Math 22- 35 – CRN (48258)- De Anza College- Spring 2025- Syllabus

Instructor: Reza Shariatmadari
Course Name: Math 22- Discrete Mathematics
Class dates: This class runs from April 07, 2025, to June 27, 2025.
CRN/Section: 48258 / 35
Location: MLC 103
Time: Tue Thu from 1:30 PM to 3:45 PM.
Office Hours: Location: zoom, Thursday 8:00 AM to 9:00 AM
Email: shariatmadarireza@fhda.edu
Textbook: Discrete Mathematics, Brief Edition, Susanna S. Epp, with WebAssign.

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.

Course Pre-requisite: MATH 43 with a grade of C or better, or equivalent and CIS 22A or CIS 35A with a grade of C or better, or equivalent. Advisory: EWRT 211 and READ 211 (or LART 211), or ESL 272 and 273.

Important Footnote information: Discrete Mathematics is an upper division undergraduate math course in most universities and you should expect the same quality and rigor in my class. Examples and problems in this class will cover a wide range of topics such as Number Theory, Abstract Algebra, Real Analysis, Graph Theory, Topology, Probability and Machine Learning. This is an online class with some scheduled meetings as noted in the class listing. Portion of this class must be completed independently on the student's own time. Students must have access to a computer (with camera), the internet, an individual email address, and access to De Anza's Canvas site.

Homework Assignments: Homework is an integral part of the course. I suggest that you work together and solve these assignments.

Midterms, Exams and Quiz: There will be 3 quizzes this quarter. These quizzes will be given either during regularly scheduled class meetings, as a take home exam, group exam, or any combination of the three. You will be notified in advance about the format of these exams. Quizzes and exams are cumulative. Any change in quiz dates and/or location will be announced in advance.

Tentative Exam Schedule:

Quiz 1: Tuesday 04/29/2025

Quiz 2: Thursday 05/22/2025

Quiz 3: Tuesday 06/17/2025

Final Exam: Tuesday 06/24/2025, from 1:45 PM to 3:45 PM.

Attendance and class participation: I expect that you attend all my lectures. You are expected to come to class prepared for the day's discussion. Should you miss a lecture for any reason, you are responsible for all the materials covered and assignments given. I suggest that you contact your group members to find out about the material that you have missed. I will not repeat any lectures under any circumstance, neither in class nor during my office hours.

My Expectations:
By the end of this quarter, I would like you to be able:

1- To match key terms to the appropriate concepts and definitions.

2- To define key terms in your own words.

3- To recognize and use concepts and procedures correctly in new situations appropriate to your discipline.

4- To break larger issues and problems into their component parts to facilitate problem solving and deeper understanding.

5- To combine concepts and procedures from this class in new ways so you can solve problems and create new ways of seeing the course content.

6- To compare and contrast information in such a way that allows you to solve problems and accomplish your goals.

7- Finally, one of my objectives is for you to develop self confidence in your abilities to learn mathematics mainly by reading, thinking, and asking questions, rather than memorizing bunch of formulas.

Course Policy:

1- No late work will be accepted under any circumstances nor credit given for late homework and assignments.
2- No make-up quiz or exam will be given under any circumstances.
3- To submit any document to Canvas, make sure your document is saved as a pdf. Any other types of file format will not be accepted by Canvas.
4- You are responsible for keeping up with course materials, catching up with subjects and ideas that you have missed. You should practice as much as possible.
5- I reserve the right to make changes to the syllabus at any time. You will be notified via Canvas announcement about any changes on the syllabus.
6- I will not discuss your grades via email for security and privacy reasons so you must consult with me (on zoom) about your standing in class and your grade throughout the quarter. I strongly suggest that you do not leave anything for the last minute.
7- This class is a face-to-face, in-person class, and your participation is essential and expected.
8- Class sessions and lectures are not recorded.
9- If you miss any class, you are responsible for catching up and finding what you have missed. You should start by getting the class notes from one of your classmates. Read those notes and write any questions you have so you can ask them during the office hours.
10- Office hours are on zoom. Come to office hours as much as you can and as often as you can and ask question. I strongly believe that there is no right or wrong question and there is no smart or stupid question. All questions are welcomed in this class, and I will do my best to answer any question that you have no matter how elementary it may sound.
11- You are responsible for keeping up with important dates on academic calendar.

Few tips on how to succeed in this class:
Your success in my class is extremely important to me and I will do everything in my power to help you achieve your goals. Here are few tips on how to succeed in this course:

1- Be an active learner, don't memorize, learn the concepts.

2- When you try to solve a problem, make sure you understand what the problem is asking for. Read the question multiple times if needed. Think about how you are going to solve the problem, and what is your strategy for solving the problem.

3- Don't be afraid of making mistakes. You may not be able to solve a problem on the first try and that's okay. Try again. No matter what, never, ever give up.

4- Your participation is essential. Your progress depends entirely on your commitment both inside and outside the classroom. I expect you to spend at least 2 hours outside of class, studying for every lecture.

Academic Integrity: Students are reminded that their behavior always reflects upon the college community. The minimum penalty for cheating, plagiarism, etc. is a grade of zero on the assignment. For additional information on the college's policies, read the Ethics and the Academic Integrity Policy at http://www.deanza.edu/studenthandbook/academic-integrity.html.

Grades: Course grades will be determined by homework, quiz, and final exams. Your grade is always available to you on Canvas. General guidelines are as follows:

Homework Assignments: 10%

Quiz 1: 15%

Quiz 2: 20%

Quiz 3: 25%

Final Exam: 30%

Your Course letter grade will be determined based on the following percentiles:

(A) 94% to 100%

(A-) 90% to < 94%

(B+) 87% to < 90%

(B) 84%to<87%

(B-) 80% to < 84%

(C+) 77% to < 80%

(C) 74%to<77%

(C-) 70% to < 74%

(D+) 67% to < 70%

(D) 64%to<67%

(D-) 60% to < 64%

(F) 00%to<60%

IMPORTANT:

All Quiz and Exams are for your exclusive use only. Meaning you are not allowed to share them with anyone, post them online, or share it using any other means without my written and verbal permission. You can keep quiz and exams only for your own personal use.

To receive full credit or partial credits, you must show your work step-by-step and in detail. Write Clearly and neatly. If you just write a final answer without showing detailed work, you will not receive any credits.

If I can't read your work or if your work is not clear, I will not grade it and you will receive a score of zero.

When applicable, box your final answer.

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.

Office Hours:

TH	8:00 AM - 9:00 AM	Zoom
T	8:00 AM - 9:00 AM	Zoom
T	9:00 AM - 10:00 AM	Zoom