

Instructor:    Dr Zack Judson

Drop-in Hours:    MW    8:30-9:20      TBA      T    12:30-2:20      TBA

Email: [judsonzack@deanza.edu](mailto:judsonzack@deanza.edu)      (Note: I will not answer Math questions over email)

### **Required Materials**

- 1) “Calculus Early Transcendentals, 9th Edition” by James Stewart
- 2) Calculator: TI83/84 graphing calculator or similar (something capable of numerical integration)

### **Student Learning Objectives**

- 1) Analyze the definite integral from a graphical, numerical, analytical, and verbal approach, using correct notation and mathematical precision.
- 2) Formulate and use the Fundamental Theorem of Calculus
- 3) Apply the definite integral in solving problems in analytical geometry and the sciences.

### **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.

### **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

### **Midterms**

Four exams will be given with no make-ups. Each exam will be worth 10% of your grade. The bulk of your grade on the exam will be based on the work you show to justify your answers. If an exam is missed under extreme circumstances and for a very valid reason, an equivalent of the final score will replace the missing exam score. If such extreme circumstances occur it is the students responsibility to inform me immediately and provide documentation of the circumstances.

## Final Exam

A two-hour comprehensive final exam will be given on Monday, June 26, from 11:30 to 1:30. 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. As with your midterms, you are expected to do your own work on quizzes. However, unlike midterms, quizzes will be given asynchronously. On the day a quiz is assigned, you can click on the quiz at any time. The quizzes are designed to be completed in 20 minutes. You will have 40 minutes to answer the questions and upload a pdf of your solutions. You must upload your solutions before midnight.

**Due to the fact that all missed points are covered by the final, quizzes will only be graded if they are submitted as a single pdf through the CANVAS quiz.**

## 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 lab assignment, you will be graded as a group on the assignment. Labs will be due before midnight on appropriate Thursdays. No late lab assignments will be accepted. Each Lab will be graded out of 100 points.

The Tuesday before the lab is due, we will have a lab check-in day. A rough draft of the lab must be submitted before midnight on the Monday immediately preceding the Lab Check-In. 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. You are more than welcome (and even encouraged) to interact with your group in other ways; however, you need to make sure to document this interaction on your discussion board. This documentation needs to show what interactions are happening in your group. Bad example: "we met in zoom today and did the lab" Good example: attach a transcript of the meeting. Labs will represent 10% of your grade. Your lowest aggregate 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 Monday 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 by 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 problem sets during the quarter. You will have at least two weeks to complete these assignments. If you are interested in taking the honors version of this course, please let me know during the first week of the quarter. The honors assignments will be worth 10% of your grade.

**Student Learning Outcome(s):**

\*Analyze the definite integral from a graphical, numerical, analytical, and verbal approach, using correct notation and mathematical precision.

\*Formulate and use the Fundamental Theorem of Calculus.

\*Apply the definite integral in solving problems in analytical geometry and the sciences.

**Office Hours:**

M,W	08:30 AM	09:20 AM	In-Person	MLC 108
T	12:30 PM	02:20 PM	In-Person	S42