

MATH 224  
CALCULUS 3  
CSULB  
SPRING 2024

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OFFICE: MON/WED 5:15-5:45, TUE 11-11:45

## Overview

Calculus has influenced civilization to an extent that would be difficult to overestimate. Why should this be the case? One of the important motivations for calculus is to describe and analyze the motion of objects. Through reading, observation, experimentation, and, above all, thinking, we'll explore issues related to the structure of two and three-dimensional space.

## Text

J. Stewart, *Essential Calculus: Early Transcendentals* (2nd edition)

## Class sessions

We'll explore the course material through lecture/discussion as well as small group collaboration. Non-quiz activity sessions will be devoted to a discussion of questions and problems arising from assigned material.

## Course-work

### Exercise

There will be regular assignments consisting of reading and exercises. Many of the assigned exercises will be posted on WebAssign for you to complete for credit. You won't submit these in writing, but I urge you to **write them up carefully**. Also, I strongly encourage you to **work with others** and to consider the problems at some length before asking about them in class. I also urge you to ask about the problems—in class, activity session, or office hours.

### Quiz

Beginning in week four and then every three weeks thereafter (two weeks between the fourth and fifth quizzes), you will complete a WebAssign quiz with your group during the activity session. As a rule, you must attend the quiz session to receive credit.

Make-up quizzes won't be offered. In the event of an approved absence, a score that's the average of quizzes taken will be substituted.

### Exam

There will be one mid-term exam (about week 8) as well as a comprehensive final exam. These will be taken individually in class. Study guides will appear two weeks or so in advance. **Exam items will be taken from the study guides as well as assigned exercises that don't appear on WebAssign.** Careful and thorough work on the assignments and engaging in class exercises and discussions should prepare you adequately for the exams.

In the event of a medical or personal condition that compels you to miss the midterm exam, the final exam score (appropriately normalized) will be substituted. Please try to notify me in advance of such a circumstance.

## Getting evaluated

Exercises	20%
Quizzes	25%
Midterm exam*	25%
Final exam	30%

\*If the score on the normalized final exam is higher than on the midterm, the midterm score will be replaced by the normalized final exam score.

Here's a *rough* indication of how grades will be assigned. These are **minimum** standards. The actual boundaries between grades might be lower than these, but won't be higher.

90-100%	A
80-90%	B
70-80%	C ( <b>CR/NC</b> : Credit requires the equivalent of a C or better.)
60-70%	D

**Let me know if you're happy or unhappy about something.**

## Key to comments on marked papers

- a This needs a supporting **argument**.
- a? What's the **argument**—the line of reasoning—here?
- d **Describe** what's going on here.
- e **Explain** what you're doing here.
- h? **How** did you get this?
- i **Illustrate** what you're talking about—give an example, a picture, etc.
- m The **meaning** here isn't clear.
- p A **picture** would help here.
- s This is not a **sentence**.
- w **Wording** is awkward, confusing, etc. Meaning is unclear.
- y? **Why** is this so? What's the connection to what you've already said?
- ! Very nice. Something especially clear, insightful
- ? What this means or what you're doing is **unclear**. Where does this come from?
- X Something's wrong here—in concept or calculation.
- ✓ This is right—you have the idea.

## Fine Print

**Values** The CNSM is committed to providing a safe and positive learning environment and has established a zero-tolerance policy for any sexual/gender-based misconduct, including, but not limited to sexual harassment, assault, relationship violence or stalking for all faculty, staff, and students.

As members of The Beach community, we practice tolerance and denounce hate and prejudice. Our classroom will strive to be a place of mutual respect where the focus is on learning and student success.

**Basic needs program** If you are having trouble affording enough food to eat, don't have a safe and reliable place to sleep, and/or experiencing an emergency or crisis we are here to help. We are the Basic Needs Program and we have emergency services and resources to assist you. To learn more about our programs and services you can visit our website at [csulb.edu/basicneeds](http://csulb.edu/basicneeds).

**Disability** Students may ask their University at any time for a reasonable accommodation. It is the faculty member's responsibility to immediately refer this student to Disabled Student Services for assistance, including a review of appropriate medical documentation. DSS will work with the faculty member to determine the appropriate accommodation.

**Withdrawal** A copy of the School of Natural Sciences withdrawal policy is available from the Department Office. Note that it's different from the University withdrawal policy and the deadlines are earlier. Deadlines to which you should pay particular attention to appear below. Withdrawals from this course will be allowed only in accordance with University and College policies. Please be aware of the more specific and restrictive withdrawal policy for the College of Natural Sciences and Mathematics.

**Weeks 1-2.** Withdrawals will not appear on the student's permanent record.

**Weeks 3-8.** Withdrawals are permissible only for serious and compelling reasons. Academic progress unsatisfactory to the student is considered a serious and compelling reason during this period. Instructor and Department Chair signatures on the drop form are required.

**Weeks 9-12.** Withdrawals are permissible for serious and compelling reasons, but during this period, unsatisfactory academic progress is not considered a serious and compelling basis to drop a course. Circumstances must be shown that preclude the student from attending class or from any effective opportunities to study. In addition to the normal withdrawal form, a special form must be completed, and instructor and department chair signatures are required.

**Weeks 13-15.** Withdrawals are permissible only for serious accident or illness and involve a total withdrawal from the University. Detailed written documentation must accompany withdrawal forms. Instructor, chair, and college dean signatures are required.

**Cheating/Plagiarism** Cheating and plagiarism are in violation of the California Administrative Code, Title 5, Section 41301. CSULB has adopted a specific policy with respect to the violations of this nature (see the Bulletin or Schedule of Classes). Any student in violation of this code and policy in any assignment or examination related to this course shall be subject to the options specified in the policy statement. This may result in the student receiving a failing grade in the course or, in certain circumstances, being expelled from the University.