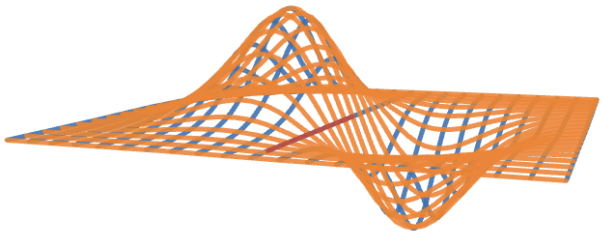

Math 1A: Calculus
Summer 2025 Asynchronous

Instructor: John Jimenez **Modality:** Asynchronous
Email: jimenezjohn@fhda.edu

Required Text and Recommended Materials:

- Textbook: Our (free) textbook will be Calculus Vol 1 from Openstax: https://openstax.org/details/books/calculus-volume-1. We will also use Vol 2 (link here) for some sections. Note that this book is available free in the online and PDF format. If you prefer a physical copy, that would be paid out of pocket and is available directly from the website or you can use the PDF file to print at a local printing facility (staples, office dept, a local printing shop).

- Calculator: Although not necessary for most of this course, it can sometimes be helpful to have access to some type of basic calculator. This can be a physical graphing calculator or a free online graphing tool such as https://www.desmos.com/ or https://www.wolframalpha.com/. Note that graphing calculators are not allowed on exams. TI30's or equivalent can be used on exams.

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

Goals for Students in the Course:

- To build a solid foundation for future math courses.

- To build confidence in their academic abilities in the math class and beyond.

- Be able to collaborate and discuss mathematics with classmates.

- To gain intuition behind concepts in the course.

Grading:

Midterm Exams	Homework	Final
55 %	30 %	15 %

Grading scale	
90-99.9% A	70-77.9% C
88-89.9 % B+	68-69.9 % D+
80-87.9% B	60-67.9% D
78-79.9% C+	$\leq$ 59.9 F

All assignments will be online through MyOpenMath which is a free online course management and assessment system for mathematics. You will automatically be enrolled and have access to MyOpenMath through Canvas so no action is required by students.

Exams 55 %: Three exams will be given throughout the quarter (not including the final). See the schedule at the end of the syllabus for the dates of the exams. The lowest exam score will be dropped.

Homework 35 %: There will be weekly homework assigned on canvas though MyOpenMath..

Final 15 %: The final for this course will be on 8/8/25, the last day of class.

Assignment submission guidelines: All assignments will have due dates posted but in case of an emergency I will still accept your assignment if it is not completed by the due date. If for some reason you cannot turn in an assignment, use a LatePass and turn it in as soon as possible without penalties. There is only a finite amount of LatePasses you can use so use them wisely!

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

To protect students GPA, you may be dropped from the course if:

- You miss the first day of class.
- You have multiple missing assignments including the first week assignments.
- You do not interact with Canvas regularly to keep up with the course.
- Failure to communicate why you miss a class meeting or miss an assignment deadline.

Note that if for any reason you feel like you may need to drop the course, it is your responsibility to do so.

Academic Integrity: If it is suspected that academic dishonesty is taking place on an assignment, the college will be notified and will result in a failing grade on the assignment or a failing grade in the class. For further information on academic integrity please see https://www.deanza.edu/policies/academic_integrity.html.

Tentative Course Schedule:

Week	Section
1	Some review Ch 1 Limits 2.2 Limit laws 2.3 Continuity 2.4 Tangent Lines 2.1 Derivatives 3.1-3.2
2	Polynomial and exponential derivatives 3.3 Product and quotient rules 3.3 Trig derivatives 3.5 **Exam 1**
3	Linear approximation and differentials 4.2 Chain rule 3.6 Implicit differentiation 3.8 Related rates 4.1 Derivatives of inverse functions 3.7
4	Maxima and minima 4.3 Infinite limits and horizontal asymptotes 4.6 Curve sketching 4.5 L'Hôspital's Rule 4.8 **Exam 2**
5	Newton's Method 4.9 Optimization 4.7 Antiderivatives 4.10
6	Hyperbolic functions 6.9 in Openstax Vol 2 Parametric equations Section 7.1-7.2 in Vol 2 Openstax Mean Value Theorem 4.4 **Exam 3**
	Final Exam Friday 8/8

For a comprehensive list of important dates see 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: