DEPARTMENT OF MATHEMATICAL AND COMPUTATIONAL SCIENCES
UNIVERSITY OF TORONTO MISSISSAUGA

MAT233H5F LEC0101
Calculus of Several Variables
Course Outline - Fall 2019

Class Location & Time	Wed, 03:00 PM - 05:00 PM IB 140 Fri, 03:00 PM - 05:00 PM IB 140
Instructor	Timothy Yusun
Office Location	DH-3058
Office Hours	T 11-13, Th 12-14
E-mail Address	tj.yusun@utoronto.ca
Course Web Site	https://q.utoronto.ca
Teaching Assistant	Anastasia Loginova
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Course Description

"Bridging Course"; accepted as prerequisite for upper level courses in replacement of MAT232H5. Limited Enrolment. Sequences and series, power series, Taylor series, trigonometric and inverse trigonometric functions and their use in integrations. 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. [48L, 12T]

Prerequisite: MAT134H5/MAT136H5/MAT134Y5/MAT135Y5/MAT137Y5/MAT157Y5 or 75% in MAT133Y5
Corequisite: MAT223H5/MAT240H5
Exclusion: MAT232H5, 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

Required: Multivariable Calculus 8/E by Stewart

Assessment and Deadlines

Type	Description	Due Date	Weight
Final Exam		TBA	40%
Term Test	Term Test 1	2019-10-09	21%
Term Test	Term Test 2	2019-11-13	21%
Assignment	5 problem sets	On-going	12.5%
Quiz	3 tutorial quizzes	On-going	4.5%
Other	Student survey		1%
		Total	100%

More Details for Assessment and Deadlines

Problem Sets

There will be a total of five problem sets that are to be submitted by **11:59PM** on the following days: Sept. 20 (Fri), Oct. 3 (Wed), Oct. 25 (Fri), Nov. 7 (Wed), Nov. 29 (Fri). Problem sets are to be submitted online, on **Crowdmark**. More details can be found on Quercus.

You are encouraged to work with your fellow students while working on the problem sets. **However, the writing of your problem set must be done without any assistance whatsoever.**

Tutorial Quizzes

In Weeks 3, 7, and 10, there will be a graded 25-minute quiz in tutorials covering the material from that week or the previous week. Each quiz is an opportunity for you to check your understanding of the material in a low-stakes, test-like environment.

Student Intro Survey

At the beginning of the term you will be asked to answer a short survey about yourself so I can find out a bit more about you, your mathematics background, and what you hope to get out of this course. This is not an anonymous survey and will count for 1% of your grade.

Term Tests

We will have two term tests (during Weeks 5 and 9) to assess your understanding of the material during the term. Term tests will be 100 minutes each and will have some multiple-choice items & some long-answer problems. They will be held on **Oct 9 (Wed)** and **Nov 13 (Wed)** during the regular class time of 3-5pm.

Your higher term test score will count for 24% of your final mark, while the lower term test score will count for 18%.

Penalties for Lateness

Late problem sets will not be accepted.

Procedures and Rules

Missed Term Work

There will be no make-up term tests; a missed term test will be given a grade of zero (0).

If you miss a term test for a medical reason or an extenuating circumstance, you must alert your instructor via email **within 24 hours of the missed test**, and:

- If the term test was missed for **a medical reason**, please bring a completed **Verification of Student Illness or Injury form** to your instructor within one week of the missed term test.
- If the term test is missed for **another valid reason**, please bring a completed **Verification of Extenuating Circumstances** form to your instructor within one week of the missed term test.

In either case, if valid documentation is provided, the weight of the missed term test will be transferred to the final exam. These forms should specify the exact period during which you were unable to carry out your academic work, and must be dated within 1 day of the missed term test. Note that submission of these forms does not guarantee approval.

Missed Final Exam

Students who cannot write a final examination due to illness or other serious causes must file an online petition **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

Tutorials

Each student must be registered in one of the tutorials (on ACORN), and attend it regularly every week. In tutorials, you will have the opportunity to work on problems and get help and guidance from your TA. Occasionally, the TA will review some of the material discussed in the lectures, and will present solutions to homework problems.

Tutorials will begin on September 13, 2019. Tutorial quizzes are scheduled on Weeks 3, 7, and 10 (Sept. 27, Nov. 1, and Nov. 22.).

Email Policy

All emails to the instructor or TAs should contain [MAT233] in the subject line and must originate from a utoronto.ca email address.

Course Schedule and Topics

Please check the course page on Quercus for the most up-to-date course schedule.

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