SYLLABUS

Instructor:	Dr. Kejian Shi
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Office Hour:	Thursdays: 11:20am-12:20pm zoom on canvas

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 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 and should be submitted to canvas. Each collection counts 10 points, the total is 60 points.

Quizzes: <u>**Three**</u> **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: <u>**Two**</u> **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: <u>**One**</u> **comprehensive examination** will be given from **8:00pm–10:00pm** on **Wednesday, June 26, 2024**. (This is school scheduled final exam time. It cannot be changed by the instructor.) 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%
Total	560	F	0-304	0%-54%

Tentative Schedule:

	MON	TUE	WED	THUR	FRI	SAT	SUN	Wk
APL	8 **1.1, 1.2, 1.3**	9 **2.1**	10 **2.2**	11 **2.3**	12 **3.1**	13	14	1
APL	15 **3.2**	16 **3.3**	17 **3.4**	18 **4.1**	19 **Quiz #1** 8:00pm-8:45pm	20 Last day to add	21 Last day to drop with no record	2
APL	22 **Solutions** **4.2**	23 **4.3**	24 **4.4**	25 **4.5**	26 **4.6**	27	28	3
APL / MAY	29 **5.1**	30 **5.2**	1 **5.3**	2 **Review**	3 **Exam #1** 8:00pm-9:00pm	4	5	4
MAY	6 **Solutions**	7 **5.4**	8 **5.5**	9 **5.6**	10 **6.1**	11	12	5
MAY	13 **6.2**	14 **6.3**	15 **6.4**	16 **7.1**	17 **Quiz #2** 8:00pm-8:45pm	18	19	6
MAY	20 **Solutions** **7.2**	21 **7.3**	22 **7.4**	23 **8.1**	24 **8.2**	25	26	7
MAY / JUN	27 Memorial Day **Holiday**	28 **8.3**	29 **8.5**	30 (Drop with "W") **Review**	31 **Exam #2** 8:00pm-9:00pm	1	2	8
JUN	3 **Solutions**	4 **9.1**	5 **9.2**	6 **9.3**	7 **9.4**	8	9	9
JUN	10 **9.5**	11 **9.6**	12 **10.1**	13 **10.2**	14 **Quiz #3** 8:00pm-8:45pm	15	16	10
JUN	17 **10.3**	18 **10.4**	19 Juneteenth Day **Holiday**	20 **Review**	21 **Review**	22	23	11
JUN / JUL	24	25	26 **Final Exam** 8:00pm-10:00pm	27	28	29	30	12
JUL	1 SUMMER BEGINS	2	3	4	5	6	7	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:

Day	Start	End	Mode	Location
M	09:50 AM	10:50 AM	In-Person	S16-A
W	09:50 AM	10:50 AM	In-Person	S16-A
T	12:20 PM	01:20 PM	In-Person	S16-A
TH	10:20 AM	11:20 AM	Zoom	
TH	11:20 AM	12:20 PM	Zoom	
TH	11:20 AM	12:20 PM	Zoom	