Math 1B-42728 Calculus II (5 units)

Instructor: Christopher Bradley **Email:** bradleychristopher@fhda.edu

Classroom: E32 **Classtimes:** M/W 4:00PM-6:15PM

Student Hours: Monday and Wednesday 8AM-10AM in room S55 and by appointment.

Office: Room E31a

Course Format

This is a face-to-face course. We will meet in Room E32 at the scheduled times, Monday and Wednesday. We will spend this time together to build community, to cover course content, to work on group activities, and to engage in classroom discussions.

I hope you **actively participate in this course**. Math education research literature shows that working together and learning from each other will help you better understand homework problems, minimize test anxiety, and strengthen your problem-solving skills.

There may be some times when you are unable to make it to the class meetings. All the class "lecture notes" will be posted to Canvas (**Note: from experience, the lecture notes alone do not translate to a good grade, so it is important to be present in class!**). You should make it a point to exchange contact information with a classmate, there could be information discussed in class that does not make it to the posted notes. If you find that these missed days are adding up, please talk to me so that we may assess your situation, together.

Prerequisites

Math 1B or Math 1BH (with a grade C or better) or equivalent.

Scope and Objectives

This course covers the fundamentals of differential calculus.

- Examine sequences and series
- Examine and apply the various convergence tests for infinite sequences and series.
- Use power series to represent functions, and use polynomials to approximate them.
- Investigate vectors in two and three dimensions and perform vector operations.

- Examine vector functions and parametric curves, and graph, differentiate and integrate curves in parametric form; compute arc length.
- Determine the equations of lines and planes.

Student Learning Outcomes

- 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 analytical geometry, including motion in space.

Homework Platform

MyOpenMath (required): www.myopenmath.com. MyOpenMath is the online homework/practice program that you will use to practice concepts learned in class. Make sure to register though canvas (by clicking any assignment and following the steps.), no course number is required. (Free). **No late homework will be accepted!** I **will drop 2 of the lowest homework scores at the end of the quarter**.

Textbook

We will be using Calculus Volume 2, Openstax & Calculus Volume 3, Openstax. (Free)

Participation

This is a **critical part** of the course, participating in the group work, working with your peers, struggling through the material together. We will be doing activities (worksheets, think-pair-shares, etc.). Yes, you can miss some days because life happens. However, if you find that you are missing too many class meetings, please come talk to me so that we may assess your situation together. Everyone will have to present a solution to at least one problem sometime during the 12 weeks in order to get full credit for participation. This does not mean that this is the only thing you have to do! This means that along with

participating in in-class activities, asking questions, answering questions, volunteering during class sessions, and discussing with your fellow classmates, you will also have to write out a solution on the board.

Homework

As stated above, we will be using MyOpenMath as our online homework platform. Our homework is an integral part of our class. Working through the homework is a big part of the learning process! I encourage collaboration with other classmates on homework. Work together, but be careful, your partner won't be able to help you during the exams! There will also be written homework, which will be graded on completeness and clarity. Rather than accepting late homework, I will drop your lowest 2 homework assignments automatically. There are roughly 5-6 short written assignments scattered throughout the 12 weeks we have together.

Exams

We will have 3 exams total. Our final will happen on the last day of class. The final exam will be cumulative. The **tentative dates** for the exams will be 4/30, 6/4, and 6/25(Final Exam: 4:00PM-6:00PM). More info on the exams will be posted in our canvas course. **There will be no makeup exams!** The final exam will be cumulative. Being that exams are a big portion of your grade, I urge you to not fall behind in the material, study, and prepare accordingly!

Grading	
Homework	15%
Participation	10%
Quizzes	15%
2 Exams	30% (15% each)
Final Exam	30%

Important Dates

Last day to add: 4/20/25
Last day to drop w/o a W: 4/20/25
Memorial Day Weekend: 5/24-5/26 (no classes)
Last day to Drop w/ W: 5/30/25
Juneteenth: 6/19/25 (no classes)
Final Exams: 6/23-6/27
(Our Final Exam is on June 25th, 4:00PM-6:00PM)

Grade Percentages

Grades in the class are as follows:

A+: 97% and above	B+: 86%-89%	C+: 76%-78%	D+: 66%-68%
A: 92%-96%	B: 82%-85%	C: 72%-75%	D: 62%-65%
A-: 89%-91%	B-: 79%-81%	C-: 69%-71%	F: Below 65%

If you are hovering around the border, getting bumped up will depend on your performance and participation (emphasis on participation) in the class.

Tutoring

All Math students can get tutoring at the Math, Science & Technology Resource Center! It is free, there is drop-in tutoring as well as online and workshops!

Disabilities Support Services

Students with disabilities needing reasonable accommodations are encouraged to contact DSS early in the quarter. If you think that you may have a learning disability (or physical disability), please contact DSS as soon as possible. More information is available at Disability Support Services (deanza.edu)

Classroom Conduct

You should not be listening to music during class. You should not be texting during class. Cell phones should be turned off/silent (if you need to leave your phone on for some reason, let me know). You may not use a cell phone, smart watch or other device capable of texting or connecting to the internet during an exam.

A graphing calculator is recommended for this class, and calculator usage is generally allowed on assignments, with some restrictions.

Cheating on exams is unacceptable and will result in a grade of 0 on the exam. See the Student Code of Conduct for further college policies.

All students must comply with the college's COVID policies and protocols.

FAQ

Are we allowed to use notes during the exams? Yes, you are allowed 1 page of notes, front and back. These notes can include theorems, definitions, formulas, and steps to solve certain problems. The main goal of a cheat sheet (at least in my head) is to optimize our strategies. Get rid of what we don't need and lay out what we do need and how to use it.

Will the exams be just like the lectures and the homework? For the most part. What we learn in class will be the foundation, working through the homework problems helps us fine tune our understanding and exposes us to the ins and outs of different variations of the things we learned in class. When writing the exams, I will assume that you went through the notes, completed the assignments and prepared accordingly.

Will we have review sessions before the exams? Yes, before every exam we will have a review session where we will discuss any topic, problem, or strategy.

May I come to office hours to work on the homework? Yes, I recommend you take advantage of office hours. Not only for This class, but all of your classes!

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Office Hours:

M,W	8:00 AM - 10:00 AM	S55