MACM 101 - D300 Discrete Math I

Instructor(s): Steve Pearce

SFU Burnaby

Calendar Objective/Description:
Discrete Math I

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

Prerequisites:
see go.sfu.ca

Topics:
- Logic, Quantifiers, Formal Reasoning, Proofs, CNF and DNF.
- Set Theory, Functions
- Growth of Functions and Asymptotic Analysis of Algorithms
- Number Theory, Modular Arithmetic
- Induction and Recursion
- Combinatorics, Inclusion/Exclusion Principle, Pigeonhole Principle
- Discrete Probability
- Functions and Relations

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

Required 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).