

## Math 1A: Calculus – Winter 2021

This class will be conducted completely online.

**Instructor:** Cheryl Jaeger Balm

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### My goals for you this quarter:

- Pass this class, despite the stresses and constraints of remote instruction
- Be fully prepared to pass your future Calculus courses

### How to Get Help With This Class:

- From your instructor: Make use of office hours, Canvas Inbox and WebAssign “Ask My Professor”.  
**Do not wait until you are drowning to get help!**

**Office Hours:** 1-3pm Mondays and Tuesdays via Zoom

Zoom Meeting ID: 973 5945 0587 Passcode: 157635

Join By Phone: 408-638-0968

- From the De Anza tutoring center: Since campus is closed, free online tutoring via Zoom is available instead, along with Academic Skills Workshops. More details can be found at <https://www.deanza.edu/studentssuccess/>.
- From your classmates: Participate in the Canvas Discussion boards and form virtual study groups to learn from one another.

**Canvas (Class Website):** All class content, assignments and announcements will be on **Canvas**, which you can access through MyPortal. It is strongly recommended that you also download the **Canvas app** if you have a smart phone.

Once you have accessed **Canvas**, please go to Account → Notifications and adjust your **Notification Preferences** so that you have selected “**Notify me right away**” for *Announcement, Submission Comment, Discussion Post* and *Conversation Message*. Other notification settings are up to you.

**Textbook:** *Stewart, Calculus Early Transcendentals* (8th edition) with WebAssign

The eBook with WebAssign can be purchased for \$60 directly through this class’s Canvas course.

**Calculators:** If you have a graphing calculator you may use it in this class. If you do not have a graphing calculator you can instead use a scientific calculator and the free graphing website [desmos.com](https://www.desmos.com) or the Desmos app.

**All assignments must be completed by 9:00pm on the day they are due.**  
This includes homework, quizzes, exams and projects.

**Homework:** You will be given online homework through WebAssign after each section that we cover. In addition, you will also be required to upload written work to Canvas for some assignments. Pay close attention to due dates and do not wait until the last minute to start assignments. Your 2 lowest online homework scores will be dropped. **Your homework will account for 15% of your course grade.**

**Discussions:** Even though this class is online, you are expected to participate and work with your classmates. Each week there will be two discussion boards active in Canvas. One discussion will be a place to ask and answer homework questions and give study tips on that week's Calculus material. In the other, you will be prompted to discuss a specific topic in math or education. **These discussions will account for 5% of your course grade.**

**Quizzes:** Most weeks will include a quiz through WebAssign which will be available from 6:00am Monday until 9:00pm Tuesday. Once you start the quiz, you will have 1 hour to complete it, and you will get two attempts on each quiz. Quizzes will focus on the material covered since the previous quiz. **Your quizzes will account for 20% of your course grade.**

**Midterm Exams:** There will be four midterm exams. Each exam will have two parts: an online portion through WebAssign and a handwritten portion which you will upload to Canvas. Once you start the online portion of the exam, you will have 2 hours to complete it. Each midterm exam will focus the material covered since the previous exam. More details on exam dates and procedures can be found in Canvas. **Each midterm exam will account for 10% of your course grade.**

**Final Assessment:** You will be given a cumulative final assessment (exam or project) at the end of the quarter. More details will be available on Canvas. **Your final will account for 10% of your course grade.**

**Projects:** Two projects will be assigned during the quarter. Details of each project will be available in Canvas. **Each project will account for 5% of your course grade.**

**Grading:**

Grade	A	B	C	D
Overall percent	≥ 90	≥ 80	≥ 70	≥ 60

Homework	Discussions	10 Quizzes	4 Midterm Exams	Final	2 Projects
15%	5%	20%	40% (10% each)	10%	10% (5% each)

**Disability Statement:** De Anza College makes reasonable accommodations for people with documented disabilities. Please notify Disability Support Programs and Services (DSPS) if you have any physical, psychological or other disabilities, vision, hearing impairments or ADD/ADHD. DSPS is still operating remotely while campus is closed. More details can be found at <https://www.deanza.edu/dsps/>

**Academic Integrity:** Learning involves the pursuit of truth, which cannot be pursued by presenting someone else's work as your own. Each student must pursue their academic goals honestly and be personally accountable for all submitted work. Representing another person's work as your own is always wrong. Any suspected instance of academic dishonesty on any assignment will be reported to the college and may result in a 0 on the assignment and/or a failing grade in the class. For more comprehensive information on academic integrity, including categories of academic dishonesty, please refer to [https://www.deanza.edu/policies/academic\\_integrity.html](https://www.deanza.edu/policies/academic_integrity.html).

**Class schedule (subject to change):**

<b>Week</b>	<b>Topics and Sections</b>
<b>Week 1</b> 4/5-9	Introductions Prerequisites and prior knowledge (Ch.1) ROC and tangent lines (2.1) Limits (2.2)
<b>Week 2</b> 4/12-16	Limit laws(2.3) Continuity (2.5) Intro to derivatives (2.7, 2.8)
<b>Week 3</b> 4/19-23	<b>Exam 1</b> Polynomial and exponential derivatives (3.1) Product and quotient rules (3.2)
<b>Week 4</b> 4/26-30	Trig derivatives (3.3) Linear approximation and differentials (3.10) Newton's Method (4.8)
<b>Week 5</b> 5/3-7	<b>Exam 2</b> <b>Start Project 1</b> Chain rule (3.4) Implicit differentiation (3.5)
<b>Week 6</b> 5/10-14	Logarithmic differentiation (3.6) Related rates (3.9)
<b>Week 7</b> 5/17-21	<b>Project 1 due</b> Parametric equations (10.1, 10.2)
<b>Week 8</b> 5/24-28	<b>Exam 3</b> Infinite limits and horizontal asymptotes (2.6) l'Hôpital's Rule (4.4)
<b>Week 9</b> 5/31 – 6/4	<b>Memorial Day</b> Maxima and minima (4.1) Mean Value Theorem (4.2) Curve sketching (4.3, 4.5) <b>Start Project 2</b>
<b>Week 10</b> 6/7-11	Optimization (4.7) Antiderivatives (4.9)
<b>Week 11</b> 6/14-18	<b>Project 2 due</b> <b>Exam 4</b>
<b>Week 12</b> 6/21-25	<b>Final Assessment</b> <b>Have a great summer!!!</b>

**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.