

SYLLABUS

Instructor: Dr. Kejian Shi
e-mail: shikejian@fhda.edu
Office Hour: Tuesdays: 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 synchronous class**. Students are expected to attend all classes on time. Attendance will be taken for every class meeting. A total of 40 points will be given to attendance credit. **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, 2/26/2025**. 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:	<u>Distribution</u>		<u>Scale</u>		
			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%
			C	387-446	65%-74%
Midterms	200		D+	357-386	60%-64%
			D	345-356	58%-59%
			D-	327-344	55%-57%
Final Exam	200		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, 1.3	7	8 2.1, 2.2, 2.3	9	10	11	12	1
Jan	13 3.1, 3.2, 3.3	14	15 3.4, 4.1 Quiz #1 8:00pm-8:45pm	16	17	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	22 Solutions 4.2, 4.3, 4.4	23	24	25	26	3
Jan	27 4.5, 4.6	28	29 Review Exam #1 7:45pm-8:45pm	30	31 <i>Last day to request P/NP</i>	1	2	4
Jan / Feb	3 Solutions 5.1, 5.2, 5.3	4	5 5.4, 5.5, 5.6	6	7	8	9	5
Feb	10 6.1, 6.2, 6.3	11	12 6.4, 7.1 Quiz #2 8:00pm-8:45pm	13	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	19 Solutions 7.2, 7.3, 7.4	20	21	22	23	7
Feb	24 8.1, 8.2	25	26 Review Exam #2 7:45pm-8:45pm	27	28 <i>Last Day to drop with a W</i>	1	2	8
Feb / March	3 Solutions 8.3, 8.5	4	5 9.1, 9.2, 9.3	6	7	8	9	9
March	10 9.4, 9.5, 9.6	11	12 10.1, 10.2 Quiz #3 8:00pm-8:45pm	13	14	15	16	10
March	17 Solutions 10.3, 10.4	18	19 Review	20	21	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	