Syllabus – Math 22: discrete Math and applications

Instructor: Dr. Yashar Zaheriani
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Office Hours: Thursdays, 8:00 – 9:00 AM (via Zoom) – or by appointment
Class Schedule: Monday/Wednesday , 18:30 – 20:45 pm
Textbook: *Discrete Mathematics*, Brief Edition, by Susanna S. Epp

Pre-requisites

MATH 32 or MATH 32H (with a grade of C or better) or equivalent, and CIS 22A or CIS 35A (with a grade of C or better) or equivalent.

Attendance and participation

Attendance is expected at all sessions. Students are responsible for catching up on missed material. Participation is essential, both in class and through group collaboration.

Course Policies

1. No late work accepted under any circumstances
2. No make-up quizzes or exams
3. All submissions must be in PDF format via Canvas
4. Students are responsible for keeping up with class progress and practice
5. Instructor reserves the right to update the syllabus (announcements via Canvas)
6. Grades are not discussed via email (schedule Zoom meetings instead). Class is synchronous; lectures are not recorded
8. Students must arrange study groups and review missed materials themselves
9. All questions are welcome – office hours are for your success
10. Students must keep track of academic calendar dates

Tips for Success

- Learn concepts, don't just memorize formulas
- Read problems carefully, strategize before solving
- Don't fear mistakes persistence is key
- Spend at least 2 hours of study per lecture hour outside of class

Academic Integrity

Cheating or plagiarism results in a failing grade and will be reported. Minimum penalty: zero on assignment/exam.
Refer to: http://www.deanza.edu/studenthandbook/academic-integrity.html

Grading

Homework: 20%

Attendance: 5%
Quiz 1: 5%
Quiz 2: 5%
Quiz 3: 5%
Mid.:30%
Final Exam: 30%

Disability Support Services (DSS)

De Anza College supports students with disabilities and provides reasonable accommodations. Contact DSS (RSS Building, Suite 141 | 408-864-8753 | DSS@deanza.edu). Website: https://www.deanza.edu/dsps/

Additional Student Support

- Student Success Programs: http://deanza.edu/studentsuccess/
- Financial Aid Info: http://www.deanza.edu/<inancialaid/
- Installment Payment Plans: http://deanza.edu/cashier/installment_plan.html
- Scholarships: http://deanza.edu/<inancialaid/types/scholarships.html

Scale

Grade	Points	Percentage
A+	529-560	95%-100%
A	501-528	90%-94%
A-	490-500	88%-89%
B+	473-489	85%-87%
B	445-472	80%-84%
B-	434-444	78%-79%
C+	417-433	75%-77%
C	361-416	65%-74%
D+	333-360	60%-64%
D	322-332	58%-59%
D-	305-321	55%-57%
F	0-304	0%-54%

Homework Problems:

Sections	Problems (Epp, Brief Ed.)
1.1	1, 2, 3, …, 13.
1.2	1, 2, 3, …, 12.
1.3	2, 4, 6, …, 20.
2.1	2 - 5, 8, 9, 13 - 17, 22, 26, 28, 31, 33, 35, 42 - 44, 46.
2.2	2, 4, 8, 10, 13, 14b, 17, 18, 20, 22, 25, 27, 33, 35, 38, 41, 43, 44, 46.
2.3	2, 4, 11, 12b, 20, 21, 23, 28, 29, 31, 32, 36, 38, 40, 42.
3.1	4, 6, 7, 9, 10, 15, 16, 18, 23, 24, 28, 32.
3.2	3, 5, 8, 10, 12, 19, 21, 23, 29, 31, 33, 38, 40, 44, 47.
3.3	11, 14, 16, 17, 19, 23, 30, 35, 36, 41, 43, 44.
3.4	4, 6, 11, 12, 14, 15, 17, 19, 22, 24, 26.
4.1	5, 12, 30, 32, 36, 41, 42, 46, 52, 53, 57, 58.
4.2	5, 14, 19, 23, 26, 28, 30.
4.3	3, 5, 13, 18, 23, 24, 26, 28, 36, 37, 41, 46, 49.
4.4	2, 4, 8, 9, 15, 19, 22, 25,30, 37, 38, 43.
4.5	7, 10, 15, 17, 20, 24, 29, 33, 34c.
4.6	2, 4, 8, 10 11, 15,23, 28, 33.
5.1	2, 4, 9, 11, 17, 29, 31, 43, 47, 49, 52, 53, 55, 59, 61, 63, 65, 68, 72.
5.2	4, 7, 9, 12, 16, 17, 18, 23, 27, 32.
5.3	2, 3, 7, 9, 15, 17, 20, 25, 29.
5.4	1, 3, 5, 7, 9, 15, 17, 18.
5.5	2, 4, 8, 12, 14, 16, 19, 22, 26, 32.
5.6	4, 7, 8, 13, 20, 23, 25, 33, 38, 52.
6.1	3, 6, 8, 9, 12, 14, 17, 18, 20,23, 27, 30, 33.
6.2	2, 7, 9, 14, 19, 21, 23b, 26, 31, 35, 39.
6.3	2, 8, 13, 16, 19, 20, 32, 35, 43.
6.4	2, 3, 5, 9, 11aii, 11aiii, 11av, 11b.
7.1	2, 4, 10, 12, 22, 23, 27, 35, 37, 39, 42.
7.2	2, 5, 7, 9, 11, 16, 17, 20, 23, 30, 33, 37.
7.3	2, 4, 7, 10, 11, 17, 19, 22, 24, 25.
7.4	3, 4, 8, 9, 11, 15, 17, 18, 22, 27, 34.
8.1	3, 5, 7, 8, 17, 18, 20 21.
8.2	2, 10, 13, 17, 19, 21, 21, 26, 30, 38, 42.
8.3	2, 4, 6, 9, 10,13, 14, 17, 19, 24, 40.
8.5	2, 4, 6, 8, 10, 12, 14.
9.1	4, 6, 8, 10, 13, 14, 16, 19, 21, 22, 24, 26.
9.2	5, 11, 14, 15, 18, 21, 22, 24, 26, 27, 30, 33, 36.
9.3	6, 11, 20, 23, 25, 29, 32, 35.
9.4	2, 4, 8, 13, 16, 19, 23, 25, 28, 30, 31, 36.
9.5	4, 5, 7, 10, 12, 14, 17, 20, 22, 24, 25, 26a-d, 28, 30.
9.6	5, 9, 11, 14, 16, 17, 30, 34, 37, 44, 49, 54.
10.1	4, 6, 9, 16, 19, 22, 26c, 27, 33, 37, 39, 40, 44.
10.2	2, 5, 6, 8, 13, 15, 20, 22, 29, 30, 32, 33, 47.
10.3	3, 7, 15, 17, 19, 23, 26, 29.
10.4	2, 3, 5, 7, 11, 14, 17, 19, 20.

Homework problems:

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:

Zoom   TH   8:30 AM - 9:20 AM