

De Anza College Fall Quarter 2025

Course: MATH 1B-21Z Calculus

Instructor: Charles De Vogelaere  
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Text: *CALCULUS Early Transcendentals 9th Edition* by Stewart

Calculator: TI-83 or TI-84 Calculator – required  
Available on-line at: <https://ti84calc.com/ti84calc>

Homework: Assigned each week, due next week. We will be using WebAssign. It is included in the cost of the Book sold in the bookstore.

The class key for WebAssign is [deanza 2288 8027](#)

Quiz: Using Canvas. There will be a 15-minute quiz at the start of each class. It will cover the material discussed during the previous class.

Tests: 3 of them. Also using Canvas. No make-up quizzes, no make-up tests.

Final: Comprehensive. Also using Canvas.

Grading:	Homework	10%	A	100-93 %
	Quizzes	25%	A-	92-90 %
	Tests	30%	B+	89-87 %
	Final	35%	B	86-83 %
	Total	100%	B-	82-80 %
			C+	79-77 %
			C	76-65 %
		D	64-60 %	
		F	> 60%	

Attendance: The first two homework assignments must be turned in or the student will be dropped.

Lectures: Done over Zoom. See Canvas for the Zoom links.

NOTE:

This is the continuation of a series of classes. If you do not put effort into this one, there is no point attempting the next ones in the series.

Please see the next page:

- Know the derivatives of the functions discussed in Math 1A. Specifically:

$$1. \frac{d}{dx} kx = k$$

$$2. \frac{d}{dx} x^n = nx^{n-1} \text{ for } n \neq 1$$

$$3a. \frac{d}{dx} e^x = e^x$$

$$3b. \frac{d}{dx} b^x = \ln(b) b^x$$

$$4a. \frac{d}{dx} \sin(x) = \cos(x)$$

$$4b. \frac{d}{dx} \cos(x) = -\sin(x)$$

$$5a. \frac{d}{dx} \tan(x) = \sec^2(x)$$

$$5b. \frac{d}{dx} \cot(x) = -\csc^2(x)$$

$$6a. \frac{d}{dx} \sec(x) = \sec(x)\tan(x)$$

$$6b. \frac{d}{dx} \csc(x) = -\csc(x)\cot(x)$$

$$7a. \frac{d}{dx} \arctan(x) = \frac{1}{x^2 + 1}$$

$$7b. \frac{d}{dx} \operatorname{arccot}(x) = \frac{-1}{x^2 + 1}$$

$$8a. \frac{d}{dx} \arcsin(x) = \frac{1}{\sqrt{1-x^2}}$$

$$8b. \frac{d}{dx} \arccos(x) = \frac{-1}{\sqrt{1-x^2}}$$

$$9a. \frac{d}{dx} \operatorname{arcsec}(x) = \frac{1}{x\sqrt{x^2-1}}$$

$$9b. \frac{d}{dx} \operatorname{arccsc}(x) = \frac{-1}{x\sqrt{x^2-1}}$$

$$10a. \frac{d}{dx} \sinh(x) = \cosh(x)$$

$$10b. \frac{d}{dx} \cosh(x) = \sinh(x)$$

- Also know trig identities. See our text book's "Reference page 2" or the web site: [https://tutorial.math.lamar.edu/pdf/Trig\\_Cheat\\_Sheet.pdf](https://tutorial.math.lamar.edu/pdf/Trig_Cheat_Sheet.pdf)
- Know the exact values of the trig functions for the unit circle. See <https://www.livingston.org/cms/lib9/NJ01000562/Centricity/Domain/742/calc/Trig%20functions%20chart%20-%20answers.pdf>
- Know the number e as a limit
  - $e = \lim_{n \rightarrow \infty} \left(1 + \frac{1}{n}\right)^n$  and also  $e = \lim_{x \rightarrow 0} (1+x)^{1/x}$

Academic Integrity: This is pretty straightforward: Do not cheat on quizzes, exams, or directly copy other student's work. For more information about De Anza College's policy on academic integrity:

<https://www.deanza.edu/studenthandbook/academic-integrity.html>

Policies for This Class: These policies are part of the syllabus and will be strictly enforced. By enrolling in this course, you as the student agree to accept these policies and follow them and agree that the instructor reserves the right to drop a student from the course with a W if any of the policies are violated. Further action may also be taken against a student who violates specific policies, such as the policy on cheating.

**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:**

T,TH 8:45 PM - 9:15 PM

Zoom