

MATH 241: CALCULUS IV

Fall 2021

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| Instructor: | Dr. Stathis Charalampidis | Office: | 25-319 (Faculty Offices East) |
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Course Web Page: https://www.egcharalampidis.com/teaching/241_F21/math_241_F21/

Class Meetings:

- Section 1 (MTRF): 07:10-08:00am (38-219)
- Section 2 (MTRF): 08:10-09:00am (38-219)

Office Hours: T 12:00-1:15pm and R 9:15-10:30am, or by appointment.

Required Textbook:

- *Calculus (Eighth Edition)*, Authors: James Stewart, Publisher: Cengage Learning, 2016 (ISBN: 978-1-285-74062-1)

Objectives: In Math 141, Math 142, and Math 143 (Calculus I, II, and III, respectively), we studied limits, continuity, differentiation and integration of functions of one (independent) variable as well as polar coordinates, series and sequences, vector calculus, and curves in 2- and 3-dimensional spaces. In this course, we will explore more advanced topics such as **partial derivatives**, **multiple integrals** as well as **line integrals** and **Green's theorem**. A detailed course outline containing the learning objectives for this class may be found at

<https://content-calpoly-edu.s3.amazonaws.com/math/1/documents/241.pdf>

Class Material by Section: During the quarter, we will cover most of Chapters 14–16 of the textbook:

- Chapter 12: 12.6
- Chapter 14: 14.1–14.8
- Chapter 15: 15.1–15.8
- Chapter 16: 16.1–16.5

A tentative schedule is posted on the course web page under “Syllabus and Tentative Schedule”.

Prerequisites: Math 143.

Homework, Quizzes and Exams: In every Mathematics course, it is extremely important you put your best effort towards solving problems and producing high-quality homework. Alongside this, it is also important to learn how to communicate your mathematical reasoning.

There will be online homework assignments and bi-weekly quizzes in WebAssign: <https://www.webassign.net/>. A **class key** was sent to you that you should use to have access. **No late homework and quizzes will be accepted.** Although the homework is online this quarter, I would strongly recommend you make copies of your solutions and keep them in a binder so that you may easily reference that when you are studying for an exam.

Of course, struggling through a question in the homework is not something unusual. Mathematics is all about **study** and **practice** and the only way to learn is for you to work through any difficulties. With that said, and before you make an attempt to solve the homework problems, make sure that you write the accompanying theory down on a piece of paper as many times as possible until you master it. Then, come back to the problems in the homework assignment and attempt to solve them. Such a way of studying will not only help you to create your own study guide but to understand the material in depth. Keep in mind that in order you to get the best grade you can, the first step is to do every assignment to the fullest extend of your ability. However, if you still need help, I strongly encourage you to make use of my office hours (think of them as free tutoring).

There will be **two in-class midterm exams** and **one cumulative final**. For their schedule, see below the “Important Dates” section of this document. Before **the exams**, I will hold outside the regular class time review sessions according to:

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|-------------------------------------|--------------------------|
| Review session for midterm #1 | Tuesday, October 12, TBA |
| Review session for midterm #2 | Tuesday, November 9, TBA |
| Review session for final | Friday, December 3, TBA |

In all review sessions, we will be solving practice problems and past exams. Most importantly, please collect any of your questions and I would be more than happy to answer them! In the realm of all exams, make sure you download the **review notes** and **practice problems** from the course web page under “Review notes and Practice Problems”.

Note that no makeup midterms will be given. In addition, further details about the policies of the final exam can be found by visiting the link:

<https://academicprograms.calpoly.edu/content/academicpolicies/final-exams>

Grading Policy and Exams: Your final grade in this course is computed according to:

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| Homework | 25% |
| Quizzes | 5% |
| Midterm #1 | 20% |
| Midterm #2 | 20% |
| Final Exam | 30% |

Important Dates:

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|------------------------------|------------------------------------|
| Midterm #1 | Friday, October 15 (in class) |
| Midterm #2 | Friday, November 12 (in class) |
| Final Exam (Section 1) | Monday, December 6, 07:10–10:00am |
| Final Exam (Section 2) | Friday, December 10, 07:10–10:00am |

Exams and Class Policies:

- Please, read very carefully the Campus’ COVID-19 policy:

<https://ctlt.calpoly.edu/covid-19-faculty-resources>

- Exams are primarily based on the material we cover in class, homework and quizzes.
- Absolutely no formula sheets, class notes and calculators are allowed during midterm and final exams.
- Please go through the cheating and plagiarism procedures by clicking [here](#).
- Learning and memorizing formulas takes time. Do not postpone this until the last minute.
- **Attendance is mandatory.** However, an **excused absence** can be allowed only if the reason for your absence falls into any of the categories listed in the following page:

<https://academicprograms.calpoly.edu/content/academicpolicies/class-attendance>

Please inform me as soon as possible if you are seeking to make up missed work pursuant to the excusable reasons listed in the url above.

Students with Disabilities: The University provides disability-related support services to qualified students through the Disabilities Resource Center (DRC). If you have a disability for which you are or may be requesting an accommodation, you are encouraged to contact both me and the DRC (124-119) at (805) 756-1395, as early as possible in the term. In addition, and for your convenience, their website is <https://drc.calpoly.edu/>. Note that use of DRC services including testing accommodations requires prior authorization by the DRC and compliance with approved procedures. **Make sure you initiate any needed arrangements well in advance of an exam date.**

Diversity and Inclusion: I am fully committed to an academic environment that is free of bias against any group and I firmly believe in the value of diversity in people and ideas. My ultimate goal is to establish that this class is a welcoming environment to every-one regardless of gender identity, sexual orientation, race, ethnicity, or religious identity. The University and I do not tolerate discrimination. Please feel comfortable coming to me or an administration if at any point you ever feel uncomfortable for any reason.