EXPANDED COURSE DESCRIPTION
ELECTRICAL ENGINEERING AND COMPUTER SCIENCE
Lassonde School of Engineering
Electrical Engineering Computer Science
LE / EECS 2031 3.0 SECTION E
SOFTWARE TOOLS
FALL 2018 / WINTER 2019

Last Modified Date: 08/29/2018

COURSE CALENDAR DESCRIPTION
Tools commonly used in the software development process: the C language; shell programming; filters and pipes; version control systems and "make"; debugging and testing. Prerequisites: General prerequisites; LE/EECS 1021 3.00 or LE/EECS 1022 3.00 or LE/EECS 1030 3.00

INSTRUCTOR(S)

<table>
<thead>
<tr>
<th>Name</th>
<th>Section / Format / Term</th>
<th>Contact Email</th>
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<td>Aboelaze, Mokhtar</td>
<td>Sec. E / LECT / F</td>
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ADDITIONAL INFORMATION

COURSE DESCRIPTION
This course introduces software tools that are used for building applications and in the Software development process. It covers ANSI-C (stdio, pointers, memory management, overview of ANSI-C libraries), Shell programming including Filters and pipes (shell redirection, grep, sort & uniq, tr, sed, awk, pipes in C), Version control systems and the "make" mechanism, and debugging and testing. All of the above are applied in practical programming assignments and/or small-group projects.

COURSE LEARNING OUTCOMES
- Use the basic functionality of the Unix shell, such as standard commands and utilities, input/output redirection, and pipes
- Develop and test shell scripts of significant size.
- Develop and test programs written in the C programming language.
- Describe the memory management model of the C programming language
- Use test, debug and profiling tools to check the correctness of programs

GRADED ASSESSMENT
The weight distribution of the course components is as follows:
5% - Participation
15% - LABs
54% - 3 lab tests 18% each
26% - Final Exam

TEXTBOOKS
- The C Programming Language, Kernighan and Ritchie (K+R)

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 Racism Policy and Procedures -
  http://secretariat-policies.info.yorku.ca/policies/racism-policy-and-procedures/
• 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