Math 12-15Y **MTWThF** **Fall, 2025**

SYLLABUS

Instructor: Dr. Kejian Shi
e-mail: shikejian@fhda.edu
Office Hour: Monday, 1:30pm-2:30pm, S16-A

Prerequisites: Math 11 or 41 (with a grade of C or better)
Textbook: *CALCULUS and its applications*, 11th Edition, by Bittinger etc.
Materials: A scientific calculator recommended

Attendance: This class is a combination of **in-person** and **online** class. Students are expected to be in class Monday through Thursday. On Fridy, students are expected to watch and study the lecture videos, which I have posted on the Canvas. The videos can be watched multiple times. Questions will be answered in the classroom, or during office hours, or through emails.

Homework: **Six homework sets** will be collected on canvas, each on **the test (Quiz and Exam) days** (10 points for each set). No late hws will be accepted. One lowest hw score will be replaced by 10. 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 45-minute Quizzes** (33, 33, and 34 points) will be given **in classroom**. No makeup quizzes. One lowest quiz score will be replaced by the average of the two highest quiz scores. Quiz problems are similar to homework problems and lecture examples.

Midterms: **Two 60-minute midterm examinations** (100 points each) will be given **in classroom**. No makeup midterms. One lowest midterm score will be replaced by the percentage of your final exam score, if the percentage is higher.

Final Exam: **One 120-minute comprehensive examination** will be given **in classroom** from **11:30AM to 1:30PM** on **Wednesday, 12/10/2025**. Anyone 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

Homework	60
Quizzes	100
Midterms	200
Final Exam	200
Total	560

Scale

Grade	Points	Percentage
A+	529-560	95%-100%
A	501-528	90%-94%
A-	490-500	88%-89%
B+	473-489	85%-87%
B	445-472	80%-84%
B-	434-444	78%-79%
C+	417-433	75%-77%
C	361-416	65%-74%
D+	333-360	60%-64%
D	322-332	58%-59%
D-	305-321	55%-57%
F	0-304	0%-54%

Math 12-15Y Tentative Schedule (Fall 2025):

	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY	SUNDAY	Wk
SEP	22 INSTRUCTION BEGINS R.3	23 1.1	24 1.2	25 1.3	26 1.4	27	28	1
SEP / OCT	29 1.5	30 1.6	1 Review	2 Quiz #1	3 1.7	4	5 Last Day to Add / Drop (without a W)	2
OCT	6 Census Day 1.8	7 2.1	8 2.2	9 2.3	10 2.4	11	12	3
OCT	13 2.5	14 2.6	15 Review	16 Exam #1	17 2.7	18	19	4
OCT	20 Solutions	21 2.8	22 3.3	23 3.4	24 3.5	25	26	5
OCT / NOV	27 3.6	28 4.1	29 Review	30 Quiz #2	31 4.2	1	2	6
NOV	3 4.3	4 4.4	5 4.5	6 4.6	7 4.7	8	9	7
NOV	10 5.1	11 VETERAN'S DAY NO CLASSES	12 Review	13 Exam #2	14 Last Day to Drop with a W 5.2	15	16	8
NOV	17 Solutions	18 5.3	19 5.6	20 5.7	21 6.1	22	23	9
DEC	24 6.2	25 Review	26 Quiz #3	27 THANKSGIVING NO CLASSES	28 THANKSGIVING NO CLASSES	29	30	10
DEC	1 6.3	2 6.4	3 6.5	4 Review	5 Review	6	7	11
DEC	8	9	10 Final Exam 11:30am-1:30pm	11	12	13	14	12
	12 weeks, 53 days of instruction							

Homework problems:

Sections	Problems
	HW #1
R.3	36, 39, 46, 49, 53
1.1	11, 15-22, 54, 59, 65, 68
1.2	1, 5, 9, …, 69 (every other odd)
1.3	1, 6, 11, 18, 25, 28, 30, 33, 34
1.4	1, 4, 7, 10, 13, 16, 19, 22, 25, 28, 31, 34
1.5	1, 5, 9, …, 65 (every other odd)
1.6	5, 12, 15, 20, 25, 35, 40, 46, 113, 117
1.7	1, 4, 7, …, 73 (every third)
	HW #2
1.8	1, 4, 7, …, 46 (every third)
2.1	1, 4, 7, …, 34 (every third)
2.2	1, 5, 9, …, 45 (every other odd)
2.3	2, 6, 14, 18, 28, 32, 42, 48, 54
2.4	7, 10 , 13, …, 34 (every third) and 49, 52, 55, 61
2.5	7, 10, 15, 18, 20, 22, 38
2.6	4, 5, 6, 28, 31, 37, 40, 45, 48, 53
2.7	1, 4, 8, 10
	HW #3
2.8	4, 10, 13, 19, 24, 29, 34, 39, 45
3.3	4, 7, 21, 41
3.4	18, 22, 24, 41
3.5	1, 4, 7, 10, 13, 16, 19, 22, 25, 28, 31, 34
3.6	1, 4, 7, 11, 13, 17, 19
4.1	1, 4, 7, …, 58 (every third)
4.2	1, 4, 7, …, 34 (every third) and 36
	HW #4
4.3	1, 4, 7, …, 58 (every third)
4.4	1, 4, 7, …, 43 (every third)
4.5	1, 5, 9, …, 57 (every other odd) and 79, 83, 85
4.6	1, 4, 7, …, 37 (every third)
4.7	1, 4, 7, …, 28 (every third)
5.1	1, 4, 7, 10, 13
5.2	1, 4, 7, 10, 13, 16, 19
	HW #5
5.3	1, 4, 7, …, 28 (every third)
5.4	1, 4, 7, …, 28 (every third)
5.5	1, 4, 7, …, 31 (every third)
5.6	1, 4, 7, …, 31 (every third)
5.7	1, 4, 7, …, 46 (every third)
6.1	1, 4, 7, 9, 12
6.2	1, 4, 7, …, 40 (every third)
	HW #6
6.3	1, 4, 7, …, 19 (every third)
6.4	1, 4, 7, 10
6.5	1, 4, 7, 10, 13, 16, 19, 20

Student Learning Outcome(s):

• Use correct notation and mathematical precision in the evaluation and interpretation of derivatives and integrals.

• Evaluate, solve, interpret and communicate business and social science applications using appropriate differentiation and integration methodologies.

Office Hours:

M	1:30 PM - 2:30 PM	S16-A
T	2:00 PM - 3:00 PM	Canvas
W	1:40 PM - 2:40 PM	Canvas
TH	2:00 PM - 3:00 PM	Canvas