

Math 30: Calculus I

Office Hours:

Erica Flapan
Millikan 2311
Phone: 18711
eflapan@pomona.edu

Office Hours:

MTW 2:00 - 3:00
other times
by appointment

<http://pages.pomona.edu/~elf04747/Math%2030/math30.html>

Goals of the Course:

1. To learn to use limits, derivatives, and integrals algebraically, graphically, and in word problems.
2. To learn to solve hard multi-step problems.

My Philosophy: In this class we will learn the concepts of calculus and how to apply them. In order for you to develop a deep understanding of the material you have to solve a variety of hard problems. Thus we will spend a lot of time solving problems both in class and out of class. Class periods will be a combination of lecture and working on problems in groups. I tend to lecture quickly, but I am always happy to repeat anything. So please stop me if you don't understand something, you have a question on anything, or you just want me to pause so you can catch up. I am also happy to go over any background material during class.

Textbook and Calculators: There is no required textbook. I will post the notes and homework problems on my webpage. However, if you want to buy a textbook, I would recommend James Stewart, *Single Variable Essential Calculus Early Transcendentals*, either the first or second edition. You can buy a used copy online or rent an online copy of it if you want. I recommend that you use a calculator on the homework, quizzes, and exams. It does not have to be a graphing calculator. Any cheap calculator is sufficient.

Homework: The homework assignments are posted on my website. I expect you to spend about 2-3 hours doing homework for every class period.

Quizzes and Exams: We will have a quiz every Friday. The quiz will consist of a single problem that is similar to a homework problem or to a problem we went over in class. Each quiz will be worth 1 extra credit point on the next exam.

There will also be three midterm exams and a 3-hour final exam. The midterm exams will be on **February 20, March 24, and April 28**. The final exam is on Monday, **May 8** from 9:00 AM until noon. The midterms and final will be based closely on problems we have done on the homework or problems we did in class.

Getting Help: If you are stuck on a problem, having trouble with the material, or want to talk about anything (even if it's not related to math) you can come to my office hours or make an appointment to meet with me at another time. You can also drop by my office any time (except before my MWF 10:00 class) and talk to me if I'm there. Note I am never available on Thursdays because those are my research days.

The **mentor sessions** are evening problem sessions that are led by an undergraduate teaching assistant. The mentor for this class is Megan Rohn. She was the mentor for Math 30 last spring, and the students loved her. The sessions are scheduled for Sunday,

Tuesday, and Thursday from 8:15-9:15 PM. These sessions are a good place to meet your classmates, work on the homework, and study for exams. I strongly urge you to attend as many of the mentor sessions as you can, since they will help you significantly with the class. To get the most out of the mentor sessions, you should work on the homework before attending the session. In particular, don't expect to be able to complete the entire assignment at the single hour of a mentor session. Also, please do not put pressure on the mentor to stay beyond the hour that she is being paid.

If you would like one-on-one tutoring, the Quantitative Skills Center offers free tutoring in math, science, and economics courses. To make an appointment click on the Quantitative Skills Center on the Academics site of the portal. Dr. Travis Brown, the director of the Quantitative Skills Center, is also happy to meet with students one on one about the challenges of college, how to organize your time, and how to improve your grades.

If you have a documented disability and wish to discuss academic accommodations, please contact Dean Jan Collins-Eaglin as soon as possible.

Grades will be computed according to the following percentages:

Individual homework	15% (I will drop your 2 lowest homework grades)
Weekly quizzes	extra credit
Three midterms	18% each
Final exam	31%

I hate giving grades, but since I have to do so I take it very seriously, and don't support grade inflation.

The meaning of letter grades in this course are as follows:

A means your performance in all areas is outstanding, demonstrating a thorough mastery of all of the concepts and techniques in the course.

B means your performance is consistently very good, demonstrating a very good understanding of the concepts and techniques in the course.

C means your performance is either consistently fair to good or is inconsistent, demonstrating a good understanding of some of the concepts and techniques in the course.

D means your performance is poor and does not demonstrate a good understanding of most of the concepts and techniques of the course.

F means you did not demonstrate a good understanding of almost any of the concepts and techniques of the course.

Technical details of the class: You are expected to attend every class and to participate actively in the lecture and the in-class problems. If you miss a lecture it will be more difficult to do the homework and understand the subsequent lecture. The lecture notes and handouts for the class are posted on my website at:

<http://pages.pomona.edu/~elf04747/Math%2030/math30.html>

Homework will be due every period. The exact problems that are due are in my lecture notes which are posted on my website. It is your responsibility to know what homework is due when. In order to get full credit for the homework, your solutions must show all of the steps of your reasoning, not just the answer. While I want you to get as much help as you need to solve the homework problems, you must write up the solutions to the homework problems by yourself. In particular, homework should not be copied from another student, the mentor, or from any other source.

I require that you hand in your homework when you arrive in class. Even if you arrive late, you must hand in your homework before you sit down. I do not accept late homework (except under unusual circumstances). So do not tell me that you forgot your homework in your room, and do not put it in my mailbox, the departmental homework box, or the grader's mailbox. If you have to miss class, give your homework to another student to hand in for you or take well lit photos of it and send it to me as a pdf before the class period when it's due. If you do send me a photo of the homework, make sure there is enough light so I can read it. I will drop two homework grades at the end of the semester. As a result, I do not want to hear any excuses. **I am very informal in the way I run class and I really care about students, but I'm very strict about things being handed in on time.**

Summary of your responsibilities:

1. **Come to class every period.** Always bring a pencil or pen and a calculator. If you miss class, it is your responsibility to get the notes on what you missed and read them over. I am happy to answer questions once you have read over the notes, but I will not repeat my lecture during office hours. If you arrive to class late, quickly hand in your homework and go to your seat.
2. **Find out what problems are assigned for homework.** There will be homework due every period. The homework problems are in my notes posted on my website. If you do the wrong homework problems you won't get credit or an extension on the assignment.
3. **Hand in every homework assignment the day it's due before you sit down in class.** If you miss class, it is your responsibility to get your homework to me before 11:00 AM on the day it is due. Do not put it in my mailbox or give it directly to the grader. Since I will drop two homework grades at the end of the semester, you should not ask permission to hand in the homework late. It is difficult for the grader to grade late homeworks, so I only accept late papers in truly unusual situations.
4. **Show up for quizzes and exams on time.** There are no make up quizzes or exams. It is up to you to show up on time for quizzes and exams. I will not give you extra time just because you showed up late. The quizzes are extra credit, so I will not give you a make up quiz if you are sick or have to miss class on a quiz day (normally every Friday). If you are too sick to take an exam, you (or a friend) must contact me by phone or e-mail **before the time of the exam** to make other arrangements.