

Math 1C: Calculus – Winter 2022
Tuesdays and Thursdays 1:30 - 3:45pm in S-35

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My goals for you this quarter:

- Pass this class, despite the continued stresses and constraints of the pandemic
- Know the material well so you can use it successfully in your future STEM courses

Tips to get the most from office hours:

- Start your assignments **early** so you can ask questions in office hours.
- Ask questions before class! Don't assume we will have time to get to everyone's questions during our class meetings (although I will do my best to do so time-permitting).
- You can always make an appointment to meet with me (virtually or in-person) if you are busy during regular office hours or want to talk one-on-one.

Office Hours

In-person in S-76g: Tuesdays and Thursdays 12:45-1:15pm
On Zoom: Mondays and Wednesdays 9:00-9:30 (link in Canvas)

Attendance: Students enrolled in the course are expected to be present **in-person** for all class meetings. If you miss a class, you are responsible for covering the material before you return to class. You should read the corresponding section(s) of the textbook and get notes from a classmate. You are also responsible for knowing about any changes to the syllabus and/or schedule that may be announced in class. Please stay home if you are not feeling well or awaiting results from a COVID test, but otherwise you should plan to attend all class meetings.

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* (9th edition)

If you do not already have it, the eBook can be purchased for \$60 in our Canvas course.

Calculators: A scientific calculator without graphing capabilities is required for this class and should be brought with you to each lecture. In addition, you may need to use the graphing websites [desmos.com](https://www.desmos.com) or [geogebra.org/3d](https://www.geogebra.org/3d) for some homework problems.

Cell phones: While it may be useful to bring a laptop or tablet to class to access your eBook or a graphing website, during much of class cell phones, tablets, laptops and other electronic devices will not be permitted and should not be seen or heard unless otherwise instructed. Your cell phone is not considered a calculator for the purposes of this class, and you will not be allowed to use a cell phone or tablet during quizzes or tests. If I see or hear your cell phone or you using it during class time, I may confiscate it until the end of that class meeting.

Homework: You will be given a list of suggested homework problems. 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 identical problems. You are expected to work on all the assigned problems corresponding to a lecture before you come to the next lecture.

Discussions: Each week there will be a discussion board in Canvas. You will be prompted to discuss a specific topic in math or education. **These discussions will account for 5% of your course grade.**

Labs: There will be 5 labs. The intention behind lab assignments is to encourage you to think more deeply about the material. These labs will be worked on in groups of three or four. There will be some initial time allotted to these lab assignments during class, but you will need to work on them outside of class to complete them. Although every student must turn in a copy of the lab, you will be graded as a group on the assignment. For further information regarding the lab assignments please read the Lab Grading Policies. Labs will be assigned in class on Tuesdays and must be submitted via Canvas the following Monday. No late lab assignments will be accepted. Your lowest lab grade will be dropped. **Labs will account for 10% of your course grade.**

Group Quizzes: There will be 6 group quizzes. These will begin at the end of the class on Thursdays and must be submitted via Canvas after class. You will be given time in class to work with your classmates to start each group quiz. After class, you may continue to work with your classmates, or you may complete the group quiz on your own. These will be graded individually, and your lowest group quiz grade will be dropped. **Group quizzes will account for 10% of your course grade.**

In-Class Quizzes: There will be 7 in-class quizzes. These quizzes will be held at the start of class on Tuesdays and will usually be open-note, but you must show all your work on each problem to receive full credit. Your lowest quiz score will be dropped. There are no make-up quizzes. **In-class quizzes will account for 15% of your course grade.**

Midterm Exams: There will be 5 midterm exams. Each midterm exam will focus the material covered since the previous exam. **Your lowest 2 exam grades will each account for 7% of your course grade, and the other 3 exams will each account for 12% of your course grade.** If an exam is missed under extreme circumstances and for a very valid reason, an equivalent of the final exam score will replace the missing exam score.

