

**COURSE:** Math 1B-27 Calculus

**QUARTER:** Winter 2020

**DAY:** TuTh

**INSTRUCTOR:** Millia Ison

**TIME:** 4:00 – 6:15 p

**OFFICE PHONE:** 864-5659

**EMAIL:** [isonmillia@fhda.edu](mailto:isonmillia@fhda.edu)

**OFFICE NUMBER:** S76e

**OFFICE HOUR :** MW: 3:00 – 3:50 p.

TuTh: 2:30 – 3:30 pm, answer questions through email online

**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 :** Class code: **deanza 0672 4129**

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

**GRADING:**

WebAssign -----75 points

13 quizzes -----75 points

3 midterms --- 300 points

Final exam ---- 150 points

Total ----- 600 points

A: 93% - 96 % , 558 - 600 pts

A- : 90% - 92 % , 540 - 557 pts

B+ : 87% - 89 % , 522 - 539 pts

B: 83% - 86 % , 498 - 521 pts

B- : 80% - 82 % , 480 - 497 pts

C+ : 76% - 79 % , 456 - 479 pts

C: 70 % - 75 % , 420 - 455 pts

D: 60 % - 69 % , 360 - 419 pts

F: 0 % - 59 % , 0 - 359 pts

**Homework Points:** You need to do your homework on a regular bases. However all homework is **due on March 24, 11:59 pm.** Total points on WebAssign is 670(subject to change). Out of which, 620 points are required (subject to change). If you have 620, you earn 75 points (full credit) toward your grade. If you have total of 650, then  $650 / 620 \approx 1.05$ , that is 105%,  $105\% \cdot 75 \approx 79$ , you have 79 points for homework, which is 4 points extra credit. The total amount of the extra credit will be decided after the final exam.

**Quiz Points:** 6 points each quiz, <sup>SEP</sup> 2 quizzes each week (1 quiz in an exam week). You must take quiz in class. **NO make-up quiz. Absent or taking a quiz outside of class is 0 for the quiz.** There are 18 quizzes this quarter. 13 quizzes are required. The extra quizzes either will be dropped (lowest scores) or will be extra credit. The total amount of the extra credit will be determined after the final exam.

**EXAM POINTS:** 100 points each. Dates are on the calendar the next page. Scheduled dates are subject to change. **NO make-up midterm exams.** Absences are counted as 0's. If the percent of your final exam score is higher than some of your exams, it will replace the lowest exam score. It can only replace 1 out of 3 exams. For example: your lowest exam score is 73%, your achieve 120/150 on the final exam, which is 80%. Then the 73 on the exam is replaced by 80. If all your 3 exams are higher than your final exam percentage, then your exam scores will not change. People doing better on the final will help their overall score.

**FINAL EXAM:** **Thursday, March 26, 4:00– 6:00 p**

Fail to take the final exam, you will receive "F" for your grade.

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

**IMPORTANT DATES:** Sunday, Jan. 19 --- Last day to drop without grade on your record.

Friday, Feb. 28 --- Last day to drop with a "W".

**ATTENDANCE:** Regular attendance is required. Frequent absences will result in a “W” or “F” for the class. The last day for you to drop the class is Feb. 28. After that day, you will receive a grade.

Chapter	SEC	Topics		Monday	Tuesday	Wednesday	Thursday	Friday
Integrals	5.1	Areas and Distances	Jan	6	7	8	9	10
	5.2	The Definite Integral	Wk1		5.1		5.2	
	5.3	The Fundamental Theorem of Calculus					Q1	
	5.4	Indefinite Integrals and the Net Change Thm	Jan	13	14	15	16	17
	5.5	The Substitution Rule	Wk2		5.3, 5.4		5.4, 5.5	
					Q2	Q3		
Applications of Integrals	6.1	Area Between Curves	Jan	20	21	22	23	24
	6.2	Volumes	Wk3	M L King Day	6.1, 6.2		Exam 1	
	6.3	Volume by Cylindrical Shells			Holiday	Q4		
	6.4	Work	Jan	27	28	29	30	31
	6.5	Average Value of a Function	Wk4		6.2, 6.3		6.4	
					Q5	Q6		
Techniques of Integration	7.1	Integration by Parts	Feb	3	4	5	6	7
	7.2	Trigonometric Integrals	Wk5		6.5, 7.1		7.1, 7.2	
	7.3	Trigonometric Substitution				Q7	Q8	
	7.4	Integration of Rat'l Funct'ns by Partial Fractions	Feb	10	11	12	13	14
	7.5	Strategy for Integration	Wk6		7.3		7.4	Lincoln's Birthday
	7.7	Approximate Integration				Q9	Q10	Holiday
	7.8	Improper Integrals	Feb	17	18	19	20	21
			Washington's B-day	7.5, 7.7		Exam 2		
Further Applications	8.1	Arc Length	Wk7		Q11			
	10.2	Parametric arclength	Feb	24	25	26	27	28
	8.3	Applications to Physics and Engineering	Wk8		7.7, 7.8		8.1, 10.2, 8.3	
	8.5	Probability				Q12	Q13	last day to drop w/W
Differential Equations	9.1	Modeling with Differential Equations	Mar	2	3	4	5	6
	9.2	Direction Fields and Euler's Method	Wk9		8.3		8.5	
	9.3	Separable Equations				Q14	Q15	
<p>All homework assignments and due dates are listed on WebAssign.</p> <p>These are the least amount 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.</p>			Mar	9	10	11	12	13
			Wk10		9.1, 9.2		Exam 3	
			Mar	16	17	18	19	20
			Wk11		9.3		9.3	
					Q17		Q18	
Mar	23	24	25	26	27			
					Final			
					4:00 – 6:00p			

**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.