

SYLLABUS

Instructor: Dr. Kejian Shi
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Office Hour: Thursdays: 12:00noon-1:00pm (Canvas zoom) or by appointment

Prerequisites: 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.

Textbook: *Discrete Mathematics*, Brief Edition, by Susanna S. Epp

Materials: A scientific calculator recommended

Attendance: This class is an **online asynchronous class**. My daily lecture videos will be posted on the Canvas. Students are expected to follow the schedule to watch and study the videos. The videos can be watched multiple times. Questions will be answered during office hours or through email. **(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. Please plan to devote a minimum of **TWO hours** to homework for each class lesson. Homework assignments are due on the test (quiz and exam) days. Each collection counts 10 points, the total is 60 points. The lowest score will be replaced by 10.

Quizzes: **Three Quizzes** (33, 33, and 34 points) will be given on canvas the quiz days. 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 on canvas the midterm exam day. No makeup tests. 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 on canvas on **Monday, 6/22/2026**. Any students missing the final will receive an F grade for the course.

Test time limits: Each test (Quiz, Midterm and Final) will be available in a 24-hour time window from 12:00am to 11:59pm on the test day. But once you open the test, you must successfully submit your solutions within the given time limits (40 minutes for a quiz, 60 minutes for a midterm, and 120 minutes for the final exam). No late submissions will be accepted.

Integrity: Every student should do all the tests independently. Any type of cheating is not tolerated. Corresponding school rules will be followed.

Grading:	Distribution		Scale		
			Grade	Points	Percentage
Homework	60		A+	529-560	95%-100%
			A	501-528	90%-94%
Quizzes	100		A-	490-500	88%-89%
			B+	473-489	85%-87%
			B	445-472	80%-84%
Midterms	200		B-	434-444	78%-79%
			C+	417-433	75%-77%
			C	361-416	65%-74%
Final Exam	200		D+	333-360	60%-64%
			D	322-332	58%-59%
			D-	305-321	55%-57%
			F	0-304	0%-54%
	Total	560			

Tentative Schedule:

	MON	TUE	WED	THUR	FRI	SAT	SUN	Wk
APL	6 1.1, 1.2, 1.3	7 2.1	8 2.2	9 2.3	10 3.1	11	12	1
APL	13 3.2	14 3.3	15 3.4	16 4.1	17 Quiz #1 (on canvas)	18	19 Last day to drop without a W	2
APL	20 Census Day 4.2	21 4.3	22 4.4	23 4.5	24 4.6	25	26	3
APL / MAY	27 5.1	28 5.2	29 5.3	30 Review	1 Exam #1 (on canvas)	2	3	4
MAY	4 Solutions	5 5.4	6 5.5	7 5.6	8 6.1	9	10	5
MAY	11 6.2	12 6.3	13 6.4	14 7.1	15 Quiz #2 (on canvas)	16	17	6
MAY	18 Solutions 7.2	19 7.3	20 7.4	21 8.1	22 8.2	23	24	7
MAY	25 Memorial Day Holiday	26 8.3	27 8.5	28 Review	29 (Drop with "W") Exam #2 (on canvas)	30	31	8
JUN	1 Solutions	2 9.1	3 9.2	4 9.3	5 9.4	6	7	9
JUN	8 9.5	9 9.6	10 10.1	11 10.2	12 Quiz #3 (on canvas)	13	14	10
JUN	15 10.3	16 10.4	17 Review	18 Review	18 Juneteenth Day Holiday	20	21	11
JUN	22 Final Exam (on canvas)	23	24	25	26	27	28	12
JUN / JUL	29 Summer classes start	30	1	2	3	4	5	1

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:

M 11:30 AM - 12:30 PM

S-16A

T,W,TH 12:00 PM - 1:00 PM

Zoom,Canvas