DEPARTMENT OF MATHEMATICAL AND COMPUTATIONAL SCIENCES UNIVERSITY OF TORONTO MISSISSAUGA

MAT157Y5Y LEC9101 Analysis I Course Outline - Fall 2020

Class Location & Time	Tue, 09:00 AM - 11:00 AM Thu, 09:00 AM - 10:00 AM
Instructor	Yael Karshon
Office Location	
Office Hours	
E-mail Address	yael.karshon@utoronto.ca
Course Web Site	http://www.math.toronto.edu/karshon/courses/mat157/
Teaching Assistant E-mail Address	David Miyamoto david.miyamoto@mail.utoronto.ca

Course Description

A theoretical course in calculus for students with a very serious interest in mathematics; emphasizing proofs and techniques, as well as geometric and physical understanding. Trigonometric identities. Limits and continuity; least upper bounds, intermediate and extreme value theorems. Derivatives, mean value and inverse function theorems. Integrals; fundamental theorem; elementary transcendental functions. Techniques of integration. Taylor's theorem; sequences and series; uniform convergence and power series. [72L, 48T] Note: MAT157Y5 will be accepted anywhere where MAT137Y5 is accepted.

Prerequisite: Minimum 70% in Grade 12 Advanced Functions (MHF4U), Minimum 70% in Grade 12 Calculus and Vectors (MCV4U) Corequisite: MAT102H5 Exclusion: MAT157Y1 or MATA37H3 (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 <u>here</u>.

Textbooks and Other Materials

Required: Michael Spivak, "Calculus", Publish or Perish.

(I recommend using the fourth edition.)

Assessment and Deadlines

Туре	Description	Due Date	Weight
Term Test	First term test	2020-10-29	12%
Term Test	Second term test	2020-12-03	12%
Term Test	Third term test	2021-02-11	12%
Term Test	Fourth term test	2021-04-01	12%
Assignment	Assignments	On-going	16%
Final Exam	Final exam	TBA	36%
		Total	100%

Penalties for Lateness

10% reduction late work on same day; 50% reduction for late work on following day; later work is not accepted

Procedures and Rules

Missed Term Work

To request special consideration, bring supporting documentation to the instructor 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 complete their final examination due to illness or other serious causes must file an <u>online petition</u> within 72 hours of the missed examination. Late petitions will **NOT** be considered. 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 (<u>http://www.writing.utoronto.ca/advice/using-sources/how-not-to-plagiarize</u>) 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

Emails: include an informative subject line including "MAT157".

Last Date to drop course from Academic Record and GPA is February 15, 2021.