

Math 22-23

Discrete Mathematics

Winter 2018

CRN 01279, TTh 1:30 – 3:40, L76

e-mail: sadeghibijan@fhda.edu

Office hours: TTh 12:15 – 1:30, E37

Instructor: Bijan Sadeghi

Textbook: Discrete Mathematics: An introduction to Mathematical Reasoning
Brief Edition, by Susanna S. Epp, Brooks/Cole

Prerequisite: Math 43 or equivalent or placement in this class via test.

Course Objective:

To introduce the students to mathematical proof and logical thinking. It also important to introduce students to the standard mathematical terminology in the area of foundations, Counting, Relations, Graphs, and Trees.

Support Services:

Students with disabilities needing reasonable accommodations should inform me in the beginning of the Quarter. To begin the reasonable accommodations process, I will need to fill out a request form from the Disabilities Support Services (DSS). For more information, please visit the DSS office at SCSB 141, call (408)864-8753/ (408)864-8748, or go to www.deanza.edu/dss.

Academic Misconduct:

Academic dishonesty will not be tolerated. If a student is found cheating on an exam, plagiarizing on writing assignments, or violating other codes of academic integrity, he or she will receive a failing grade for the course and may be reported to the college for an appropriate action. See section on Academic Integrity in your current schedule of classes catalog.

Important dates:

- Jan. 20 Last day to add quarter-length classes.
- Jan. 21 Last day to drop for a full refund or credit.
- Jan. 21 Last day to drop a class with no refund or grade
- Feb. 2 Last day to request pass/no pass grade
- March 2 Last day to drop with a “W”.

Evaluation of Students:

You will be evaluated according to a percent system, with an additional guarantee as stated.

90 -100%	A- - A+	70 – 79%	C- - C+
80 – 89%	B- - B+	60 – 69%	D- - D+
Below 60%	F		

Approximate point total for class:

3 midterm tests	300 points (100 each)
short tests (4 highest scores)	100 points
Final examination (comprehensive)	200 points
	600 points

Approximate Time Schedule:

I. Foundations

Logic, Sets, Functions, Growth of Functions, Algorithms, Integers, Methods of Proofs, Inductions.

II. Counting

Multiplication Principle, Addition Principle, Combinations, Permutations, Probability, Recurrences.

III. Relations, Graphs and Trees

Matrices, Relations, properties of Relations, Equivalence Relations, Graphs, Representation of Graphs, Connectivity, Trees.

IV. Boolean Algebras (if time permits)

Jan.	9	11	16	18
Jan.	23	25	30	Feb.1 Exam 1
Feb.	6	8	13	15
Feb.	20	22 Exam 2	27	March 1
March	6	8	13	15 Exam 3
March	20	22	27 Final Exam 1:45 – 3:45	29

Student Learning Outcome(s):

*Critique a mathematical statement for its truth value, defend choice by formulating a mathematical proof or constructing a counterexample.

*Analyze and apply patterns of discrete mathematical structures to demonstrate mathematical thinking.