Multivariable Calculus

Welcome to MAT237!

UNIVERSITY OF TORONTO

September 5th, 2019

Information about this section:

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⚠ Please start the subject with "MAT237:"

Lectures schedule:

- Tuesday, 6pm to 7pm – Room SS2117
- Thursday, 6pm to 8pm – Room SS2117

Office hours:

- Tuesday, 7pm to 8pm – Room PG003
- Thursday, 3pm to 4pm – Room PG003

Website for this section:

http://uoft.me/MAT237-5201

Resources:

MAT237 website:

`http://uoft.me/MAT237-2019`

Quercus:

- Announcements
- Discussions
- WeBWorK

Lecture notes:

`http://uoft.me/MAT237-notes`

Administrative questions:

`admin237@math.toronto.edu`

Enrol in a tutorial!

Marking scheme

- Participation (10%)
  Based on your WeBWorK submissions, problem sets and tutorial reflections.
- 4 tests (15% each)
- Final Exam (30%)

Read the syllabus for the details.

Fall Term: schedule (tentative)

Preliminaries

Week 1	Geometry of Euclidean spaces, multivariable functions

Some topological notions

Week 2	Open subsets, closed subsets, boundaries, …
Week 3	Limits, continuity, completeness
Week 4	Compactness, connectedness (the IVT)

Differentiation

Week 5	Partial derivatives
Week 6	Differentials
Week 7	The Chain Rule
Week 8	The MVT
Week 9	Taylor's formula
Week 10	Applications
Week 11	Review
Week 12	The Implicit Function Theorem

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Homework

- Read the syllabus
- Review MAT137 materials
- Read the section 0.1 Prerequisites of the notes