

**Math 1A: Calculus – Winter 2024**

Mon. – Thur. 11:30am-12:20pm in G-1

**Instructor:** Cheryl Jaeger Balm Email: [balmcheryl@fhda.edu](mailto:balmcheryl@fhda.edu)  
Office: S-76G

**Office hours:** Mondays 12:30-2:00pm in S-43 (math & science tutoring center)  
Tuesdays 12:30-1:30pm in S-54 (MESA center)  
Wednesdays 12:30-2:00pm in S-55 (Physical Sciences & Technology Village Space)

**My goals for you this quarter:**

- Believe that you can **excel** at math, no matter what your past experiences have been.
- Be fully prepared to pass your future Calculus courses

**Textbook:** Free OpenStax textbook at <https://openstax.org/details/books/calculus-volume-1>

**Calculators:** You do *not* need a graphing calculator for this class. You may need to use a graphing calculator or the graphing website [desmos.com](https://www.desmos.com) or the Desmos app for some homework problems, but no calculator will be needed or permitted during quizzes and exams.

**I C U Care principles**

Include others as experts – Look beyond the expertise of the teacher to recognize your own **brilliance** and that of your classmates.

Critical consciousness – Understand negative stereotypes and actively work to erase their effects.

Understand how relationships improve learning – Get to know your teacher and classmates!

Culturally relevant resources – Seek out resources that help you see yourself as a **doer** of mathematics.

Assess, activate and build on prior knowledge – Value the prior knowledge you bring to the classroom and build on it to learn new things.

Retain control – Take ownership of your learning!

Expect more – Expect more from yourself and your classmates by rising above any low expectations that others may set for you or that you may have for yourself. Expect more from your teacher to **teach you until you understand.**

**Attendance:** Regular, punctual attendance at all class meetings is expected of each student. Students absent during the first two weeks of class may be dropped unless they contact the instructor. Each tardy of more than 15 minutes will count as half an absence, as will leaving class more than 15 minutes early.

**Homework:** You will be given a list of suggested homework problems from the textbook. The homework will *not* be collected or graded. However, solving these problems is essential for keeping up with the class. Moreover, the exams and quizzes will be of the same spirit as the homework and will often contain similar or identical problems. You are expected to work on each day's assigned problems before you come to the next class meeting.

**Quizzes:** There will be 7 weekly quizzes, usually in class on Thursdays. Quizzes will be open-note, but you must show all your work on each problem you receive full credit. The material that each quiz will focus on will be announced in class the day before the quiz. Your lowest quiz score will be dropped. There are no make-up quizzes.

**Midterm Exams:** There will be 4 in-class midterm exams. All exam dates are listed on the class calendar and in Canvas. Each of the midterm exams will focus the material covered since the previous test.

**Final Exam:** There will be a final exam on **Monday, March 25, 11:30am-1:30pm**. The final exam will cover all material from throughout the quarter.

**Podcast:** You will create 4 podcast episodes for this class. Details are in the Podcast Project instructions in Canvas. All podcast due dates are listed on the class calendar and in Canvas.

**Projects:** Two projects will be assigned during the quarter. Details of each project will be available in Canvas. Project due dates are listed on the class calendar and in Canvas.

**Course grades will be assigned as follows:**

2 Projects	4 Podcasts	6 Quizzes	4 Midterms	Final
10%	16%	24%	40%	10%
(5% each)	(4% each)	(4% each)	(10% each)	

Grade	A	B	C	D
Overall percent	$\geq 90$	$\geq 80$	$\geq 70$	$\geq 60$

**Student resources:**

- Your classmates: Form study groups to learn from one another.
- Your instructor: Make use of office hours. **Do not wait until you are drowning to get help!**
- MSTRC (Math, Science and Technology Resource Center): Free peer tutoring is available in person in S-43 and online via Zoom. Hours and more details can be found at <https://deanza.edu/studentsuccess/mstrc/>.
- More free student resources are listed in the Start Here module in Canvas

**Other:**

- If you have any questions regarding your grade on any assignment, please discuss the matter with me before leaving the room with the graded material. Once the graded material has left the classroom, no grading changes will be made.
- **Cell phone policy:** Cell phones and other devices should be turned off or set to **silent** (not vibrate) and **not visible** throughout class unless you have discussed with me why you need to receive notifications during that class period. If I decide that your phone, laptop, tablet or other device is a distraction to others, I will talk to you about using it in a less distracting manner. If it continues to be a problem, it may be confiscated until the end of that class meeting.
- Disruptive talking and other interruptions during class is not conducive to learning will not be tolerated. Respect your classmates and your instructor!

