

Math 1A: Calculus  
Fall 2023

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**Instructor:** John Jimenez  
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**Office hours (via [Zoom](#)):** Fridays 12:00a - 4:00p

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**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 graphing 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/>.
- 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	Project	Final
45 %	20 %	5%	30 %

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 45 %:** 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 replaced by the final exam grade if the final exam is a better score than any one midterm.

**Homework 20 %:** Homework will be assigned at the beginning of each lecture week and will be due one week after it is assigned.

**Project 5 %:** There will be one project to enrich your understanding of topics studied in the course and beyond.

**Final 30 %:** The final for this course will be a two-hour cumulative exam.

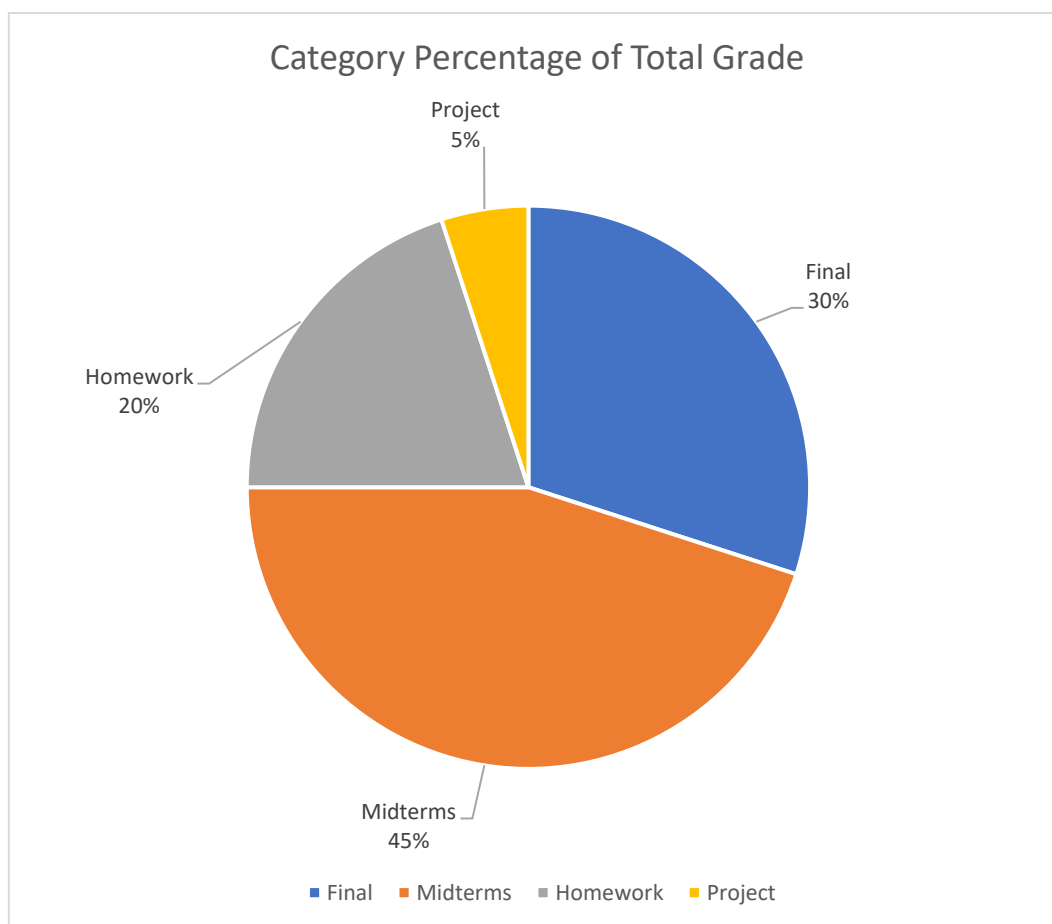


Figure 1: Grade categories for the course as a percentage of total grade.

**Assignment submission recommendation:** All assignments will have due dates. If for some reason you cannot turn in an assignment, you can redeem a LatePass and turn it in as soon as possible without penalties. LatePasses are automatically activated if you choose to use one so you do not need to reach out to me for permission. You get 5 late passes each of which can extend the due date of one assignment by 48 hours per. You cannot use a LatePass on an assignment if it is 10 days past due.

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

- You have multiple missing 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.

## How to Succeed in this Course:

- The Student Success Center tutors and workshops area a great place to start! Watch the [SSC Welcome Video](#) to learn more.

## Tutoring:

For tutoring through MPS visit <https://www.deanza.edu/mps/mpstutoring/index.html>.

For tutoring through The Student Success go to <http://deanza.edu/studentssuccess> and click to join a Zoom tutoring room during open hours.

**Workshops:** Attend a [Skills Workshop](#), a [content-specific math/science workshop](#), an [Accounting chapter review workshop](#), or a [Listening and Speaking workshop](#).

**Resources:** Join the [SSC Resources Canvas site](#) to see content and learning skills links.

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

**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.**

- 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.

**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:** 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](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 Exam 1
4	The derivatives as rates of change 3.4 Trig derivatives 3.5 Linear approximation and differentials 4.2 Newton's Method 4.9
5	Chain rule 3.6 Derivatives of inverse functions 3.7 Implicit differentiation 3.8 Derivatives of logarithmic functions 3.9 Related rates 4.1
6	Maxima and minima 4.3 What Derivatives Tell Us about the Shape of a Graph 4.5 Exam 2
7	Infinite limits and horizontal asymptotes 4.6 L'Hôpital's Rule 4.8
8	Curve sketching 4.6
9	Optimization 4.7 Exam 3
10	Antiderivatives 4.10
11	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 Exam is on Monday Dec 11 from 11:00 AM to 1:15PM

**Important Dates:**

Date	
Nov 10	Veterans Day holiday – no classes; offices closed
Nov 17	Last day to drop classes with a W
Nov 23-26	Thanksgiving holiday – no classes; offices closed
Dec 11-15	Finals Week

For a more 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:**

F      12:00 PM      04:00 PM      Zoom