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EXPANDED COURSE DESCRIPTION
ELECTRICAL ENGINEERING AND COMPUTER SCIENCE

Lassonde School of Engineering
Electrical Engineering Computer Science

LE / EECS 2011 3.0 SECTION M
FUNDAMENTALS OF DATA STRUCTURES
FALL 2017 / WINTER 2018

Last Modified Date: 12/14/2017

COURSE CALENDAR DESCRIPTION

A study of fundamental data structures and their use in the efficient implementation of algorithms. Topics include abstract data types, lists, stacks, queues, trees and graphs. Prerequisites: General Prerequisite; LE/EECS 1030 3.00 or LE/EECS 2030 3.00; LE/EECS 1028 3.00 OR SC/MATH 1028 3.00 or LE/EECS 1019 3.00 or SC/MATH 1019 3.00. Course credit exclusion: LE/CSE 20111 3.00, AK/AS/SC/CSE 2011 3.00, AK/AS/SC/COSC 2011 3.00. (NOTE: The General Prerequisite is a cumulative GPA of 4.50 or better over all major EECS courses. EECS courses with the second digit "5" are not major courses.)

INSTRUCTOR(S)

Name	Section / Format / Term	Contact Email	Contact Phone
Datta, Suprakash	Sec. M / LECT / W		

LIST OF LEARNING OUTCOMES AND EXAMPLES OF

LEARNING OUTCOMES

By the end of the course, students will be familiar with the more prevalent data structure patterns, and will be able to design and implement variations on these patterns, and then use them as clients to solve a broad range of real-world problems.

GRADED ASSESSMENT

The weight distribution of the course components is as follows:

- 20% - 4 Assignments, all equal weight
- 30% - Midterm Test -closed book
- 50% - Final Exam -closed book

ADDITIONAL INFORMATION

COURSE TEXTBOOK

[GTG] Goodrich, Tamassia, Goldwasser, “Data Structures and Algorithms in Java”, 6th edition, January 2014.

click here for the Wiley book site

The following resources are useful for this course and are mostly accessible on-line:

- Oracle Technology Network for Java Developers (online access)
- JDK 7 Download

- Java API
- Java Tutorials
- Eclipse IDE for Java Developers (online access)
- Eclipse Tutorial — Vogel
- "Introduction to Programming in Java: An Interdisciplinary Approach" — R. Sedgewick & K. Wayne, Addison-Wesley, 2008. (online access)
- "Java By Abstraction, 3rd Edition", — H. Roumani, Pearson, 2010.
- "EECS 1030: Course Notes" — H. Roumani & F. van Breugel, 2010. (online access)
- Useful Mathematical Facts — [GTG] resource. (online access)
- AAW: Algorithmics Animation Workshop — A. Mirzaian's students. (online access)

ACADEMIC INTEGRITY LINKS

- Senate Policy on Academic Honesty - http://secretariat-policies.info.yorku.ca/policies/academic-honesty-senate-policy-on/
- Academic Integrity - http://lassonde.yorku.ca/academic-integrity

STUDENT LINKS

- Student Rights and Responsibilities - http://oscr.students.uit.yorku.ca/student-conduct
- Religious Observance - https://w2prod.sis.yorku.ca/Apps/WebObjects/cdm.woa/wa/regobs
- Academic Accommodation for Students with Disabilities - http://secretariat-policies.info.yorku.ca/policies/academic-accommodation-for-students-with-disabilities-policy/
- Counselling and Disability Services - http://cds.info.yorku.ca/

Many courses utilize Moodle, York University's course website system. If your course is using Moodle, click here to access it.
Moodle @ York University