Course topics: Abstract vector spaces, linear transformations, inner product spaces, orthogonal bases, spectral theorems, quadratic forms.

Instructor: Federico Galetto, 407 Hamilton Hall, galettof@math.mcmaster.ca.

Office hours: Tue, Thu: 17:30 - 18:30 (tentative).

Course website: All course information, material and updates will be posted on Avenue to learn.

Lectures: Tue, Thu: 19:00 - 22:00, 305 Hamilton Hall (June 21 - August 4).


Grading scheme: Your mark will be determined according to the following scheme.

Assignments: 20%  ||  Tests: 30%  ||  Final exam: 50%

Your final letter grade will be assigned using the following table.

<table>
<thead>
<tr>
<th>Grade</th>
<th>Percentage conversion</th>
<th>C+</th>
<th>C-</th>
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<tbody>
<tr>
<td>A+</td>
<td>90-100</td>
<td>67-69</td>
<td></td>
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<tr>
<td>A</td>
<td>85-89</td>
<td>63-66</td>
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<tr>
<td>A-</td>
<td>80-84</td>
<td>60-62</td>
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<tr>
<td>B+</td>
<td>77-79</td>
<td>57-59</td>
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<td>B</td>
<td>73-76</td>
<td>53-56</td>
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<tr>
<td>B-</td>
<td>70-72</td>
<td>50-52</td>
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<td>F</td>
<td>49 and below</td>
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</tbody>
</table>

Assignments: There will be three written assignments (tentative due dates: June 28, July 12, and July 28). Each student is expected to work independently and submit a paper copy of each assignment by 19:00 on the due date. Assignments must be delivered to lockers 22 or 23 (depending on your last name) located on the first floor of Hamilton Hall. Other practice problems will be assigned regularly but need not be submitted for evaluation.

Exams: There will be two written tests of one hour each (tentative dates: July 5, and July 21). There will be one (cumulative) final exam of 2.5 hours (tentative date: August 4). Tests and exam locations will be announced in class and posted on the course website at least one week before the actual date. You are responsible for bringing your student ID to all tests and exams.

Calculators: The McMaster standard calculator is the Casio fx-991. This is the only calculator allowed during tests and exams.

Academic integrity: You are expected to exhibit honesty and use ethical behaviour in all aspects of the learning process. Academic credentials you earn are rooted in principles of honesty and academic integrity.

Academic dishonesty is to knowingly act or fail to act in a way that results or could result in unearned academic credit or advantage. This behaviour can result in serious consequences, e.g. the
It is your responsibility to understand what constitutes academic dishonesty. For information on the various types of academic dishonesty please refer to the Academic Integrity Policy, located at www.mcmaster.ca/academicintegrity.

The following illustrates only three forms of academic dishonesty:

1. Plagiarism, e.g. the submission of work that is not one’s own or for which other credit has been obtained.
2. Improper collaboration in group work.
3. Copying or using unauthorized aids in tests and examinations.

**Accommodations:** Students who require academic accommodation must contact Student Accessibility Services (SAS) to make arrangements with a Program Coordinator. Academic accommodations must be arranged for each term of study. Student Accessibility Services can be contacted by phone 905-525-9140, ext. 28652, or e-mail sas@mcmaster.ca. For further information, consult McMaster University’s Policy for **Academic Accommodation of Students with Disabilities.**

**Relief for Missed Academic Term Work (MSAF):** The University recognizes that students periodically require relief from academic work for medical or other personal situations. Please familiarize yourself with the relevant policies available here.

**Important message about course modifications:** The instructor and university reserve the right to modify elements of the course during the term. The university may change the dates and deadlines for any or all courses in extreme circumstances. If either type of modification becomes necessary, reasonable notice and communication with the students will be given with explanation and the opportunity to comment on changes. It is the responsibility of the student to check their McMaster email and course websites weekly during the term and to note any changes.