COSC 2011 3.0 Fundamentals of Data Structures

Summer 2000

Brief overview

The design and analysis of data structures is a key subject in computer science. This course will focus on some fundamental data structures, including lists, trees and graphs. JavaTM will be used as the implementation language.

General information for Section A

Time: Monday and Wednesday, 17:30-19:00

Place: Stedman Lecture Hall B Instructor: Franck van Breugel Office: CCB 348

Office hours: Monday and Wednesday, 16:45–17:15 and 19:00–19:30 or by appointment

Email: franck@ariel.cs.yorku.ca

Prerequisites: general prerequisites

General information for Section B

Time: Wednesday, 18:30–21:30 Place: Stedman Lecture Hall C Instructor: Gordon Turpin

Office: CCB 148

Office hours: Wednesday 17:00–17:30 or by appointment

Email: gordon@cs.yorku.ca Prerequisites: general prerequisites

Reference material

The textbook for the course is

* Michael T. Goodrich and Roberto Tamassia. Data Structures and Algorithms in Java. John Wiley & Sons. 1998.

"Data Structures and Algorithms in Java" is on reserve in the Steacie library. The following books are suggested for further reading.

- * Mary Campione and Kathy Walrath. The Java Tutorial: Object-Oriented Programming for the Internet. Second edition. Addison-Wesley. 1998.
- * Alfred V. Aho, John E. Hopcroft and Jeffrey D. Ullman. *Data Structures and Algorithms*. Addison-Wesley. 1983.

Note that "The Java Tutorial" is available online. "Data Structures and Algorithms" is on reserve in the Steacie library.

Evaluation

The student's performance in the course will be evaluated as a combination of a final exam (50%), a midterm (25%) and assignments (25%). More details are given below. There will be no supplemental examination for the course. Neither will students have the option of doing additional work to upgrade their mark.

Assignments: There will be two big assignments and a number of small assignments.

Small assignments: A number of small assignments will be given out during the term. These assignments should be handed in within one week. The assignments will be returned within one week after the due date. All small assignments together are worth at most 5%. The actual percentage will depend on the number of small assignments a student hands in.

Big assignments: The big assignments are given out on

- 1. May 17
- 2. June 14

These assignments should be handed in within three weeks. No late assignments will be accepted. If a student cannot hand in the assignment in time for reasons beyond his/her control, the student should bring a documented note to the instructor. If accepted, the weight of the other assignment will be prorated accordingly. The assignments will be returned within two weeks after the due date. Each big assignment is worth $\frac{25-\text{weight of small assignments}}{2}\%$.

The assignments can be found at the URL

http://www.cs.yorku.ca/course/2011/

Midterm: The midterm will be held on June 14. The midterm will be written in class. If a student misses the midterm for reasons beyond his/her control, the student has to bring a documented note to the instructor. If accepted, the weight of the final exam will be prorated accordingly.

Final exam: The final exam will be held in the examination period. It will be a three hour exam.

Additional information can be found at the URL

http://www.cs.yorku.ca/course/2011/