

Math 1A: Calculus – Spring 2020

This class will be conducted completely online.

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

Instructor: Cheryl Jaeger Balm

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Office Hours:

Mon. & Wed. 3:30-4:30 pm

Tues. & Fri. 1:00-2:00 pm

Important: Read the “Office Hours Information” in the first Canvas module for details on how to contact me during office hours.

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

You will be given **FREE** access to the textbook and WebAssign via 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.

Calculators: You may want a calculator for this class, but it is not required. You might need either a graphing calculator or access to the graphing website [desmos.com](https://www.desmos.com) or the Desmos app for some homework problems, but no calculator will be needed for any quizzes of exams.

Homework: You will be given online homework through WebAssign after each section that we cover. In addition, you will also be assigned a small number of problems in most sections to do by hand with pen/cil and paper which you will then upload to Canvas. Pay close attention to due dates and do not wait until the last minute to start assignments. Your 3 lowest homework scores will be dropped. **Your homework will account for 15% of your course grade.**

Check-ins: You are expected to log into Canvas and work on Math 1A **every day** Monday through Friday. To help ensure that this happens, on days in which no assignments are due there will be small check-ins that will only be available during that day. Please note that if you are in a different time zone, the check-ins will close at 11:59pm PST. **These check-ins will account for 5% of your course grade.**

Quizzes: Each week will end with a quiz through WebAssign which will be available from 6am Friday until 11:59pm Saturday. Once you start the quiz, you will have 1 hour to complete it. Quizzes will focus on the material covered during that week. Your lowest quiz score will be dropped. **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. 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 Exam: The final exam will be given through WebAssign and will cover all material from throughout the quarter. More details on the final exam will be available on Canvas. **Your final exam will account for 10% of your course grade.**

Projects: Two projects will be assigned during the quarter, one in Week 5 and one in Week 9. Details of each project will be available in Canvas. **Each project exam will account for 5% of your course grade.**

Grading:

Homework (online & written)	Check-ins	9 Quizzes	4 Midterm Exams	Final Exam	2 Projects
15%	5%	20%	40% (10% each)	10%	10% (5% each)

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

Student resources:

- Your classmates: Participate in the Canvas Discussion boards and form virtual study groups to learn from one another.
- MSTRC (Math, Science and Technology Resource Center): Since campus is closed, free online tutoring via Zoom is available instead, along with Academic Skills Workshops. More details can be found here <http://deanza.edu/studentssuccess/servicesupdate.html>.
- Your instructor: Make use of virtual office hours and email (preferably through the Canvas Inbox). If you are not available during office hours, please make an appointment to chat with me at another time. **Do not wait until you are drowning to get help!** Please contact me for help or to talk about your grade. That is what I am here for!

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 here <https://www.deanza.edu/dsps/>

Academic Integrity: Academic dishonesty will not be tolerated. If a student is found cheating and/or copying on **any** assignment, or violating any other code of academic integrity, he or she 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 will be expelled from the class with an F.

Tentative class schedule (subject to change):

Week	Topics and Sections
Wk 1 4/13-17	Introductions Prerequisites and prior knowledge (Ch.1) ROC and tangent lines (2.1)
Wk 2 4/20-24	Limits and limit laws (2.3, 2.4) Continuity (2.5) Exam 1
Wk 3 4/27 - 5/1	Intro to derivatives (2.7, 2.8) Polynomial and exponential derivatives (3.1)
Wk 4 5/4-8	Product and quotient rules (3.2) Trig derivatives (3.3) Newton's Method (4.8)
Wk 5 5/11-15	Chain rule (3.4) Logarithmic differentiation (3.6) Start Project 1
Wk 6 5/18-22	Implicit differentiation (3.5) Related rates (3.9) Linear approximation and differentials (3.10)
Wk 7 5/25-29	Parametric equations (10.1, 10.2) Exam 3
Wk 8 6/1-5	Infinite limits and horizontal asymptotes (2.6) l'Hôpital's Rule (4.4)
Wk 9 6/8-12	Maxima and minima (4.1) Mean Value Theorem (4.2) Curve sketching (4.3, 4.5) Start Project 2
Wk 10 6/15-19	Optimization (4.7) Antiderivatives (4.9) Exam 4
Wk 11 6/22-26	Final Exam Have a great summer!!!

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.