Math 113

Calculus III

Spring 2003

# **Course Information**

Instructor: Email:	Warren Weckesser wweckesser@mail.colgate.edu	Office: Phone:	314 McGregory 228-7228		
Office Hours:	Mon, Wed, Thu, Fri, 10:10-11:10 AM (Additional times to be arranged.) 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:	$\texttt{http://math.colgate.edu}/\sim\texttt{wweckesser/math113}/$				

# **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. Only one or two problems from the homework will be graded, but you are responsible for doing and understanding *all* of the problems. Collaboration with your classmates on the homework is allowed, expected, and even encouraged. However, collaboration does not mean copying someone else's answers. It means working together so that everyone understands the problems and can write up their own solutions. You must write your own solutions in your own words.

## Quizzes:

There will be a short quiz almost every week. The quizzes will consist of one or two problems based on the homework or lectures.

#### Exams:

There will be two exams during the semester, and a final exam. 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. The dates and times of the midterm exams are:

Exam $1$	Tuesday,	February 25	7-9 PM
Exam $2$	Tuesday,	April 8	7-9 PM

Let me know immediately if you have an unavoidable conflict with one of the above times, so we can schedule an earlier time for the exam.

## 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:

Homework	10%
Quizzes	10%
Exam 1	25%
Exam 2	25%
Final Exam	30%

Your grade for the course will be determined by computing your numerical grade with the above percentages, rounding to one decimal place, 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:

100 - 97	A+	87 - 89.9	B+	77 - 79.9	C+	67 - 69.9	D+	0 - 59.9	$\mathbf{F}$
93 - 96.9	А	83 - 86.9	В	73 - 76.9	С	63 - 66.9	D		
90 - 92.9	A-	80 - 82.9	B-	70 - 72.9	C-	60 - 62.9	D-		

# Advice:

- You must read the assigned sections before class. My lectures will assume that you have read the material.
- 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 the 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.)