Simon Fraser University

School of Computing Science

MACM 101: Discrete Mathematics I

Spring 2026

Introduction & Course Topics

This course is an introduction to discrete mathematics, including:

- Counting (chapter 1, 2 weeks)
- Logic (chapter 2, 2 weeks)
- Set Theory (chapter 3 and 8, 2 weeks)
- Integers (chapter 4, 2 weeks)
- Relations and functions (chapter 5 and 7, 2-3 weeks)
- Introduction to Trees (chapter 12, 1 week)

The times for each topic are tentative, and may change slightly as the course progresses.

Note: at a minimum, you will need access to a computer with the ability to access the CourSys course management system to complete this course. In the event of a long stretch of online-only course delivery, you will need a stable internet connection and a digital camera (e.g. smartphone) for tests in the course.

Lectures, People and Office Hours

Lectures:

Section D300: 10:30 - 11:20am Mondays, Wednesdays & Fridays in room SRYC 2600

Attendance at certain lectures for tests is mandatory.

Instructor:

Harinder Singh Khangura (khangura@sfu.ca)

Office Hours:	Tuesdays	9:30 - 10:30am
	Wednesdays	4:00 - 5:00pm
	Fridays	4:00 - 5:00pm

Office hours will be conducted remotely via Zoom.

Please feel free to arrange appointments with me (e.g. via email), or to ask questions in email.

Teaching Assistants:

Shabnam Razmjooei (sra175@sfu.ca)

Textbook

Discrete and Combinatorial Mathematics (an Applied Introduction) 5th Edition, Ralph P. Grimaldi, Addison-Wesley, 2017.

Many exercises will be taken from this book, so it is essential that you have your own copy.

Marking Scheme

- **15% assignment quizzes** (approximately 5 online quizzes written during a 48-hour period, generally due on Saturdays)
- **35% midterms** (2 midterms worth ~17.5% each; midterms are during lecture time; no calculators, books, or aids are allowed during the exam except for a single 8.5-by-11in piece of paper with any notes you want on both sides)
- **50% final exam** (during the final exam schedule; time to be announced; no calculators, books, or aids are allowed during the exam except for a single 8.5-by-11in piece of paper with any notes you want on both sides)

All midterms will be in-person during lecture time. More details on the format and allowances will be given as the semester progresses.

The above marking scheme is *tentative* and may change.

Students may be expected to attend follow-up meetings with an instructor for verification of the work submitted for online assignments quizzes.

Students must attain an overall passing grade on the weighted average of tests in the course in order to obtain a clear pass (C- or better).

Students who do not obtain a passing grade in the final exam may not obtain a pass (D or better).

Labs

All labs are on Fridays at the following times:

- D301: 3:30 - 4:20pm in room SRYC 2990
- D302: 3:30 - 4:20pm in room SRYC 2995
- D303: 11:30am - 12:20pm in room SRYC 2710
- D304: 11:30am - 12:20pm in room SRYC 2995
- D305: 1:30 - 2:20pm in room SRYC 2990
- D306: 1:30 - 2:20pm in room SRYC 2995
- D307: 2:30 - 3:20pm in room SRYC 2990
- D308: 2:30 - 3:20pm in room SRYC 2995

You should each have registered for the lab section. You will receive help on the assignment quizzes from the TA during the lab times. You are encouraged to attend the lab every week! *There are no labs during the first week of classes*.

On-Line Services

You will have available to you a reasonably complete set of services through the WWW. These services can be accessed from the following URL:

https://coursys.sfu.ca/2026sp-macm-101-d3/pages/

At the website you will find lecture notes, sample exams, and other material relevant to the course. Make sure to check the website regularly!

Academic Conduct

As a member of the SFU community, you are expected to abide by the rules of academic honesty and student conduct as detailed in the calendar. Ignorance of these policies is no excuse if you run afoul of them!

Submitting the work of another person as your own (i.e. plagiarism) constitutes academic misconduct, as does communication with others (either as a donor or recipient) in ways other than those permitted for assignments and tests. Specifically, for this course, the rules are as follows:

- Assignment quizzes and all tests are to be done alone. You may not, under any circumstances, submit any work not written by you or look at another student's work. You may not share your work with others.
- You are, however, encouraged to discuss the approach you used to solve a problem with your fellow students. This discussion must not involve any specific details, only the approach used. You are not permitted to take any written/recorded notes away from your discussion.

Violations of these rules constitute serious academic misconduct, and they are subject to penalties ranging from a grade of zero on a particular assignment to indefinite suspension from the University. If you are in any doubt about the interpretation of these rules, consult the instructor or a TA!