**Academic Integrity:** **Academic dishonesty will not be tolerated.** If a student is found cheating and/or copying on any assignment, test or quiz or violating any other code of academic integrity, they will receive a 0 on the assignment and may receive failing grade for the course and/or be reported to the Dean of the PSME Division. Those caught twice may be expelled from the class with an F.

**Disability Statement:** De Anza College makes reasonable accommodations for people with documented disabilities. Please notify Disability Support Services (DSS) if you have any physical, psychological or other disabilities, including vision or hearing impairments or ADD/ADHD. DSS is located in RSS 141. Phone number: 408-864-8753. Website: <http://www.deanza.edu/dss/>.

**Student Learning Outcomes** (aka what I hope you get out of Math 1A mathematically):

- 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.

**Important Dates for Winter Quarter 2023:**

- Sat., Jan. 20: Last day to add classes.
- Sun., Jan. 21: Last day to drop for a full refund and with no record of grade.
- Fri., Mar. 1: Last day to drop with a “W.”

**Tentative class schedule (subject to change):**

Week	Mon	Tues	Wed	Thur	async
<b>Week 1:</b> Jan. 8-12	Prior knowledge: Functions (1.1, 1.2, 1.4A)	Prior knowledge: Trig (1.3, 1.4B)	Prior knowledge: Exponents & logs (1.5)	Limits (2.1, 2.2)	<b>Quiz 1 due Friday</b>
<b>Week 2:</b> Jan. 15-19	<b>NO CLASS</b>	Limit laws (2.3); Start podcasts	Continuity (2.4)	<b>Quiz 2</b>	
<b>Week 3:</b> Jan. 22-26	Derivative definition (3.1, 3.2)	Review	<b>EXAM 1</b>	Polynomial derivatives (3.3A)	<b>Podcast #1 due Sunday</b>
<b>Week 4:</b> Jan. 29 - Feb. 2	Product & quotient rules (3.3B)	Trigonometric derivatives (3.5)	Rate of change (3.4)	<b>Quiz 3</b>	Newton’s method (4.9) Canvas video
<b>Week 5:</b> Feb. 5-9	Linear approximation (4.2)	Review	<b>EXAM 2</b>	Chain rule (3.6); Start Project #1	<b>Podcast #2 due Sunday</b>
<b>Week 6:</b> Feb. 12-16	Implicit differentiation (3.7, 3.8)	Exponential & logarithmic derivatives (3.9A)	Logarithmic differentiation (3.9B)	<b>Quiz 4</b>	
<b>Week 7:</b> Feb. 19-23	<b>NO CLASS</b>	Related rates (4.1)	Parametric equations (Calc 2 §7.1)	Parametric derivatives (Calc 2 §7.2)	<b>Project #1 due Friday</b>

<b>Week</b>	<b>Mon</b>	<b>Tues</b>	<b>Wed</b>	<b>Thur</b>	<b>async</b>
<b>Week 8:</b> Feb. 26 - Mar. 1	<b>Quiz 5</b>	Review	<b>EXAM 3</b>	Asymptotes (4.6)	<b>Podcast #3 due Sunday</b>
<b>Week 9:</b> Mar. 4-10	l'Hôpital's rule (4.8)	Extreme Value Theorem (4.5)	Mean Value Theorem (4.4)	<b>Quiz 6</b>	
<b>Week 10:</b> Mar. 11-15	Curve sketching (4.5); Start Project #2	Optimization (4.7)	Optimization cont.	<b>Quiz 7</b>	<b>Podcast #4 due Sunday</b>
<b>Week 11:</b> Mar. 18-22	Antiderivatives (4.10); <b>Project #2 due</b>	Review	<b>EXAM 4</b>	Review	<b>Final podcast deadline Friday</b>
<b>Week 12:</b> Mar. 25-29	<b>FINAL EXAM 11:30 - 1:30</b>				

**Student Learning Outcome(s):**

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- 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:**

In-Person	S-43 tutoring center	M	12:30 PM
In-Person	S-54 MESA center	T	12:30 PM
In-Person	S-55 PST Village center	W	12:30 PM