Math 22-5,   8:30 a.m. -- 9:20,   MTWThF,   Room: E31,   Fall, 2019

SYLLABUS

Instructor: Dr. Kejian Shi
e-mail: shikejian@fhda.edu
Office & Phone: S-16A, (408)864-8481
Office Hour: **MTWTh**:10:30 --11:00 a.m., 1:30 p.m. – 2:00, and **F**: 10:30 --11:00 a.m. or by appointment

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 all classes on time. Students who are absent more than **3 times** may be dropped from the class. However, **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: **Three Homework sets** will be collected, each on **the examination days** (20 points for each collection). No late hws will be accepted. Hw is the key to success in this class. Plan to devote a minimum of **TWO hours** to hw for each class hour.

Quizzes: **Three Quizzes** (33, 33, and 34 points) will be given in class. 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 in class. 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 **Wednesday**, **12/11/ 2019**, from **7:00am–9:00am**. Any student missing the final will receive an F grade for the course.

Integrity: Any types of cheating are not tolerated. Corresponding school rules will be followed.

Grading: <u>Distribution</u>   <u>Scale</u>

		Grade	Points	Percentage
		A+	530-560	95%-100%
Homework	60	A	502-529	90%-94%
		A-	490-501	88%-89%
		B+	474-489	85%-87%
Quizzes	100	B	446-473	80%-84%
		B-	434-445	78%-79%
		C+	418-433	75%-77%
Midterms	200	C	362-417	65%-74%
		D+	334-361	60%-64%
Final Exam	200	D	322-333	58%-59%
--------		D-	308-321	55%-57%
Total	560	F	0-307	0%-54%

Tentative Schedule:

	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY	SUNDAY	Wk
SEP	23 INSTRUCTION BEGINS 1.1	24 1.2	25 1.3	26 2.1	27 2.2	28	29	1
SEP / OCT	30 2.3	1 3.1	2 3.2	3 3.3	4 Review Quiz #1	5 Last Day to Add	6 Last Day to Drop with no Record	2
OCT	7 Census Day 3.4	8 4.1	9 4.2	10 4.3	11 4.4	12	13	3
OCT	14 4.5	15 4.6	16 5.1	17 Review Hw/Proj. 1 Due	18 Last Day to Request P/NP Exam #1	19	20	4
OCT	21 Solution	22 5.2	23 5.3	24 5.5	25 5.6	26	27	5
OCT / NOV	28 6.1	29 6.2	30 6.3	31 6.4	1 Review Quiz #2	2	3	6
NOV	4 7.1	5 7.2	6 7.3	7 7.4	8 8.1	9	10	7
NOV	11 VETERAN'S DAY NO CLASSES	12 8.2	13 8.3	14 Review Hw/Proj. 2 Due	15 Last Day to Drop with a W Exam #2	16	17	8
NOV	18 Solution	19 9.1	20 9.2	21 9.3	22 9.4	23	24	9
NOV / DEC	25 9.5	26 9.6	27 Review Quiz #3	28 THANKSGIVING NO CLASSES	29 THANKSGIVING NO CLASSES	30	1	10
DEC	2 10.1	3 10.2	4 10.3	5 10.4	6 Review Hw/Proj. 3 Due	7	8	11
DEC	9	10	11 Final Exam 7:00AM-9:00	12	13	14	15	12
					12 weeks, 53 days of instruction			

Homework Problems:

Sections	Problems
	HW #1
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.
	HW#2
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.
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.
	HW#3
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.