DEPARTMENT OF MATHEMATICAL AND COMPUTATIONAL SCIENCES UNIVERSITY OF TORONTO MISSISSAUGA

MAT232H5F LEC0101 Calculus of Several Variables Course Outline - Fall 2019

Class Location & Time Mon, 03:00 PM - 05:00 PM DV 2080

Wed, 03:00 PM - 04:00 PM DV 2080

Instructor Parker Glynn-Adey

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Office Hours By appointment

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Course Web Site https://q.utoronto.ca

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Course Description

Differential and integral calculus of several variables: partial differentiation, chain rule, extremal problems, Lagrange multipliers, classification of critical points. Multiple integrals, Green's theorem and related topics. [36L,12T]

Prerequisite: MAT134H5/MAT136H5/MAT134Y5/MAT135Y5/MAT137Y5

Corequisite: MAT223H5/MAT240H5

Exclusion: MAT233H5, MAT235Y1, MAT237Y1, MAT257Y1, MAT257Y5, MATB41H3 (SCI)

Distribution Requirement: SCI

Students who lack a pre/co-requisite can be removed at any time unless they have received an explicit waiver from the department. The waiver form can be downloaded from here.

Textbooks and Other Materials

OpenStax. Calculus Volume 3: https://openstax.org/details/books/calculus-volume-3

Optional resource: Stewart. Multivariable Calculus. 8th Edition.

Assessment and Deadlines

Type	Description	Due Date	Weight
Term Test	Term Test 1	2019-10-25	25%
Term Test	Term Test 2	2019-11-29	25%
Quiz	Quiz 1	2019-09-20	2%
Quiz	Quiz 2	2019-10-04	2%
Quiz	Quiz 3	2019-11-08	2%
Quiz	Quiz 4	2019-11-22	2%
Class Participation	Reflection on Learning 1		1%
Class Participation	Reflection on Learning 2		1%
Final Exam	Final Exam	TBA	40%
		Tota	al 100%

More Details for Assessment and Deadlines

Quizzes will be written in in the last half hour of tutorial. They will contain questions similar to the suggested homework questions from OpenStax. There will be no opportunity to defer writing a quiz. If you are unable to write a quiz then you must contact Parker within 24 hours of the quiz, to transfer the weight of the quiz to the final.

Reflections on Learning are small writing assignments that will be made available through Quercus. You will be asked to describe what you have learned in the course, and how it will impact your future career. We will also ask you describe your study habits, and to estimate your final mark in the course. These are graded for participation only. If you submit a response, you will get full marks.

The Term Test will be written outside of regular lecture hours.

Term Test #1: Friday October 25th from 18-20:00 in IB 110/120. Term Test #2: Friday November 29th from 18-20:00 in IB 110/120.

If you cannot attend reasons of creed or religion, then you must contact Parker as early as possible to arrange for an alternative sitting. If you miss the midterm test for medical reasons, you must contact Parker within 24 hours of the test. You will need to send a UTM Verification of Student Illness or Injury form:

http://www.illnessverification.utoronto.ca/index.php

Students who miss the midterm test will be asked to provide the Verification Form and a timetable for the next five days. You will be given only one opportunity to write the make-up test.

The Exam will be written during the fall exam period: December 7-19th and will be conducted according to official UTM Exam Regulations.

Penalties for Lateness

Late work will have its weight transferred to the final exam.

Procedures and Rules

Missed Term Work

To request special consideration, bring supporting documentation to Parker Glynn-Adey in person during office hours at least one week in advance.

In case of illness, bring a U of T medical certificate to the instructor within one week of the missed work. The certificate must

specify the exact period during which you were unable to carry out your academic work.

Missed Final Exam

Students who cannot write a final examination due to illness or other serious causes must file an<u>online petition</u> within 72 hours of the missed examination. Original supporting documentation must also be submitted to the Office of the Registrar within 72 hours of the missed exam. Late petitions will NOT be considered. If illness is cited as the reason for a deferred exam request, a U of T Verification of Student Illness or Injury Form must show that you were examined and diagnosed at the time of illness and on the date of the exam, or by the day after at the latest. Students must also record their absence on ACORN on the day of the missed exam or by the day after at the latest. Upon approval of a deferred exam request, a non-refundable fee of \$70 is required for each examination approved.

Academic Integrity

Honesty and fairness are fundamental to the University of Toronto's mission. Plagiarism is a form of academic fraud and is treated very seriously. The work that you submit must be your own and cannot contain anyone elses work or ideas without proper attribution. You are expected to read the handout How not to plagiarize (http://www.writing.utoronto.ca/advice/using-sources/how-not-to-plagiarize) and to be familiar with the Code of behaviour on academic matters, which is linked from the UTM calendar under the link Codes and policies.

Final Exam Information

Duration: 3 hours Aids Permitted: None

Additional Information

E-Mail must be from an official University of Toronto account. You must include [MAT 232] in the subject line, or your e-mail might get lost. Please include your name and student number in every e-mail that you send. Be sure to include the precise question, and the problem or difficulty.

To: parker.glynn.adey@utoronto.ca

From: joe.schmoe@utoronto.ca Subject: [MAT 232] Help request!

Hi! I am Joe Schmoe (12932188) from MAT 232.

I need help with this question: Find the derivative of $f(x)=x^2$. My problem is this: I don't know what the word "derivative" means.

Thanks!

Anonymous Feedback is welcome in this course. You can submit anonymous feedback here: http://pgadey.ca/feedback.html

You may use the form to comment on lecture, ask questions about the course, or give me tips. You do not need to enter your name or email address unless you want a private response from Parker. Note that your anonymous feedback may be discussed (and answered) in lecture, or on Quercus.

Last Date to drop course from Academic Record and GPA is November 7, 2019.