

SYLLABUS

Instructor: Dr. Kejian Shi
e-mail: shikejian@fhda.edu
Office Hour: Thursdays: 1:30pm-2:30pm (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 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. 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 in class 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
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:

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</i> M L K Holiday	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</i> 8:00pm-9:00pm	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</i> Exam #2 8:00pm-9:00pm	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	