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- TA:** Collin Litterell
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- Classes:** M/T/W/Th/F 10:30-11:20, Smith 405
- Web site:** www.math.washington.edu/~lee/Courses/134-2016
- Textbook:** *Calculus, One and Several Variables, 10th Edition* by Salas, Hille, and Etgen.
- Prerequisite:** A good calculus course that covers differentiation and integration, and above average preparation, interest, and ability in mathematics.
- Exams:** Two midterms to be announced.
Final exam: Monday, December 12, 2016, 8:30-10:20, Smith 405

GENERAL DESCRIPTION

This is a three-quarter calculus course, meant for students who have already studied calculus, at least to the point of being adept at using the formulas for computing derivatives and integrals. Because it is an accelerated course and an honors course, it is only appropriate for students with strong enthusiasm and aptitude for mathematics, and a desire to understand concepts rather than just to master problem solving techniques. It is ordinarily open only to students who have completed a full-year high school calculus course with an AP score of 5; excellent grades in Math 124 and 125 would be an acceptable alternative.

In Math 134, we will complete the subject matter of Math 124 and 125 (single-variable calculus), but with a much more theoretical approach. If you continue and complete Math 135 and 136, you will also have covered the material in Math 126 (multivariable calculus), Math 307 (differential equations), and Math 308 (linear algebra).

REQUIREMENTS

Classes: Although I won't keep a formal attendance record, *class attendance is required*. Much of what we talk about in class will be designed to *supplement* the reading, not repeat it. If you will miss a class for a religious holiday, let me know in advance and I'll help you get the information you missed. If you must miss a class for some other unavoidable reason, it's your responsibility to find out what happened, and get your homework to me or to the TA by class time (or, in case of emergency, as soon as possible thereafter).

Class Discussion Group: I've set up an online GoPost class discussion group, accessible from the class website. As soon as possible, you should log onto the group, select "Profile," and set your notifications to "immediate notification," so that you'll receive an email whenever there's new information posted there. I will post an entry as soon as possible after every class—usually, my entries will be ready by about 3:00PM, often sooner. Each of my entries will include a brief summary of what happened that day (no substitute for attending class!), and the latest reading and written assignments. Sometimes I'll expand on things that I said in class, or pose questions for you to think about before the next class. You're welcome to add posts of your own—adding comments, or asking questions of your own, or responding (respectfully!) to questions or comments that were posed by me or by others in the class. If you wish to write about specific homework problems, please confine your comments to general questions and suggestions about how to get started.

Reading: Most of my posts will include reading assignments. If the reading covers material that we have not yet talked about in class, I expect you to read through it quickly before the next class. Then, after we talk about it, you'll need to read it thoroughly and carefully. All reading assignments are required. Because we will

be focusing on *concepts*, not just problem-solving techniques, it's important to read all of the assigned sections of the textbook, not just go through and look for example problems.

Written Homework Assignments: Two or three times a week, after class, I'll post a homework assignment on the class website (with a link to it on the class discussion group). All homework assignments will be due at the subsequent Friday class. Homework that is turned in after the first ten minutes of class will get a 10% deduction, and homework turned in after class is over will not be accepted except in extraordinary circumstances and (except for emergencies) with advance permission.

Study Groups: During the first week of class, I will assign each of you to a study group of approximately four students. You'll be required to meet with your study group at least twice before the first midterm exam (and I hope you'll find it so useful that you'll continue meeting with them throughout the year!). Many of you have been quite successful in the past working on math alone, with very little contact with other students. But when you start dealing with the kind of abstract material we'll be talking about, you'll be amazed how much more quickly and more deeply you can learn when you work with others.

Collaboration on Homework: I strongly encourage you to work on the homework assignments together with the other students in your group. Discussing the problems, brainstorming about solutions, and even telling each other how to do them, are fair game. There's just one hard and fast rule: When you're ready to write up your solutions to individual assignments, *you must write your own solutions in your own words*. It is not acceptable for one person to write down the solution (whether on paper, on a blackboard, or online) and for others to copy it; or to copy a solution that you find on the web somewhere. If two or more people turn in solutions to an individual assignment that are obviously verbatim or near-verbatim copies of each other, those people will get no credit for that whole assignment. (Of course, we realize that there will be many similar solutions to some problems; we're just talking about solutions that were obviously written by the same person and copied.)

Quizzes: In some class meetings, there will be short quizzes, usually (but not necessarily always) announced in advance. These will often be based on homework problems that you've already done, which I will ask you to answer in a timed setting without looking at your notes. Other times, they will be short questions that test how well you've absorbed the concepts that have been discussed recently. Quizzes cannot be made up, but your lowest quiz score will be dropped, and any quiz missed for religious or medical reasons (with a doctor's note) will not count against you.

Midterm Exams: There will be two midterm exams on days to be announced.

Final Exam: At the official University final exam time, there will be a final exam in the regular classroom.

GRADES: Your grade will be based on a weighted average of the following scores:

- 20% Homework assignments
- 10% Quizzes
- 20% First midterm exam
- 20% Second midterm exam
- 30% Final exam

Individual homework and quiz scores will be recorded as percentages, and the lowest homework score and lowest quiz score will be dropped before averaging the rest.