EXPANDED COURSE DESCRIPTION
ELECTRICAL ENGINEERING AND COMPUTER SCIENCE
Lassonde School of Engineering
Electrical Engineering Computer Science
LE / EECS 2011 3.0 SECTION E
FUNDAMENTALS OF DATA STRUCTURES
FALL 2018 / WINTER 2019

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: cumulative GPA of 4.50 or better over all major EECS courses (without second digit “5”); 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. Previously offered as: LE/CSE 2011 3.00.

INSTRUCTOR(S)

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<th>Name</th>
<th>Section / Format / Term</th>
<th>Contact Email</th>
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<tbody>
<tr>
<td>Vlajic, Natalija</td>
<td>Sec. E / LECT / F</td>
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ADDITIONAL INFORMATION

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

COURSE TEXTBOOK

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)
• "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/
• York University’s Policies on Sexual Violence - http://secretariat-policies.info.yorku.ca/policies/sexual-violence-policy-on/
• York University’s Policies on Gender/LGBTQ*/Positive Space - http://rights.info.yorku.ca/lgbtq/

LAND ACKNOWLEDGEMENT
• We acknowledge our presence on the traditional territory of many Indigenous Nations. The area known as Tkaronto has been care taken by the Anishinabek Nation, the Haudenosaunee Confederacy, the Huron-Wendat, and the Métis. It is now home to many Indigenous Peoples. We acknowledge the current treaty holders, the Mississaugas of the New Credit First Nation. This territory is subject of the Dish With One Spoon Wampum Belt Covenant, an agreement to peaceably share and care for the Great Lakes region.
• The Indigenous Framework for York University: A Guide to Action can be found here: http://indigenous.info.yorku.ca/
• Meaning of a land acknowledgement: http://healthydebate.ca/opinions/indigenous-land-acknowledgements

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