

SYLLABUS

Instructor: Dr. Kejian Shi
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Office Hour: Wednesday, 10:00am-11:00am virtual office hour via zoom on canvas

Prerequisites: Math 43 (with a grade of C or better), or equivalent
Textbook: *Discrete Mathematics*, Brief Edition, by Susanna S. Epp
Materials: A scientific calculator recommended

Attendance: This class is an **online class**. My daily lecture videos will be posted on the Canvas. Students are expected to watch and study the videos before each class. The videos can be watched multiple times. Questions will be answered during the office hours or through emails. **(It is the students' responsibility to drop by the appropriate deadline. Petitions to drop after the deadline will not be considered by the instructor.)**

Homework: Homework is the key to success in this class. Plan to devote a minimum of **TWO hours** to homework for each class lesson.

Quizzes: **Three Quizzes** (33, 33, and 34 points) will be given from 8:00pm-9:00pm on quiz days. Quiz problems are like homework problems and lecture examples. No makeup quizzes. The lowest quiz score will be replaced by the average of the two highest quiz scores.

Midterms: **Two midterm examinations** (100 points each) will be given from 8:00pm-10:00pm on the midterm exam days. No makeup exams. The lowest midterm score will be replaced by the percentage of the final exam if the final percentage is higher.

Final Exam: **One comprehensive examination** will be given from **8:00pm-11:00pm** on **Tuesday, Dec. 13, 2022**. Any student missing the final will receive an F grade for the course.

Integrity: Any types of cheating are not tolerated. Corresponding school rules will be followed.

Grading:	<u>Distribution</u>		<u>Scale</u>		
			Grade	Points	Percentage
Quizzes	100		A+	473-500	95%-100%
			A	448-472	90%-94%
			A-	438-447	88%-89%
			B+	423-437	85%-87%
Midterms	200		B	398-422	80%-84%
			B-	388-397	78%-79%
			C+	373-387	75%-77%
			C	323-372	65%-74%
Final Exam	200		D+	298-322	60%-64%
			D	288-297	58%-59%
			D-	273-287	55%-57%
			F	0-272	0%-54%
	Total	500			

Math 22-50Z Tentative Schedule (Fall 2022)

	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY	SUNDAY	Wk
SEP / OCT	26 INSTRUCTION BEGINS 1.1, 1.2, 1.3	27	28	29	30	1	2	1
OCT	3	4	5	6	7	8 Last Day to Add	9 Last Day to Drop with no Record	2
	3.2	3.3	3.4	4.1	Quiz #1 8:00pm-9:00pm			
OCT	10 Census Day	11	12	13	14	15	16	3
	4.2	4.3	4.4	4.5	4.6			
OCT	17	18	19	20	21	22	23	4
	5.1	5.2	5.3	Review	Exam #1 8:00pm-10:00pm			
OCT	24	25	26	27	28	29	30	5
	Solution	5.4	5.5	5.6	6.1			
OCT / NOV	31	1	2	3	4	5	6	6
	6.2	6.3	6.4	7.1	Quiz #2 8:00pm-9:00pm			
NOV	7	8	9	10	11	12	13	7
	7.2	7.3	7.4	8.1	VETERAN'S DAY NO CLASSES			
NOV	14	15	16	17	18	19	20	8
	8.2	8.3	Review 8.5	Review	Last Day to Drop a W Exam #2 8:00pm-10:00pm			
NOV	21	22	23	24	25	26	27	9
	Solution	9.1	9.2	THANKSGIVING NO CLASSES	THANKSGIVING NO CLASSES			
NOV / DEC	28	29	30	1	2	3	4	10
	9.3	9.4	9.5	9.6	Quiz #3 8:00pm-9:00pm			
DEC	5	6	7	8	9	10	11	11
	10.1	10.2	10.3	10.4	Review			
DEC	12	13	14	15	16	17	18	12
		Final Exam 8:00pm-11:00pm						
12 weeks, 53 days of instruction								

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, 11a _{ii} , 11a _{iii} , 11a _v , 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.

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	M	10:00 AM	11:00 AM
Zoom	T	10:00 AM	11:00 AM
Zoom	TH	10:00 AM	11:00 AM
Zoom	W	10:00 AM	11:00 AM