COURSE: Math 1B-13, CRN 38553 QUARTER: Winter 2024

DAY: TuTh 11:00a-1:15p INSTRUCTOR: Millia Ison

Room: E33 EMAIL: isonmillia@fhda.edu

ZOOM OFFICE HOUR: MW 10:00 -11:40 am. Link: https://fhda-edu.zoom.us/j/95244405559

**OFFICE NUMBER**: S76e

**COURSE PREREQUISITES**: Math 1A, or equivalent course with a grade "C" or better.

**TEXT**: Calculus: Early Transcendentals, by James Stewart, 9th edition.

**ENROLL WEB ASSIGN**: Log into your Canvas account, In Module, Click WebAssign Sign in to continue the registration process. Your Cengage course materials will open in a new tab or window, so be sure pop-ups are enabled. Homework and quizzes are on Web Assign.

**EQUIPMENT**: A graphic calculator or a computer with graph capability is required. **GRADING**:

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Homework ----160 points
Quizzes ------80 points
3 midterms --- 150 points
Final exam ---- 110 points
Total ------ 500 points

A: ≥93 % , 465 - 500 pts
A-: 90% - 92 % , 450 - 464 pts
B+: 87% - 89 % , 435 - 449 pts
B: 83% - 86 % , 415 - 434 pts
B-: 80% - 82 % , 400 - 414 pts

C+: 76% - 79 % , 380 - 399 pts
C: 70 % - 75 %, 350 - 379 pts
D: 60 % - 69 %, 300 - 349 pts
F: 0 % - 59 %, 0 - 299 pts
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**HOMEWORK POINTS:** You need to do your homework on a regular basis. However, all homework is due Tuesday March 26, 11:59 pm. **No Extension under any circumstances.** A total point on WebAssign is 703 (subject to change). Out which, 683 points are required (subject to change). If you have 683, you earn 160 points (full credit) toward your grade. If you have total of 703, then  $703/683 \approx 1.03$ , that is 103%,  $103\% \times 160 \approx 164$  which is 4 points extra credit. The total amount of the extra credit will be decided after the final exam.

**QUIZ POINTS**: 5 points each. 12:45 - 1:15 pm each meeting. NO EXTENSION. Absent will be counted as 0. There are 19 quizzes this quarter. 3 lowest scores will be dropped.

**EXAM POINTS**: 50 points each. See Calendar next page for exam dates. **No make-up midterm exams.** 0 point for missed exam. For unusual circumstances, you must contact me on or before the exam time, then the <u>percentage</u> of your final exam score <u>multiply by 50</u> will replace the exam score. Exam Review is on WebAssign for each exam; it is optional. Points of the Reviews are NOT part of grade.

**FINAL EXAM**: 110 points. March 26, Tuesday, 11:30a – 1:30p. Fail to take the final exam, you will receive "F" for your grade.

Exams and quizzes are to test your understanding of the course material and homework assignments. Cheating of any form on quizzes, midterm exams or final exam will be grounds for disciplinary action.

**IMPORTANT DATES:** : Sunday, Jan. 21 --- Last day to drop without grade on your record. Friday, Mar. 1 --- Last day to drop with a "W".

Student is responsible to withdraw from the class. The last day for you to withdraw is March 1. After that day, you will receive a grade.

Text: Stewart 9th edition

MATH 1B-13 Winter 2024 Calendar

TuTh 11:00a-1:15p

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Chapter	SEC	Topics		Monday	Tuesday	Wednesday	Thursday	Friday
Integrals	5.1	Areas and Distances	Jan	8	9	10	11	12
	5.2	The Definite Integral			5.1, 5.2, 5.3		5.3	
	5.3	The Fundamental Theorem of Calculus	Wk1		Quiz 5.2		Quiz 5.3	
	5.4	Indefinite Integrals and the Net Change Thm	Jan	15	16	17	18	19
	5.5	The Substitution Rule		MLKing's	5.4, 5.5, 6.1		6.1	
			Wk2	Birthday	Quiz 5.5		Quiz 6.1	
	6.1	Areas Between Curves	Jan	22	23	24	25	26
Appendix G	6.2	Volumes			6.2, <mark>Exam 1</mark>		6.2	
Applications of	6.3	Volume by Cylindrical Shells	Wk3		12:15 – 1:15 p		Quiz 6.2	
Integrals	6.4	Work	Jan	29	30	31	1	2
eg. a.e	6.5	Average Value of a Function			6.3, 6.4, 6.5		6.4, 6.5	
			Wk4		Quiz 6.3		Quiz 6.4	
Techniques of Integration	7.1	Integration by Parts	Feb	5	6	7	8	9
	7.2	Trigonometric Integrals			7.1, 7.2		7.2	
	7.3	Trigonometric Substitution	Wk5		Quiz 7.1		Quiz 7.2	
	7.4	Integration of Rat'l Funct'ns by Partial Fractions	Feb	12	13	14	15	16
	7.5	Strategy for Integration			7.3, <mark>Exam 2</mark>		7.3	Lincoln's Birthday
	7.7	Approximate Integration	Wk6		12:15 – 1:15 p		Quiz 7.3	
	7.8	Improper Integrals	Feb	19	20	21	22	23
				Washington's	7.4		7.5, 7.7	
	8.1	Are Length	Wk7	Birthday	Quiz 7.4		Quiz 7.5, 7.7	
Further Applications	10.2	Parametric arclength / Area	Feb	26	27	28	29	1
	8.2	Area of a Surface of Revolution		7.8,	7.8,		8.1,10.2	
	8.3	Applications to Physics and Engineering	Wk8		Quiz 7.8		Quiz 8.1,10.2	last day to drop w/W
	8.5	Probability	Mar	4	5	6	7	8
					8.2		8.3	
Differential Equations	9.1	Modeling with Differential Equations	Wk9		Quiz 8.2		Quiz 8.3	
	9.2	Direction Fields and Euler's Method	Mar	11	12	13	14	15
	9.3	Separable Equations and Apps	Dec		8.5, <mark>Exam 3</mark>		8.5	
All homework assignments and due dates are listed on			Wk10		12:15 – 1:15 p		Quiz 8.5	
WebAssign.			Mar	18	19	20	21	22
					9.1, 9.2, 9.3		9.3	
These are the least number of exercises you need to			Wk11		Quiz 9.1, 9.2		Quiz 9.3	
do. If you don't master the material well after doing			Mar	25	26	27	28	29
WebAssign, work with more of the similar problems in the					Final 11:30a-1:30p			
text.			Wk12		HW due 11:59p			
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## **Student Learning Outcome(s):**

- Analyze the definite integral from a graphical, numerical, analytical, and verbal approach, using correct notation and mathematical precision.
- Formulate and use the Fundamental Theorem of Calculus.
- Apply the definite integral in solving problems in analytical geometry and the sciences.

## **Office Hours:**

M,W 10:00 AM 11:40 AM Zoom