

**COURSE:** Math 1B-27Z, CRN 01232

**QUARTER:** Winter 2022

**DAY:** TuTh 4:00 – 6:15 p

**INSTRUCTOR:** Millia Ison

**Zoom** Join URL: <https://fhda-edu.zoom.us/j/97994261238> **EMAIL:** [isonmillia@fhda.edu](mailto:isonmillia@fhda.edu)

**OFFICE HOUR** on Zoom: Mon - Thu. 3-3:50 pm

Here is the link: Join URL: <https://fhda-edu.zoom.us/j/94279799616> Meeting ID: 942 7979 9616

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

**TEXT:** Calculus: Early Transcendentals, by James Stewart, 8th 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, quizzes, and exams are on Web Assign.

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

**GRADING:**

Homework ----160 points

Quizzes -----80 points

3 midterms --- 150 points

Final exam ---- 110 points

Total ----- 500 points

A: 93% - 96 % , 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

**HOMEWORK POINTS:** You need to do your homework on a regular basis. However, **all homework is due Tue. March 22, 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. **2 quizzes each week** (1 quiz if a week has exam), **due Sundays 11:59 pm**, available 1 week before due. **NO EXTENSION under any circumstances.** If the deadline is missed, you get 0 for the quiz. There are 18 quizzes this quarter. 2 lowest scores will be dropped.

**EXAM POINTS:** 50 points each. **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 percentage of your final exam score multiply by 50 will replace the exam score. See Calendar next page for exam dates.

**FINAL EXAM:** 110 points. **March 24, Thursday, 4 – 6 p.** 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:** Monday, Jan. 17 --- Last day to drop without grade on your record.  
Friday, Feb. 25 --- Last day to drop with a "W".

Student is responsible to withdraw from the class. The last day for you to withdraw is **Feb. 25**. After that day, you will receive a grade.

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



**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.