

Math 22: Discrete Mathematics Fall 2019

Instructor: Fatemeh Yarahmadi

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Class Location and Time: TR 4 — 6:15/ G5

Office Hours: TR 3- 3:50 or by appointment/ E37

Text: Epp, Susanna. Discrete Mathematics: **An Introduction to Mathematical Reasoning**, Brief Edition. Cengage Learning, 2011.

Prerequisite: Mathematics 41 (with a grade of C or better); or a satisfactory score on the College Level Math Placement Test within the last calendar year.

Course Description: Elements of discrete mathematics with applications to computer science. Topics include methods of proof, mathematical induction, logic, sets, relations, graphs, combinatorics, and Boolean algebra.

Attendance: You are expected to attend all class meetings and complete all assignments. Come to class *on time* ready to learn and work for the entire class period. **Turn off cell phones and keep them out of sight.**

“Students missing one more class hour than the unit value for a particular course, without making prior arrangements may, at the instructor’s option, be dropped without possibility of credit.

”It is the responsibility of the student to drop the course.

Sources of Help:

The De Anza campus has a tutorial center for math students where students can get "drop in" help. The tutorial center is located in room S-43.

Homework:

Written sets for submission: During our course, I will send out a homework set to be written up and submitted in the class. These sets will include problem solving, critical thinking and applications exercises. Write your homework out in full detail, as modeled in the textbook and in class. There will be a strong emphasis on how the solutions are written up in this class. A subset of these exercises will be graded for correctness and all of it will be graded for completeness.

HW Guidelines:

- Write your full name in the top right hand corner of the first page.
- STAPLE your homework. No paperclips!
- Label each problem clearly – use highlighter to mark the number.
- Do the problems in order, showing all work neatly, clearly and completely.

Exams: There will be four exams to test your understanding of the concepts from lecture and the homework. They should be straightforward for those who complete and understand the homework. Each exam will be worth 100 points. A total of 400 points will be counted toward your final grade

No make-up exams will be given. If you are forced to miss an exam, you need to contact me **before** the exam with a valid reason.

Final Exam: A comprehensive final exam worth 200 points will be given on the last day of the class.

Grading Policy:

Homework		100 points
Exam Reviews	4 @ 10 pts	40 points
Exams	4 @ 100 pts	400 points
Participation		60 points
Final	1 @ 200 pts	200 points
Total		800 points

Your grade will be computed as a straight average: the total number of points earned divided by the total points possible. Please keep all of your graded papers.

Student Honesty Policy: “Students are expected to exercise academic honesty and integrity. Violations such as cheating and plagiarism will result in disciplinary action which may include recommendation for dismissal.”

Special Needs: “Students requiring special services or arrangements because of hearing, visual, or other disability should contact their instructor, counselor, or the Disabled Student Services office.”

Recipe for Success:

- If you ever have any questions, COME TALK TO ME! You are welcome to send email to me whenever you need help!
- Visit the Tutoring Center.
- Form a study group.
- Attend all lectures and complete every homework assignment.
- For each hour of class time, expect to spend **two hours** outside of class reading the text, studying your notes, and working problems.
- Read the sections to be discussed in class prior to the lecture.

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.