Math 22-55Z,   **MTWThF**   **Spring, 2025**

SYLLABUS

Instructor:	Dr. Kejian Shi
e-mail:	shikejian@fhda.edu
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. 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: <u>**Three**</u> **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: <u>**Two**</u> **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: <u>**One**</u> **comprehensive examination** will be given on canvas from **8:00pm–10:00pm** on **Tuesday, 6/24/2025**. 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>

			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%
Total	560		F	0-304	0%-54%

<u>Scale</u>

Tentative Schedule:

	MON	TUE	WED	THUR	FRI	SAT	SUN	Wk
APL	7 **1.1, 1.2, 1.3**	8 **2.1**	9 **2.2**	10 **2.3**	11 **3.1**	12	13	1
APL	14 **3.2**	15 **3.3**	16 **3.4**	17 **4.1**	18 **Quiz #1** 8:00pm-8:45pm	19	20 Last day to drop without a W	2
APL	21 **Census Day** **4.2**	22 **4.3**	23 **4.4**	24 **4.5**	25 **4.6**	26	27	3
APL / MAY	28 **5.1**	29 **5.2**	30 **5.3**	1 **Review**	2 **Exam #1** 8:00pm-9:00pm	3	4	4
MAY	5 **Solutions**	6 **5.4**	7 **5.5**	8 **5.6**	9 **6.1**	10	11	5
MAY	12 **6.2**	13 **6.3**	14 **6.4**	15 **7.1**	16 **Quiz #2** 8:00pm-8:45pm	17	18	6
MAY	19 **Solutions** **7.2**	20 **7.3**	21 **7.4**	22 **8.1**	23 **8.2**	24	25	7
MAY / JUN	26 Memorial Day **Holiday**	27 **8.3**	28 **8.5**	29 (Drop with "W") **Review**	30 **Exam #2** 8:00pm-9:00pm	31	1	8
JUN	2 **Solutions**	3 **9.1**	4 **9.2**	5 **9.3**	6 **9.4**	7	8	9
JUN	9 **9.5**	10 **9.6**	11 **10.1**	12 **10.2**	13 **Quiz #3** 8:00pm-8:45pm	14	15	10
JUN	16 **10.3**	17 **10.4**	18 **Review**	19 Juneteenth Day **Holiday**	20 **Review**	21	22	11
JUN / JUL	23	24 **Final Exam** 8:00pm-10:00pm	25	26	27	28	29 Graduation	12
JUL	30 Summer classes start	1	2	3	4	5	6	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, 11aii, 11aiii, 11av, 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	S16-A
T	12:00 PM - 1:00 PM	Zoom,Canvas
W	12:00 PM - 1:00 PM	Zoom,Canvas
TH	12:00 PM - 1:00 PM	Zoom,Canvas