COSC 2011 3.0 Fundamentals of Data Structures

Fall 1999

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. Java™ will be used as the implementation language.

General information

Time: Monday, Wednesday and Friday, 14:30–15:30
Place: Ross South 137
Instructor: Franck van Breugel
Office: CCB 348
Office hours: Monday, Wednesday and Friday, 15:30–16:30 or by appointment
Email: franck@ariel.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. Class notes and handouts will be crucial. 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 three assignments (20%) and three tests (80%). In order to pass the course, students should pass the tests (a student who fails based on the marks for the three tests also fails the course). More details are given below. There will be no final or supplemental examination for the course. Neither will students have the option of doing additional work to upgrade their mark.

Assignments: There will be three assignments. The assignments are given out on

1. September 13 (6.66%)

2. October 13 (6.66%)
3. November 10 (6.66%)

The assignments should be handed in within two 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 assignments will be prorated accordingly. The assignments can be found at the URL

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

Tests: There will be three tests. The dates for the tests are

1. October 8 (30%)
2. November 8 (30%)
3. December 6 (20%)

The tests are written in class. If a student misses the first or the second test for reasons beyond his/her control, the student should bring a documented note to the instructor. If accepted, the weight of the other tests will be prorated accordingly. If a student misses the third test, the student has to contact the instructor to take a replacement test.

Additional information can be found at the URL

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