DEPARTMENT OF MATHEMATICAL AND COMPUTATIONAL SCIENCES UNIVERSITY OF TORONTO MISSISSAUGA

MAT133Y5Y LEC0101 Calculus and Linear Algebra for Commerce Course Outline - Fall 2018

Class Location & Time

InstructorTyler HoldenOffice LocationDH 3031

Office Hours

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Co-Instructor Parker Glynn-Adey

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Co-Instructor TJ Yusun **Office Location** DH 3058

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Course Description

Mathematics of finance, matrices and linear equations. Review of differential calculus; applications. Integration and fundamental theorem; applications. Introduction to partial differentiation; applications. NOTE: This course cannot be used as the calculus prerequisite for any 200-level MAT or STA course, except in combination with MAT233H5. [72L, 24T]

Prerequisite: Minimum 70% in Grade 12 Advanced Functions (MHF4U). Highly Recommended: Minimum 70% in Grade 12 Calculus and Vectors (MCV4U).

Exclusion: MAT134Y5,MAT135Y5,MAT137Y5, MAT157Y5, MAT133Y1, MAT135Y1,MAT135H1,MAT136H1, MAT137Y1, MAY157Y1, MATA30H3, MATA31H3, MATA32H3, MATA33H3, MATA35H3, MATA36H3, MATA37H3 (SSc)

Distribution Requirement: SSc

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

Textbook:

- **Required:** *MAT133 Course Notes*, Available for free on the course website. These will be the primary resource for the course. All required information is included in these notes.
- Optional: Introductory Mathematical Analysis, 13th edition, by Haeussler, Paul, and Wood.

Assessment and Deadlines

Type	Description	Due Date	Weight
Other	Calculus Readiness Assessment	2018-09-21	6%
Assignment	Six (6) Assignments. Valued at 2% each.	On-going	12%
Term Test	Test #1	2018-10-19	12%
Term Test	Test #2	2018-11-23	12%
Term Test	Test #3	2019-02-01	12%

Term Test	Test #4	2019-03-15	6%
Final Exam	Final examination	TBA	40%
		Total	100%

More Details for Assessment and Deadlines

Evaluation Scheme:

(6% CRA) + (12% Assignments) + (42% Term Tests) + (40% Final Exam)

Term Tests:

There will be two (2) Term Tests in each academic term, for a total of (4) Term Tests. They will be held on Fridays, from 1500 - 1700, on the following days:

- Friday, October 19, 2018,
- Friday, November 23, 2018,
- Friday, February 1, 2019,
- Friday, March 15, 2019.

Your worst term test will be worth 6% of your final mark, while your other three term tests will be worth 12%.

Assignments:

There will be six (6) assignments posted regularly in each academic term. Students are divided into either Group A (even student numbers) or Group B (odd student numbers). Both groups will have access to the assignments and solutions when posted. Group A students will be required to submit their work for evaluation in the Fall term (Sept-Dec), while Group B will be required to submit their work for evaluation in the Winter term (Jan-Apr).

Each assignment will be worth 2% of the final mark. Assignments must be printed off from the website, and solutions supplied in the provided space. Assignment due dates will be posted on Quercus.

You are encouraged to work together on assignments, but are required to write and submit your work independently of other classmates.

Calculus Readiness Assessment:

The Calculus Readiness Assessment (CRA) is a written test of your pre-calculus knowledge. It will be held **Friday, September 21, 2018 from 1500 - 1700**. Rooms will be announced closer to the date of the test. The assessment is based on secondary school material (excluding calculus), and its purpose it to help you measure your readiness for university math courses. Your mark on the CRA will count as 6% of your course mark. More information regarding the CRA will be made available closer to the date of the test.

Help available:

A list of office hours for the instructors, the MathHelp hours (for TAs), and a schedule for Facilitated Study Group (FSG) sessions, will be posted on the course web site. It is up to you to make sure that you use these, in a timely manner.

Tutorials:

Tutorials will consist of problem solving sessions, and represent an opportunity for students to receive feedback and assistance on their work. As a general rule, students should feel free to attend any and as many tutorial sections as they choose, so long as this does not interfere with the attendance of officially registered students. Tutorial rooms often change before the beginning of term, both in September and January. Be sure to check the <u>official timetable</u> before your first tutorial to double check your rooms.

For this reason, all students are required to enrol in a tutorial. Note that you may change the tutorial in which you are officially enrolled in as often as you like before September 19, 2018. There will be no tutorials until the week of September 17, 2018.

E-mail Policy

E-mails must originate from a 'utoronto.ca' address and must contain the course code MAT133 in the subject line. Failure to do so may result in your email being mis-categorized, in which case you might not receive a reply. You must include your FULL NAME, STUDENT NUMBER, and LECTURE SECTION in your e-mail. You should address any administrative questions to the course coordinator (Tyler Holden).

Penalties for Lateness

Late assignments will NOT be accepted.

Procedures and Rules

Missed Term Work

If you are forced to miss a term test because of an illness or other extenuating circumstance, you **must alert the course coordinator Tyler Holden within 24 hours of the term test**, and provide supporting documentation no later than **one week after the term test**. In particular, the university has <u>very precise procedures regarding documentation of sick notes</u> and a <u>form for extenuating circumstances</u>.

Failure to adhere to any of these policies will result in your term test being assigned a grade of zero (0).

Students granted an exemption will have their marking scheme adjusted as follows:

- One Exempted Test: The other three term tests will be reweighted to 12% each, with a 46% final exam.
- Two or More Exempted Tests: Each written test will be worth 12%, with the weight from all missed tests reallocated to the final exam.

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

Course Contents

- Review of Precalculus,
- Financial Mathematics,
- Linear Algebra,
- Discrete Mathematics,
- Limits and Continuity,
- Derivatives,
- Applications of Derivatives,
- Integration,
- Applications of Integration
- Multivariate Differentiation and Integration.

A more detailed schedule will be posted on Quercus.

Last Date to drop course from Academic Record and GPA is February 18, 2019.