### MACM 101 - D200 Discrete Math I

**Instructor(s):** Harinder Khangura  
**SFU Surrey**

#### Calendar Objective/Description:
Discrete Math I

#### Instructor's Objectives:
This course is an introduction to discrete mathematics. The course will focus on establishing basic principles and motivate the relevance of those principles by providing examples of applications in Computing Science and other related areas.

*As of May 26, 2021, the university has announced its plan for approximately 70-80% of teaching in person in Fall 2021. It has also stated that: “not all courses will be delivered in person. The fall will be a transitional term. Deans, supported by the work of chairs and directors, will make final decisions about whether courses will be taught remotely or in person.” Please continue to check our course outline for further information.*

Should this course be taught remotely, students must have access to a computer with internet access, allowing the use of a conferencing system such as Zoom or BB Collaborate Ultra. Some components of the course will require synchronous (real-time) participation during the scheduled lecture and/or exam times. Visual proctoring may be required, subject to university approval.

#### Prerequisites:
see go.sfu.ca

#### Topics:
- Counting
- Logic and Quantifiers
- Set Theory
- Formal Reasoning and Induction
- Functions and Relations
- Number Theory
- Graphs and Trees (if time permits)

#### Grading:
There will be several assignments, multiple midterms, and a final exam. The details will be discussed in the first week of classes.

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

#### Required Books:

#### Recommended Books:


Academic Honesty Statement:

Academic honesty plays a key role in our efforts to maintain a high standard of academic excellence and integrity. Students are advised that ALL acts of intellectual dishonesty will be handled in accordance with the SFU Academic Honesty and Student Conduct Policies (http://www.sfu.ca/policies/gazette/student.html).