

SYLLABUS

Instructor: Dr. Kejian Shi
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Office Hour: Thursdays: 12:30pm-1:30pm (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 a combination of **online synchronous (MTWTh) and asynchronous (F) class**. Students are expected to attend all classes on time Monday through Thursday. Attendance will be taken for every class meeting. A total of 40 points will be given to attendance credit. Every tests (Quizzes and Exams), except Quiz #2 and the Final, are given on Friday. If there are no tests, students should study the class material by themselves. **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. Homework assignments are due on the test (quiz or midterm) days. Each collection counts 10 points, the total is 60 points.

Quizzes: **Three Quizzes** (33, 33, and 34 points) will be given on the quiz day. 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 in class on 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 from **8:00pm–10:00pm** on **Wednesday, 3/26/2025**. Any students missing the final will receive an F grade for the course.

Integrity: Any type of cheating is not tolerated. Corresponding school rules will be followed.

Grading:	Distribution		Scale		
			Grade	Points	Percentage
Attendance	40		A+	567-600	95%-100%
			A	537-566	90%-94%
Homework	60		A-	525-536	88%-89%
			B+	507-524	85%-87%
Quizzes	100		B	477-506	80%-84%
			B-	465-476	78%-79%
			C+	447-464	75%-77%
Midterms	200		C	387-446	65%-74%
			D+	357-386	60%-64%
			D	345-356	58%-59%
Final Exam	200		D-	327-344	55%-57%
			F	0-326	0%-54%

Total	600				

Tentative Schedule:

Winter 2025								
	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY	SUNDAY	Wk
Jan	6 INSTRUCTION BEGINS 1.1, 1.2	7 1.3, 2.1	8 2.2	9 2.3	10 3.1	11	12	1
Jan	13 3.2	14 3.3	15 3.4	16 4.1	17 Quiz #1 8:00pm-8:45pm	18	19 <i>Last Day to Add / to Drop without a W</i>	2
Jan	20 <i>Last day to drop without a W M L K Holiday</i>	21 Census Day 4.2	22 4.3	23 4.4	24 4.5	25	26	3
Jan	27 4.6	28 5.1	29 5.2	30 Review	31 <i>Last day to request P/NP Exam #1 8:00pm-9:00pm</i>	1	2	4
Jan / Feb	3 Solutions	4 5.3	5 5.4	6 5.5	7 5.6	8	9	5
Feb	10 6.1	11 6.2	12 6.3	13 Quiz #2 8:00pm-8:45pm	14 <i>Lincoln's B-Day Holiday</i>	15 <i>President's Weekend</i> 16		6
Feb	17 <i>Washington's B-day Holiday</i>	18 6.4	19 7.1	20 7.2	21 7.3	22	23	7
Feb	24 7.4	25 8.1	26 8.2	27 Review	28 <i>Last Day to drop with a W Exam #2 8:00pm-9:00pm</i>	1	2	8
Feb / March	3 Solutions	4 8.3	5 8.5	6 9.1	7 9.2	8	9	9
March	10 9.3	11 9.4	12 9.5	13 9.6	14 Quiz #3 8:00pm-8:45pm	15	16	10
March	17 10.1	18 10.2	19 10.3	20 10.4	21 Review	22	23	11
March	24	25	26 FINAL EXAM 8:00pm-10:00pm	27	28	29	30	12

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:

T	11:30 AM	12:30 PM	In-Person	S16-A
TH	12:30 PM	01:30 PM	Canvas	
T	01:30 PM	02:30 PM	Canvas	
TH	01:30 PM	02:30 PM	Canvas	