Final: You will have a final project that will cover all material from throughout the quarter. More details on the final will be available later in the quarter. **Your final will account for 10% of your course grade.**

Exam dates:

- Exam 1: Thursday, January 20
- Exam 2: Thursday, February 3
- Exam 3: Thursday, February 17
- Exam 4: Thursday, March 3
- Exam 5: **Tuesday**, March 15
- Final due Tuesday, March 22 at 3:45pm

Course Grades:

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

Discussions	4 Labs	5 Group Quizzes	6 In-class Quizzes	2 Lowest Midterms	3 Highest Midterms	Final
5%	10% (2.5% each)	10% (2% each)	15% (3% each)	14% (7% each)	36% (12% each)	10%

Student resources:

- Your classmates: Form study groups, virtual and in-person, to learn from one another.
- MSTRC (Math, Science and Technology Resource Center): Since the tutoring center is still closed for in-person services, free online tutoring via Zoom is available instead, along with Academic Skills Workshops. More details can be found here <https://www.deanza.edu/studentsuccess/>.
- Your instructor: Make use of office hours and email via Canvas Inbox. If you are not available during office hours, please make an appointment to see me at another time, in-person or on Zoom. **Do not wait until you are drowning to get help!**

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. More details can be found here <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.

Tentative class schedule (subject to change):

Week	Tuesday	Thursday
Wk 1: Jan. 4 & 6	Introductions Sequences (11.1)	Intro to Series (11.2) Group Quiz 1 (11.1, 11.2)
Wk 2: Jan. 11 & 13	Quiz 1 (11.1, 11.2) Integral Test; p-series (11.3) Comparison Test (11.4) Start Lab 1	Limit Comparison Test (11.4 cont.) Alternating Series (11.5) Ratio Test (11.6) Group Quiz 2 (11.3-11.5)
Wk 3: Jan. 18 & 20	Quiz 2 (11.3-11.5) Root Test (11.6 cont.) Convergence Tests Summary (11.7) Exam review	EXAM 1 (11.1-11.7) Power Series (11.8)
Wk 4: Jan. 25 & 27	Quiz 3 (11.8) Functions as Power Series (11.9) Start Lab 2	Taylor Series (11.10) Group Quiz 3 (11.9, 11.10)
Wk 5: Feb. 1 & 3	Quiz 4 (11.9, 11.10) Taylor Polynomials (11.11) Exam review	EXAM 2 (11.8-11.11) Parametric Equations (10.1) Parametric Derivatives (10.2)
Wk 6: Feb. 8 & 10	Parametric Integrals (10.2 cont.) Polar Graphs (10.3) Start Lab 3	Polar Derivatives (10.3 cont.) Polar Areas (10.4) Group Quiz 4 (10.1-10.3)
Wk 7: Feb. 15 & 17	Quiz 5 (10.1-10.3) Polar Arc Length (10.4 cont.) Exam review	EXAM 3 (10.1-10.4) 3D Coordinates (12.1) 3D Vectors (12.2)
Wk 8: Feb. 22 & 24	Quiz 6 (12.1, 12.2) Dot Product & Projections (12.3) Start Lab 4	Cross Product (12.4) 3D Lines (12.5) Group Quiz 5 (12.3, 12.4)
Wk 9: Mar. 1 & 3	Quiz 7 (12.3, 12.4) Planes (12.5 cont.) Exam review	EXAM 4 (12.1-12.5) Vector Functions (13.1)
Wk 10: Mar. 8 & 10	Intro to Vector Calculus (13.2) 3D Arc Length (13.3)	Curvature; Normal vectors (13.3 cont.) Group Quiz 6 (13.1-13.3)
Wk 11: Mar. 15 & 17	EXAM 5 (13.1-13.3) Final Project Instructions Start Lab 5	Approval of Final Project topics
Wk 12: Mar. 22	Final Projects due 3:45pm Tues.	Have a great spring break!!!

Student Learning Outcome(s):

*Graphically, analytically, numerically and verbally analyze infinite sequences and series from the perspective of convergence, using correct notation and mathematical precision.

*Apply infinite sequences and series in approximating functions.

*Synthesize and apply vectors, polar coordinate system and parametric representations in solving problems in analytic geometry, including motion in space.