DEPARTMENT OF MATHEMATICAL AND COMPUTATIONAL SCIENCES
UNIVERSITY OF TORONTO MISSISSAUGA

MAT202H5S LEC0102
Introduction to Discrete Mathematics
Course Outline - Winter 2019

Class Location & Time	Tue, 03:00 PM - 05:00 PM KN L1220
	Thu, 03:00 PM - 04:00 PM IB 140
Instructor	Martin Leguil
Office Location	DH3019
Office Hours	Tuesday, 10am-12pm
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Course Web Site	https://q.utoronto.ca
Teaching Assistant	Muhammad Kamal
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Course Description

Mathematics derives its great power from its ability to formulate abstract concepts and techniques. In this course, students will be introduced to abstraction and its power through a study of topics from discrete mathematics. The topics covered will include: Sets, relations and functions; Basic counting techniques: subsets, permutations, finite sequences, inclusion-exclusion; Discrete probability: random variables paradoxes and surprises; Basic number theory: properties of the integers and the primes. The course will emphasize active participation of the students in discussion and written assignments. [36L, 12T]

Prerequisite: MAT102H5, MAT134Y5/MAT135Y5/MAT137Y5/MAT157Y5/MAT233H5 (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

Mathematical thinking: Problem-solving and proofs, 2nd Edition, by D'Angelo and West. (Required)

Assessment and Deadlines

Type	Description	Due Date	Weight
Assignment	7 assignments, only the best 6 count	On-going	20%
Term Test		2019-02-05	20%
Term Test		2019-03-07	20%
Final Exam	Date not set yet.	On-going	40%
		Total	100%

More Details for Assessment and Deadlines

Assignments are due at the beginning of tutorial in the 3rd, 4th, 6th, 7th, 9th, 10th and 11th weeks of the term (**Not counting reading week as a week of the term**).

Penalties for Lateness

No late assignments will be accepted. Lowest assignment mark will be dropped.

Procedures and Rules

Missed Term Work

Students can miss one assigment without consequences (only the best six out of seven count).

For missed term tests, students have to submit a U of T medical certificate to the instructor no later than one week after the test. **There will be no makeup tests**. The weight of one missed term test will be added to the weight of the final exam. If a student misses a large portion of term work due to serious illness or other extreme circumstances, accomodation will be arranged on an individual basis.

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: 2 hours
Aids Permitted: None

Additional Information

Emails must originate from a utoronto.ca email account and include "MAT202" in the subject line.

We will cover the following chapters of the textbook: **Chapter 5** (Combinatorial reasoning), **Chapter 10** (Two principles of counting), **Chapter 7** (Modular arithmetic), **Chapter 11** (Graph theory), and **Chapter 9** (Probability).

Last Date to drop course from Academic Record and GPA is March 17, 2019.