COURSE CALENDAR DESCRIPTION

An introduction to scientific computing using an integrated computing and visualization environment. The course presents computer-based problem-solving techniques through a series of applications rooted in Mathematics and Statistics. Prerequisite: SC/MATH 1300 3.00. Corequisites: SC/MATH 1310 3.00; SC/MATH 1131 3.00 or SC/MATH 2030 3.00. Course credit exclusions: LE/EECS 1541 3.00, LE/EECS 1570 3.00. This course is not open to any student who has passed or is taking SC/PHYS 2030 3.00. PRIOR TO FALL 2014: course credit exclusions: LE/CSE 1541 3.00, LE/CSE 1570 3.00. PRIOR TO SUMMER 2013: course credit exclusions: SC/CSE 1541 3.00, SC/CSE 1570 3.00.

"As per January 27, 2009 Curriculum Committee meeting - CCE for CSE 1570 3.00 added.

INSTRUCTOR(S)

<table>
<thead>
<tr>
<th>Name</th>
<th>Section / Format / Term</th>
<th>Contact Email</th>
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<tbody>
<tr>
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ADDITIONAL INFORMATION

Course Description
The objectives of this course are the introduction of the Matlab software environment, including its use for solving simple problems and the introduction of the programming principles that underlie programming in any environment including loops, encapsulation, efficiency, debugging and algorithms. More specifically:

- Overview of the platform and its interface
- Syntax, data types, variables
- Programming in Matlab
- Input, output
- Basic matrix operations, statistics
- Plotting
- Sorting, searching, recursion
- Random numbers

Lecture Hours
Mon. and Fri. 11:30am-12:30pm Curtis Lect. Hall K

Lab Hours Lab Session 1:
Tue 1:00-4:00pm South Ross 110

Lab Hours Lab Session 2:
Thu 1:00-4:00pm South Ross 110

Tests
There will be a midterm worth 25% and a final worth 40%. The midterm will cover material up to the lecture before the midterm and it will be in-class. The final will cover all the material in the course and will be during the regular exam period.
Lab Assignments.

There will be a total of ten labs 8 of which (L1, L2, L3, L5, L6, L7, L8, L9) have a graded programming component and a few multiple choice questions. The seven best of the eight are worth 5% each. The extra lab is meant to make up for a sick day. Due to the nature of the labs there will be no other make-up lab. Labs 4 and 10 are review labs before the midterm and final respectively.

This year we will be using Moodle instead of Learn.Lassonde.

You do not need to purchase the software since Dept. of Math provides matlab on their computers and can be accessed through webfas. There is also a student version that Matlab sells at lower price.

Text

Matlab: An introduction with Applications, by Amos Gilat, Sixth Edition, Wiley. If you have the fifth edition already it is also OK.

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