

Math 1A Spring 2025

Instructor: John Jimenez Class: MTWR 12:30p-1:20p MLC 105

Email: jimenezjohn@fhda.edu Office hours (by F 8:00a-12:00p via Zoom

Appointment): Schedule appointments in

advance <u>here</u>.

Required Text and Recommended Materials:

• Textbook: Our (free) textbook will be Calculus Vol 1 from Openstax: https://openstax.org/details/books/calculus-volume-1.

• Access to https://deanza.instructure.com/. Canvas is where all the course information will be available. Information regarding grades, announcements, resources, etc.

Grading:

Exams	Quizzes	Final
50 %	20 %	30 %

Grading scale where $x = your grade$
$A + 97\% \le x$
A $92\% \le x < 97\%$
A- $90\% \le x < 92\%$
B+ $87\% \le x < 90\%$
B $82\% \le x < 87\%$
B- $80\% \le x < 82\%$
C+ $77\% \le x < 80\%$
$C 70\% \le x < 77\%$
D+ $67\% \le x < 70\%$
D $62\% \le x < 67\%$
D- $60\% \le x < 62\%$
F x < 60%

Exams 50 %: Three exams will be given throughout the quarter. The lowest exam score will be dropped.

- 4/24 Exam 1
- 5/15 Exam 2
- 6/5 Exam 3

Quizzes 20 %: Weekly quizzes will be given promptly at the start of class at the beginning of each week. The format of quizzes can range from calculation, theoretical, multiple choice, short answer, essay, etc. Quizzes will be timed appropriately depending on the style of questions that are asked.

Final 30 %: The final for this course will be a two-hour cumulative exam on 6/25 1A Wednesday from 11:30 AM to 1:30 PM in MLC 105.

Makeup and Assignment Policies: There are no makeup exams, quizzes, or final. All grades are final. If you take your exams, quizzes, or the final in the DSS center, it is your responsibility to reserve a time with the DSS testing facility prior to the assignment date. An assessment is defined as any material that is assigned by the instructor and to be completed by the student for a grade in the course. No calculators will be needed in this class and they will not be allowed on assessments.

Resources to Succeed in this Course:

- Free on campus tutoring for math in the Math, Science & Technology Resource Center located in S43. https://deanza.edu/studentsuccess/mstrc/
- The MESA center located in S54 has drop-in tutoring. https://www.deanza.edu/mesa/
- After-hours or weekend tutoring. See the <u>Online Tutoring</u> page for information about NetTutor (via Canvas) or Smarthinking (via MyPortal).

Classroom Attendance and Participation Protocol: Arrive to class on time. Arriving late is distracting to the class and also counterproductive toward your chances of doing well in the course. Many of the lectures in a math class can be dense and catching up on your own outside of the classroom will be significantly more difficult. The usage of smart devices, phones, or laptops in class is not permitted and they must be put away during lecture. Required usage of a device outlined in documentation provided by the DSS offices will be honored. Otherwise, no usage is allowed. Tablets may be used for note taking but they must be level with the writing surface, not upright.

Disability Statement: If you have a disability related need for academic accommodations or services in this course, you will need to provide me with a Test Accommodation Verification Form (TAV form) from Disability Support Services (DSS) or the Educational Diagnostic Center (EDC). Students are expected to give a two week notice if they are in need of accommodations. For those students with disabilities, you can obtain a TAV form from their DSS counselor (408 864-8753 DSS main number) or EDC advisor (408 864-8839 EDC main number). The application process can be found here: https://www.deanza.edu/dsps/dss/applynow.html

Academic Integrity: Students suspected of academic dishonesty shall be subject to College discipline which include suspension and or expulsion for any of the following misconduct that occurs at any time on campus or at any off campus facility, including internet-based courses held on the worldwide web, or college-approved or sponsored functions. Additionally a failing grade will be given to the student on the exam, quiz, or final that academic dishonesty has taken place. These standards are intended to promote responsible student conduct and fair play. For more details, see Administrative Procedure 5520: Student Discipline Procedures. https://www.deanza.edu/policies/academic_integrity.html.

Tentative Course Schedule:

Week	Section
1	Calculus Preparedness Questionnaire
	Limits 2.2
	Infinite limits and horizontal asymptotes 4.6
2	Limit laws 2.3
	Continuity 2.4
	Derivatives 3.1-3.2
3	Polynomial and exponential derivatives 3.3
	Product and quotient rules 3.3
	Tangent Lines 2.1
4	4/24 Exam 1
	The derivatives as rates of change 3.4
	Trig derivatives 3.5
	Chain rule 3.6
5	Related rates 4.1
	Implicit differentiation 3.8
	Newton's Method 4.9
6	Derivatives of inverse functions 3.7
	Maxima and minima 4.3
	Exam 2: Feb 24th
7	What Derivatives Tell Us about the Shape of a Graph 4.5
8	Curve sketching 4.6
	L'Hôspital's Rule 4.8
9	Optimization 4.7
10	6/5 Exam 3
	Antiderivatives 4.10
11	Hyperbolic functions 6.9 in Openstax Vol 2
	Parametric equations Section 7.1-7.2 in Vol 2 Openstax
	Rolle's Theorem, Intermediate Value Theorem, Mean Value Theorem 4.4
	Linear approximation and differentials 4.2
12	Final 6/25 1A Wednesday from 11:30 AM to 1:30 PM in MLC 105.

Important Dates:

- April 20 Last day to drop classes without a W
- May 24-26 Memorial Day Weekend no classes, offices closed
- May 30 Last day to drop classes with a W
- June 19 Juneteenth Holiday no classes, offices closed
- June 23-27 Final exams
- June 29 Graduation
- For a comprehensive list of important dates like the drop deadline

For a comprehensive list of important dates like the drop deadline http://www.deanza.edu/calendar/.

Course Description: Fundamentals of differential calculus. (5 units)

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:

F 8:00 AM - 12:00 PM

Zoom