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. Two lecture hours per week and one weekly three hour laboratory session. 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 exclusion: LE/EECS 1541 3.00, LE/SC/CSE 1541 3.00, LE/EECS 1570 3.00, LE/SC/CSE 1570 3.00. NCR Note: This course is not open to any student who has passed or is taking SC/PHYS 2030 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>
<th>Contact Phone</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spetsakis, Minas E</td>
<td>Sec. M / LECT / W</td>
<td><a href="mailto:minas@cse.yorku.ca">minas@cse.yorku.ca</a></td>
<td>York Ext. 77886</td>
</tr>
</tbody>
</table>

TOPICS AND CONCEPTS

The objectives of this course is 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

REQUIRED TEXT

ISBN: 978-1-118-62986-4

GRADED ASSESSMENT

8 Lab Assignments: 45%
Mid-term Exam: 20%
Final Exam: 35%

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