De Anza College – Fall 2025

MATH 1A-22 (CRN 27486) Calculus I

Instructor: Lucian Sega, PhD

Class: Mondays and Wednesdays, 1:30-3:45 pm PST in room G1

Email: segalucian@fhda.edu

Office Hours: Tuesdays, 12:00-1:00 pm PST (zoom) or by appointment

Prerequisites

Math 32, Math 32H, Math 43, or Math 43H with a grade of C or better, or appropriate score on the Calculus Placement Test within past calendar year

Course Materials

- Textbook: Calculus, by James Stewart, Daniel K. Clegg, Saleem Watson, 9th Edition, ISBN-13: 9780357711491, Cengage Learning
- Instructor notes

Calculator

A graphing calculator (e.g TI-83/TI-84, TI-nspire CX CAS) is recommended.

Tips for Success

- ➢ Participate actively in class
- ➢ Do not fall behind on assignments, work problems/practice every day
- ➢ Review old material constantly (brush up Math 31 and Math 32 topics)
- ➢ Form study groups
- ➢ Make use of tutoring and online resources

Course Objectives

- Analyze and explore aspects of the differential calculus.
- Compute and interpret limits of functions using analytic and other methods, including L'Hôpital's Rule.
- Apply the definition of continuity using limits to analyze the behavior of functions.
- Find the derivative of a function as a limit.
- Derive and use the power, quotient, product, and chain rules to differentiate functions, including implicit and parametric functions, and find the equation of a tangent line to a function.
- Graph functions using methods of calculus.
- Apply the derivative to solve applications including related rate problems and optimization problems.
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Student Learning Outcomes

- Analyze and synthetize the concepts of limits, continuity, and differentiation from a graphical, numerical, analytical, and verbal approach, using correct notation and mathematical precision.
- Evaluate the behavior of graphs in the context of limits, continuity, and differentiability.
- Recognize, diagnose, and decide on the appropriate method for solving applied real-world problems in optimization, related rates, and numerical approximation.

Homework and Quizzes

Homework problems will be assigned regularly and posted in canvas each week. The homework for an entire week is due by 11:59 pm PST on Monday of the following week. The homework problems will provide a good preparation for the midterms and final exam.

Quizzes will be given approximately once a week and will be similar to the homework and class examples. The quizzes are take-home, will be posted in canvas on Friday each week, and are due back by 11:59 pm PST on the following Monday. Please submit your solution files through Canvas for both homework and quizzes.

Midterm Exams

There will be two one-hour in-class midterm exams:

- Monday, October 13
- Monday, November 10

Make-up midterms will only be given in extraordinary circumstances.

Final Exam: Monday, December 8, 1:45-3:45 pm

A mandatory comprehensive final exam will be given at the end of the quarter. The final exam must be taken on Monday, December 8, at the scheduled time. There is no make-up final exam.

Grading Policy

- Quizzes………………………15%
- Homework…………………...15%
- Each midterm exam…………20%
- Final exam……………………30%

A+: 98-100	**B+**: 87-88	**C+**: 74-77	**F**:0-54
A: 92-97	**B**: 80-86	**C**: 65-73	
A-: 89-91	**B-**: 78-79	**D**: 55-64	

Attendance Policy

Students are expected to attend all classes, to be on time and to stay for the entire class period. Any student who misses more than one (1) class during the first two weeks or more than three (3) classes before the withdraw deadline may be dropped by the instructor. If a student decides not to continue with the course, it is the student's responsibility to officially drop the course. Failure to do so may result in a grade of F for the course.

Academic Honesty Policy

Students are responsible for keeping themselves informed of the De Anza College Policy on Academic Integrity. Cheating will not be tolerated and may result in receiving a zero on the exam or an F for the course and being reported to the Dean of Students Office for possible disciplinary action.

https://www.deanza.edu/policies/academic-integrity.html

Student Conduct and Classroom Behavior

Students are responsible for keeping themselves informed of the De Anza College Student Code of Conduct. Disruptive classroom behavior is unacceptable. Examples of such behavior include, but not limited to, talking during lecture and student presentation, making distracting noises, or arriving to class late or leaving early. Persistent disruption may result in being asked to leave the class and/or being referred to the Dean of Students Office.

https://fhdafiles.fhda.edu/downloads/aboutfhda/5510ap.pdf

Accommodations for Students with Disabilities

Students with disabilities who believe that they may need accommodations in this course are encouraged to contact Disability Support Services (408-864-8753) or Educational Diagnostic Center (408-864-8839) as soon as possible to ensure that such accommodations are arranged in a timely fashion.

Student Learning Outcome(s):

• Analyze and synthesize the concepts of limits, continuity, and differentiation from a graphical, numerical, analytical and verbal approach, using correct notation and mathematical precision.

• Evaluate the behavior of graphs in the context of limits, continuity and differentiability.

• Recognize, diagnose, and decide on the appropriate method for solving applied real world problems in optimization, related rates and numerical approximation.

Office Hours:

TH	11:00 AM - 12:00 PM	Zoom
TH	12:00 PM - 1:00 PM	Zoom
T	12:00 PM - 1:00 PM	Zoom
T	11:00 AM - 12:00 PM	Zoom