DEPARTMENT OF MATHEMATICAL AND COMPUTATIONAL SCIENCES
UNIVERSITY OF TORONTO MISSISSAUGA

MAT337H5F LEC0101
Introduction to Real Analysis
Course Outline - Fall 2019

Class Location & Time	Tue, 02:00 PM - 03:00 PM MN 2190
	Thu, 01:00 PM - 03:00 PM MN 2190
Instructor	Yevgeny Liokumovich
Office Location	DH-3052
Office Hours	Tue, 3:00 PM – 4:00 PM; Thu, 3:00 PM – 4:00 PM
E-mail Address	ylio@math.toronto.edu
Course Web Site	https://q.utoronto.ca
Teaching Assistant	Belal Abuelnasr
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Course Description

(Formerly MAT378H5) The real numbers; Sequences and series; Functional limits; Topology in Rn; Differentiation and Integration; Power Series; Metric Spaces; Integrability and sets of measure zero. The course emphasizes rigour and theory. [36L, 24T]

Prerequisite: MAT102H5, MAT224H5/MAT240H5, MAT212H5/MAT244H5, MAT232H5/MAT233H5/MAT257Y5
Exclusion: MAT337H1, MAT357H1,MATB43H3, MATC37H3;MAT378H5 (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

Understanding Analysis, Second Edition, by Stephen Abbott.

This book is provided as a free electronic resource to all UofT students through the library website.

Click on the following link to access the textbook (you may be required to enter your UTORid and password):

http://myaccess.library.utoronto.ca/login?url=http://books.scholarsportal.info/viewdoc.html?id=/ebooks/ebooks3/springer/2015-0709/1/9781493927128

Assessment and Deadlines

Type	Description	Due Date	Weight
Presentations	Tutorial presentations	On-going	15%
Class Participation	Attendance of tutorials and active participation in discussions	On-going	5%
Assignment	Best 9 out of 10 Hand-in problem sets	On-going	15%
Term Test	(2 hours, in lecture)	2019-10-31	25%
Final Exam		TBA	40%
		Total	100%

More Details for Assessment and Deadlines

Homework. The homework assignments will be posted on the course website on Thursdays. The first assignment will be posted on September 5. The assignments will be due the following Thursdays, at **11:00AM**, seven days after they are posted. The assignments should be submitted through Quercus. To submit, you can scan or take a photo of your work (or write your work electronically). Please make sure that the images are clear and easy to read before you submit them.

Tutorials and presentations. Each student must be registered in one of the tutorials (on ACORN). The attendance of tutorials is mandatory. Based on the homework assignments, the students will be selected to present some of the homework problems at the tutorials. An unexcused absence at the tutorial on the day you are selected for the presentation will result in zero credit for the presentation. **Tutorials will begin on Friday of the first week of classes (i.e., on September 6).**

Midterm Test. There will be a two-hour in-class midterm test on Thursday, October 31. No aides are allowed for this test.

Penalties for Lateness

Late assignments will not be 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 **Verification of Student Illness or Injury Form** to the instructor within one week of the missed test. The form must specify the exact period during which you were unable to carry out your academic work, and stamped/signed by your doctor or clinic.

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

The course is the rigorous introduction to Real Analysis. We start with the careful discussion of The Axiom of Completeness and proceed to the study of the basic concepts of limits, continuity, Riemann integrability, and differentiability.

E-mail policy. E-mails must originate from a utoronto.ca address and contain the course code MAT337 in the subject line. Please include your **full name** and **student number** in your e-mail.

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