

SYLLABUS

Instructor: Dr. Kejian Shi
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Prerequisites: Math 43 (with a grade of C or better), or equivalent
Textbook: *Discrete Mathematics*, Brief Edition, by Susanna S. Epp
Materials: A scientific calculator recommended

Attendance: Students are expected to attend the lectures Monday through Thursday. **It is the students' responsibility to drop by the appropriate deadline. Petitions to drop after the dead line 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 hour**.

Quizzes: **Three Quizzes** (33, 33, and 34 points) will be given this quarter. No makeup quizzes. Quiz problems are similar to homework problems and lecture examples.

Midterms: **Two one-class-hour midterm examinations** (100 points each) will be given this quarter. No makeup except for extenuating circumstances assuming the student notifies the instructor as soon as the emergency arises.

Final Exam: **One two-hour comprehensive examination** will be given on Thursday, **August 6, 2020**. 10:00AM-1:00PM. Any student missing the final will receive an F grade for the course.

Integrity: Every student is expected to finish all the work independently. If there are identical written works, each person will receive the average score of such a group of people.

Grading:	<u>Distribution</u>		<u>Scale</u>		
			Grade	Points	Percentage
Quizzes	100		A+	473-500	95%-100%
			A	448-472	90%-94%
			A-	438-447	88%-89%
			B+	423-437	85%-87%
			B	398-422	80%-84%
Midterms	200		B-	388-397	78%-79%
			C+	373-387	75%-77%
			C	323-372	65%-74%
			D+	298-322	60%-64%
			D	288-297	58%-59%
Final Exam	200		D-	273-287	55%-57%
			F	0-272	0%-54%

	Total	500			

Math 22-3 Tentative Schedule (Summer 2020)

	MON	TUE	WED	THU	FRI	SAT	SUN
June / July	29 1.1, 1.2, 1.3	30 2.1, 2.2	1 2.3 Review	2 3.1, 3.2 Quiz #1	3	4	5
July	6 Solution 3.3, 3.4, 4.1	7 4.2, 4.3, 4.4	8 4.5, 4.6 Review	9 TEST #1	10	11	12
July	13 Solution 5.1, 5.2, 5.3	14 5.5, 5.6	15 6.1, 6.2 Review	16 6.3 Quiz #2	17	18	19
July	20 Solution 7.1, 7.2	21 7.3, 7.4	22 8.1, 8.2 Review	23 TEST #2	24	25	26
July / August	27 Solution 8.3, 9.1	28 9.2, 9.3	29 9.4, 9.5 Review	30 9.6 Quiz #3	31	1	2
August	3 Solution 10.1, 10.2	4 10.3, 10.4	5 Review	6 FINAL EXAM	7	8	9

Sections	Problems
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.
5.5	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.
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.
8.4	2, 4, 5, 8, 9, 10, 12, 15, 16, 18, 35, 36.
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.