

MATH 1C

CRN 38459

SECTION 5Y

MATH1CH

CRN 39359

Students in this course will learn about infinite series, lines, and planes in three dimensions, vectors in two and three dimensions, parametric equations of curves, derivatives, and integrals of vector functions.

Instructor: **Dr Zack Judson**

Modality: 80% Face to Face / 20% Online

Time: MTWTh 9:30-10:20 Room: G5

Drop In Hours: TW 8:30-9:20 Room: G5

Email: judsonzack@deanza.edu

Prerequisite: Math 1B or an equivalent course

Text: **“Calculus Early Transcendentals, 9th Edition” by James Stewart
(Recommended, Not Required)**

Student Learning Outcomes

1. Graphically, analytically, numerically and verbally analyze infinite sequences and series from the perspective of convergence, using correct notation and mathematical precision
2. Apply infinite sequences and series in approximating functions.
3. Synthesize and apply vectors, polar coordinate system and parametric representations in solving problems in analytic geometry, including motion in space.

Grading Scale

Due to the complexity of the material the grading scale we will use is as follows:

A :90–100 B+: 80–84 C+: 67–69 D : 50–59 F : 0–49
A–: 85–89 B : 75–79 C : 60–66
B–: 70–74

All grades will be computed using multiple measures. Students will receive the highest possible grade they achieve through these measures.

Accommodations

Those of you who need additional accommodations, due to disability, campus-related activities, or some other reason, please meet with me during the first two weeks of class to discuss your options.

Assignments

Asynchronous Lectures

Most weeks you will have an asynchronous module that you must complete before midnight on Sunday. These modules will consist of some mixture of recorded lectures, short quizzes and handouts to read. These asynchronous modules will represent 10% of your grade.

Exams

Three exams will be given with no make-ups. Each exam will be worth 10% of your grade. If an exam is missed under extreme circumstances and for a very valid reason, an alternative will be found.

Final Exam

A two-hour comprehensive final exam will be given on Tuesday, March 25, from 9:15 to 11:15. The final will represent 30% to 40% of your grade. (see quizzes below)

Quizzes

Quizzes will represent up to 10% of your grade. However, all points that are missed on quizzes will be replaced by your final. For example, if you average a 60% across all quizzes and then score a 75% on the final, you will earn back 75% of the points you had missed on quizzes so that your final quiz score will be a 90%. In this way quizzes are designed to be a place where you can make mistakes and learn from them.

There will be two types of quizzes in this course. The first will be given at the start of the week and will cover the material from the previous weeks lectures and discussions. The questions will mostly be similar to exam style questions in order to prepare you for what to expect on the midterms. These quizzes will take place during the first 20 minutes of class. Each quiz will be evaluated out of 20 points.

The second type of quiz will take place at the end of the week. These will be self-reflection quizzes that are part of the online-component of this course. These quizzes will give you the opportunity to check-in and ask questions about how the lectures, in class quizzes, and other parts of Math 1C are going. They are designed to focus on your affective learning. These quizzes will be graded out of 5 points.

Labs

A half dozen times throughout the quarter we will have lab assignments. The intention behind lab assignments is to encourage students to think more deeply about the material. For this reason, the labs often cover topics you haven't seen in the course. By the time each lab is assigned you will have learned all of the skills you need in order to complete the assignment.

These labs will be worked on in groups of three or four. You will need to work on them outside of class to complete them. Although every student must turn in their own final draft of the lab assignment, you will be graded as a group on the assignment. No late lab assignments will be accepted. Each final draft will be graded out of 100 points.

At least 3 days prior to the lab due date, we will have a lab check-in day. On the evening immediately preceding the Lab Check-In a single agreed upon member of your group will submit a rough draft. The rough draft will be worth 10 points and will be graded solely based upon attempting all parts of the exam and asking meaningful questions about those parts you do not know how to do up to that point.

In addition, each Lab will have a Lab discussion worth 10 points where you will document your interactions with your group. This discussion will be graded both for the work you share with the group and for your responses to the posts of other group members.

Labs will represent 10% of your grade. Your lowest aggregate (sum of rough draft, discussion and final draft) lab score will be dropped.

Group Work

This brings us to the hybrid part of the class. In my experience, every calculus class understands the lecture right up until the point they have to work through a problem. To help facilitate this process, every Tuesday you will be assigned a worksheet. When the worksheet is assigned you will not have heard all of the lecture material related to the worksheet. Throughout the week you are encouraged to share your initial thoughts on the worksheet.

For each group work assignment there will be a discussion board. The discussion board will be the place for you to share your work with each other. This is a place to propose a solution, an idea about how to begin the problem or a specific question that is troubling them about the problem. The discussion board will be graded both for the work you share with the group and for your responses to the posts of other group members.

Students will be expected to have posted some of their work and questions before Friday. This will ensure that your group has time to respond to your work.

In addition to these weekly assignments, there will be one in class group work session per unit. Group Work will account for 10% of your total grade.

Homework

Homework will not be a part of your grade in this course. Some of you will read that sentence and have the mistaken impression that there will be no homework. The only way we can learn mathematics is by practicing mathematics. It is best to think of the homework assignments I assign as minimal problem sets. Students are encouraged to go beyond them. It is recommended that you complete all homework problems from a particular section before we take the quiz covering those sections. Unfortunately, due to the amount of material we cover in this course we will rarely if ever have time to cover homework questions during class, so you are encouraged to ask homework questions you might have during my drop in hours.

Honors

If you are taking the honors section of this course you will be required to do two honors labs during the quarter. You will have at least two weeks to complete these labs. The honors labs will be worth 10% of your grade. (Yes, this means your grade will be scored out of 110%. As a result, once your first honors lab has been graded, you will need to divide your percentage grade in the grade book by 1.1 in order to find your letter grade on the grading scale.

If you are interested in taking the honors version of this course, please let me know during the first week of the quarter.

Student Learning Outcome(s):

- 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.

Office Hours:

7:30 AM - 8:30 AM	G7	M,W
10:00 AM - 11:00 AM	G5	T,TH