## Course Information

| Instructor: | Warren Weckesser | Office: |
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|  | Phone: $228-7228$ |  |

Office Hours: Mon, Wed 9:00-10:15 AM, 1:20-3:00 PM
Other times by appointment, or just drop by to see if I'm available.
Text: Multivariable Calculus, Third Edition, McCallum, Hughes-Hallet, Gleason, et al. The Student Solutions Manual for this text is also available and recommended.

Web Page: http://math.colgate.edu/~wweckesser/math113/

## Topics Covered:

Chapters $12-16$, plus Sections 17.1 and 17.2. We may skip some sections, and we will cover some topics in a different order than in the text.

## Homework:

Homework will be assigned and collected each week (with a few exceptions). Each assignment handed in will be marked with a score of $0,1 / 2$, or 1 . If it is clear that you have made a concerted effort to do all the problems, the score will be 1 . Incomplete or excessively sloppy work will be given $1 / 2$. Assignments not turned in will be given a zero. Late homework will not be accepted.

Collaboration with your classmates on the homework is encouraged! However, collaboration does not mean copying someone else's answers. It means working together so that everyone understands the problems. Each person then writes their own solutions.

## Quizzes:

There will be a short quiz (approximately 15 minutes) each week that there is not a midterm exam or some other scheduled activity, such as working in the computer lab. The quizzes will consist of one or two problems based on the homework and lectures. Each quiz is worth five points, and there will be (at least) nine quizzes. When computing the final grade for the course (see below), the sum of all the quizzes is used, but with a maximum of 40 points. This means that $100 \%$ credit ( 40 points) is achieved, for example, by getting 5 on eight quizzes and 0 on one, or by getting 5 on five quizzes and 4 on four, etc.

## Exams:

There will be four midterm exams during the semester, and a final exam. The tentative dates for the midterm exams are

Exam 1 September 25
Exam 2 October 16
Exam 3 November 6
Exam 4 December 4
Let me know immediately if you have any unavoidable conflicts with these dates.
Consult the final exam schedule before making travel plans for the end of the semester, as the date and time of the final exam can not be altered.

## Calculators:

No special calculator is required for this course. Some homework problems may require a calculator, but any basic scientific calculator should be fine. Maple (see below) may also be used.
You will not be permitted to use a calculator on the exams.

## The Maple Program:

Maple is a software package for doing symbolic mathematics. Maple can solve many types of equations, plot functions, find derivatives and integrals, and much more. This course will include an introduction to Maple.

## Grading:

Your grade will be based on the following:

| Item | Points |
| :--- | ---: |
| Homework | 10 |
| Quizzes | 40 |
| Exam 1 | 45 |
| Exam 2 | 45 |
| Exam 3 | 45 |
| Exam 4 | 45 |
| Final Exam | 120 |
| Total | 350 |

Your grade for the course will be determined by computing your numerical grade and then converting that number to a letter grade. The actual cutoff points will depend on my overall impression of the performance of the class on the homework, quizzes, and exams. However, I will not set the cutoffs any stricter than the following:

| $340-350$ | A+ | $304-314$ | B+ | $269-279$ | C+ | $234-244$ | D+ | $0-209$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| $326-339$ | A | $291-303$ | B | $256-268$ | C | $221-233$ | D |  |
| $315-325$ | A- | $280-290$ | B- | $245-255$ | C- | $210-220$ | D- |  |

## Advice:

- Numerically, the homework makes up the smallest part of the final grade. However, doing the homework is the most important part of the class, and has the biggest impact on your grade! It is while working through the homework problems that you will really learn the material. Consistent and diligent effort on the homework will pay off in higher grades on the quizzes and exams.
- Reading a math book must be an active process, done with pencil and paper at your side. When the text starts an example, try to do it yourself before looking at the answer in the book.
As you read each assigned section and try the examples, write down any questions that you have and ask them in class or during office hours.
- Take notes in class and review them the same evening. As you go over the notes, make a list of anything which is unclear and be sure to ask me about these points, either in class or during my office hours.
- Form a study group to work on the homework problems. (Just be sure that the group allocates time to remain focused on the homework, and that everyone completes and understands the problems.)

