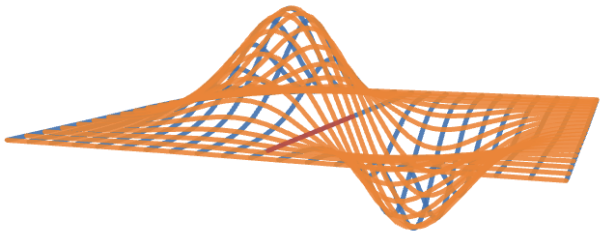

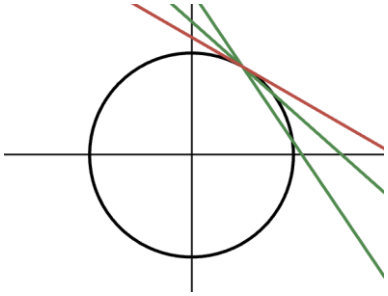

Math 1A: Calculus
Spring 2025 MPS

Instructor:	John Jimenez	**Class:**	M-Th 09:30a-11:20a in S75
Email:	jimenezjohn@fhda.edu	**Office hours:**	M-Th 11:30a-12:30p in S55

Note that this course is a part of the Math Performance Success Program.

Program Mission

The Math Performance Success (MPS) program established at De Anza Community College in 1999, aims to help all underrepresented students meet their goals by improving student success in math through innovative and collaborative approaches including extended lecture time, in-class tutoring, and embedded counseling services.

Program Philosophy

The MPS program team members are dedicated to the philosophy that any willing student with the proper support and services can succeed in mathematics. Instructors, counselors, and tutors collaborate to help students complete their mathematics requirements. **The MPS program is designed for students who have had previous difficulty with Math.**

Structure

How does an MPS Math Classroom look like?

Students in the MPS program attend math class for two hours a day, approximately 10 hours a week, double the class time compared to a stand-alone math course. This extended instructional time, provides ample time for lecture, class activities, mindfulness, and group work. Tutors are available during the second part of the class to assist students who have questions about the material. Counselors also use the second hour of this class to check-in on students and make sure they are on track in succeeding in the course.

Important contact information:

Director, STEM Success Program Yvette Campbell, PHD campbellyvette@fhda.edu	MPS Counselor/Coordinator TBA
Program Coordinator Deepa Yuvaraj yuvarajdeepa@fhda.edu	Tutors TBA

If you have any questions regarding the program, you can contact myself or anyone listed above. Preferably the counselors.

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:

Exams	Homework	Final
60 %	20 %	20 %

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+	≤ 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 60 %: Three exams will be given throughout the quarter. See the schedule at the end of the syllabus for the dates of the exams. The lowest exam score will be dropped.

Homework 20 %: Homework will be assigned at the beginning of each lecture week and will be due one week after it is assigned. The two lowest homework grades will be dropped.

Final 20 %: The final for this course will be a two-hour cumulative exam. The final exam score will replace your lowest exam score. The final exam is on Tuesday March 25th from 9:15 AM to 11:15 AM.

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!

Resources to Succeed in this Course:

- The MESA center located in S54 has drop-in tutoring that you should definitely make use of! https://www.deanza.edu/mesa/
- Another great place to find tutors is in Math, Science & Technology Resource Center located in S43. https://deanza.edu/studentsuccess/mstrc/

- After-hours or weekend tutoring**.** See the Online Tutoring page for information about NetTutor (via Canvas) or Smarthinking (via MyPortal).

- Office hours! I encourage students to ask me any questions about the course content if they wish! You can reach me via Zoom in the times listed on the first page of the syllabus. This is another great place to get help on material related to the course.

- **It is known that students who participate in tutoring, group study, or workshops for three or more hours a week succeed at much higher rates than those who do not. The students who most need the help may reluctant, but if you take the first step in seeking resources you will be glad you did.**

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
2	Tangent Lines 2.1 Derivatives 3.1-3.2
3	Polynomial and exponential derivatives 3.3 Product and quotient rules 3.3
4	**Exam 1: Jan 27th** The derivatives as rates of change 3.4 Trig derivatives 3.5 Linear approximation and differentials 4.2
5	Chain rule 3.6 Related rates 4.1 Implicit differentiation 3.8 Newton's Method 4.9
6	Derivatives of inverse functions 3.7 Derivatives of logarithmic functions 3.9 Maxima and minima 4.3 Infinite limits and horizontal asymptotes 4.6
7	What Derivatives Tell Us about the Shape of a Graph 4.5 L'Hôspital's Rule 4.8
8	**Exam 2: Feb 24th** Curve sketching 4.6
9	Optimization 4.7
10	Antiderivatives 4.10
11	**Exam 3: March 17th** Hyperbolic functions 6.9 in Openstax Vol 2 Parametric equations Section 7.1-7.2 in Vol 2 Openstax Mean Value Theorem 4.4
12	**Finals Week**: Final is on Tuesday March 25th from 9:15 AM to 11:15 AM

Important Dates:
For a comprehensive list of important dates like the drop deadline (February 28 Last day to drop classes with a W) 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:

F	08:00 AM	12:00 PM	Zoom	By Appointment