may constitute plagiarism or undue collaboration, consult the instructor immediately.

If you are having trouble with the course, come speak to us, that's why we're here!

Important Dates

Deadline to add F courses
Deadline to drop F section courses
Classes end in F section courses
Final Examinations

September 23, 2007 November 4, 2007 December 7, 2007 December 10-21, 2007