De Anza College Fall Quarter 2022
Course: MATH 1B-01Z Calculus
Instructor: Charles De Vogelaere email: devogelaerecharles@fhda.edu

Text: CALCULUS Early Transcendentals 8th Edition by Stewart
Calculator: $\quad$ TI-83 or TI-84 Calculator - required
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 22024167

Quiz: Using Canvas. I will post quizzes; you may print them or copy the questions and then write the answers. Then by taking a picture of the answers or scanning the answers, post the results back to canvas. There will also be pop quizzes during the class period to encourage attentiveness. Quizzes with be every Friday.

Tests: $\quad 3$ 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 | $64-60 \%$ |
|  |  |  |  | $>60 \%$ |

Attendance: Will be taken. 2 absences may cause a student to be dropped. Homework must be turned in or the student will be dropped.

On-line: $\quad$ We are using Canvas for Quizzes and Tests

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

1. $\frac{d}{d x} k x=k$
2. $\frac{d}{d x} x^{n}=n x^{n-1}$ for $n \neq 1$
3a. $\frac{d}{d x} e^{x}=e^{x}$
$3 b \cdot \frac{d}{d x} b^{x}=\ln (b) b^{x}$
4a. $\frac{d}{d x} \sin (x)=\cos (x)$
4b. $\frac{d}{d x} \cos (x)=-\sin (x)$
5a. $\frac{d}{d x} \tan (\mathrm{x})=\sec ^{2}(x)$
5b. $\frac{d}{d x} \cot (\mathrm{x})=-\csc ^{2}(x)$
6a. $\frac{d}{d x} \sec (x)=\sec (\mathrm{x}) \tan (x)$
6b. $\frac{d}{d x} \csc (x)=-\csc (x) \cot (x)$
7a. $\frac{d}{d x} \arctan (\mathrm{x})=\frac{1}{x^{2}+1}$
7b. $\frac{d}{d x} \operatorname{arccot}(\mathrm{x})=\frac{-1}{x^{2}+1}$
$8 a \cdot \frac{d}{d x} \arcsin (\mathrm{x})=\frac{1}{\sqrt{1-x^{2}}}$
$8 b \cdot \frac{d}{d x} \arccos (\mathrm{x})=\frac{-1}{\sqrt{1-x^{2}}}$
9a. $\frac{d}{d x} \operatorname{arcsec}(\mathrm{x})=\frac{1}{x \sqrt{x^{2}-1}}$
10a. $\frac{d}{d x} \sinh (\mathrm{x})=\cosh (\mathrm{x})$
9b. $\frac{d}{d x} \operatorname{arccsc}(\mathrm{x})=\frac{-1}{x \sqrt{x^{2}-1}}$
$10 a \cdot \frac{d}{d x} \cosh (\mathrm{x})=\sinh (\mathrm{x})$

- 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
- Know the exact values of the trig functions for the unit circle. See https://www.livingston.org/cms/lib9/NJ01000562/Centricity/Domain/742/calc/Tr ig\%20functions\%20chart\%20-\%20answers.pdf

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:
$\underline{\text { https://www.deanza.edu/studenthandbook/academic-integrity.html }}$

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:

Zoom M,W 09:30 AM 10:30 AM

Students from Math 1A or Math 1B may attend these Office Hours

