

Simon Fraser University
School of Computing Science
MACM 101: Discrete Mathematics I
Fall 2021

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.

Lectures, People and Office Hours

Lectures:

Section D200: 1:30 – 2:20pm Mondays, Wednesdays, and Fridays in room SRYE 1002

Note: Lectures will be delivered in person, unless the University determines it is not safe to do so. Every effort will be made to record live lectures and make them available for review on the course website, but there is no guarantee all lectures will be successfully recorded. Simon Fraser University may collect your image, voice, name, personal views and opinions, and course work under the legal authority of the University Act and the Freedom of Information and Protection of Privacy. This information is related directly to and needed by the University to support student learning only (i.e., posting in the Learning Management System for students to review). If you have any questions about the collection and use of this information please contact your instructor.

Attendance at certain lectures for tests is mandatory.

Instructor:

Harinder Singh Khangura (khangura@sfu.ca)

Office Hours: Mondays, Wednesdays, and Fridays 10:30 – 11:20am

For the safety of all, 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:

Shubham Malik (shubhamm@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's 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 Fridays)
- **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-11 in 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-11 in 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.

In the event that the University moves to online-only teaching for safety reasons, tests will be conducted online during lecture times. In this case, photograph/video may be used for proctoring and/or verifying student identity during tests.

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 Thursdays at the following times:

- D201: 12:30 - 1:20pm in room SRYE 4013
- D202: 12:30 - 1:20pm in room SRYE 4024
- D203: 1:30 - 2:20pm in room SRYE 4013
- D204: 1:30 - 2:20pm in room SRYE 4024
- D205: 2:30 - 3:20pm in room SRYE 4013
- D206: 2:30 - 3:20pm in room SRYE 4024
- D207: 1:30 - 2:20pm in room SRYE 3024
- D208: 2:30 - 3:20pm in room SRYE 3024

You should each have registered for the lab section. You will receive help on the weekly assignments 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/2021fa-macm-101-d2/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:

- Assignments 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!