

**MATH 213**  
**Analytic Geometry and Calculus III**  
**Fall 2018, Section 002**

**Instructor :** David Singman

**Office:** Exploratory Hall, Room 4203

**E-mail and my web page:** A good way to get in touch with me, other than seeing me in class and office hours, is to send me an e-mail message. The address is dsingman@gmu.edu. I check my e-mail seven days a week. My web page is at **<http://math.gmu.edu/~dsingman/>**. You will find a link to the course web page there.

**Office hours:** TTh, 10:30-11:45

**Text:** *Calculus: Early Transcendentals, 2nd edition*, by Briggs, Cochran, & Gillett, Published by Pearson.

**Web site:** A web site has been set up for the course. You will find a link to it at the bottom of my web page (indicated above). You are responsible for checking the homepage of the site for updates each day. On it I will post material relevant to the course, such as Lecture Outlines, Practice Problems from the text, announcements concerning tests and quizzes, etc.

**Course:** This is a course in multivariable calculus. The chapter titles of the sections which we will cover are as follows:

- Chapter 11: Vectors and Vector-Valued Functions
- Chapter 12: Functions of Several Variables
- Chapter 13: Multiple Integration
- Chapter 14: Vector Calculus

See the list of Practice Problems for more detail.

**Practice Problems:** You will find a link to the list of Practice Problems on the course web site. These are problems from the text for you to work each day in order to keep up with the lectures and to prepare for quizzes and class test. Feel free to ask questions about them to me or our TA either during class, during our office hours, or by email.

**Lecture Outlines:** These are outlines of what we will go over together in class. You will find them posted on the course web site. They consist essentially of the main theoretical points and a list of exercises (without solution). In class we will go over the Lecture Outline by discussing the theoretical points raised and by working through the exercises. I will post each Lecture Outline in advance of the lecture, so you will get much more out of the class if you work through each Lecture Outline and try the

exercises prior to the lecture. I will post a scan of the lecture notes on the “Lecture Outline” web page at the latest by the evening of the day the lecture is given.

**Prerequisites and study habits:** It is expected that prior to taking Math 213 you have already reviewed the main techniques of differentiation and integration covered in Math 113 and 114 or their equivalent. You cannot expect to succeed in this course unless you are well prepared.

Given that you are well prepared to take the course, in order to succeed, you should do the following:

- Work through the Lecture Outlines prior to the lecture and make an effort to do the exercises in the Lecture Outlines.
- Rework the exercises in the Lecture Outlines again throughout the semester. Do the exercises without looking at the solutions, but compare your work to my solutions.
- Regularly work the Practice Exercises from the text which are posted on the web site.
- If you are merely working exercises a few days before the class tests, or worse still, just reading solutions for them, you can count on doing very poorly in the course.
- Don't hire a tutor. Make full use of the help you can get from me and from your TA.

I routinely have about 50% of the class getting D's and F's for the course. It is not because I try to make the course hard, but rather it is a combination of the student not truly meeting the prerequisites for the course and the student not doing as I suggest in the above bullets.

**Recitations and quizzes:** Each of you signed up for a section of a 50 minute recitation each Friday morning. Your recitation will be run by your TA, Duy Nguyen. Typically he will use the time to go over your questions on the Practice Problems and from the text and the exercises in the Lecture Outlines, and in most weeks he will give you a short quiz.

**Makeups:** Makeups will not be given for quizzes or exams, so if you want to take them **you need to attend class and your recitation**. I will drop the lowest two quiz grades, including any of the quizzes which you miss.

**Date of Class Tests:** There will be two tests given in class as follows:

- Test 1: Thursday, September 27
- Test 2: Thursday, November 8

**Final exam:** The final exam will be held on **Thursday, December 13**, 10:30am-1:15pm. Don't make plans to leave the area at a time which includes that date.

**Grading:** The grade will consist of quizzes, two class tests, and a final exam as follows:

- quizzes: 15%
- tests 25% each
- final exam: 35%

**Scale:**  $A^-$ ,  $A$ ,  $A^+$ : 90-92, 93-95, 96-100;  $B^-$ ,  $B$ ,  $B^+$ : 80-82, 83-85, 86-89;  $C$ ,  $C^+$ : 70 - 75, 76-79;  $D$ : 60 - 69;  $F$ : 0 - 59.

**University Honor Code:** It is expected that each student will conduct him or herself within the guidelines of the Honor Code. Among other things, this means that any kind of cheating on tests and homework is strictly forbidden.