# MATH 213-001, Fall 2018

#### **Multivariable Calculus**

Logistics

Class location: Exploratory Hall L004

Class Meeting Times: Mon/Wed 1:30-2:45pm

Instructor: Dr. Rebecca Goldin

Office: Exploratory Hall, Room 4214

Office Hours: After class until 3:30pm, and by appointment.

Phone: Nope! The best way to reach me is by email.

Email: rgoldin@gmu.edu

Your TA: Duy Nguyen
Office-Hours: Friday 4-6pm

Office Location: Exploratory Hall, Room 4462

Email: dnguyet@gmu.edu

Learning Assistant: Madeline Horton

Office Hours: Wednesdays 4:30-6:30pm and Fridays 11am-1pm

Email: mhorton5@masonlive.gmu.edu

Location: Wednesdays Exploratory Hall 4208. Fridays Exploratory Hall 4104.

Learning Assistant: Michael Belete

Office Hours: Wednesdays 4:30-6:30pm and Thursdays 4:30-6:30pm

Email: mbelete@gmu.edu

Location: Wednesdays Exploratory Hall 4208. Thursdays Exploratory Hall 4102.

### **Prerequisite**

C or better in Math 114 or equivalent. If you earned a C in previous calculus classes, you will find this course extremely difficult. Earning a B or better from prerequisite courses is recommended. A good understanding of Calc I (Math 113, AB Calculus) is even more important than Calc 2.

#### Text

Calculus: Early Transcendentals, by: Briggs & Cochran (2nd edition). We will not be doing online homework.

## **Course Content**

We will roughly cover material from Chapters 11-14 in this text. I will alert you to more details or skipped sections as we go forward.

## **Philosophy**

A teacher in college is more like a coach, and will not "cover" everything you need to know in order to do well in a course like this. You are in charge of your own learning. I will guide you, but there will be topics that you are responsible to learn without time in class to discuss it. Learning is truly done by the student, not the teacher. Think of me as your expert learner or learning coach. I am not only an expert at the math; I am an expert in the art of learning mathematics.

The best way to learn is to: read the text; engage with hard ideas about what mathematical tools you should use and when; do the assigned homework and a few extras if you don't feel comfortable; complete any materials that are passed out in class and during recitation; explain the math to someone else; come to office hours to discuss the math; and test yourself by doing problems with your book closed.

Successful students work approximately 8-10 hours each week outside of class on the material related to this course, so be prepared to work hard if you want to master the material!

### **Schedule changes and Important Dates**

Different teacher: September 5 (Brent Gorbutt) and September 10 (Duy Nguyen). There will be no office hours these days.

Drop Date: September 9 (no tuition pentalty) and Sept 30 (self-withdrawal)

**Exams and Quizzes:** 

Quiz: September 18 (recitation)

Quiz: TENTATIVELY October 2 (recitation)

Midterm 1: TENTATIVELY October 10 (during class)

Quiz: TBD

Midterm 2: TBD Quiz: TBD

Final Exam: Wednesday, December 12, 1:30pm-4:15pm

There are no make up tests allowed unless you have an extremely serious and well-documented excuse. You must see me in advance if at all possible, such as a religious reason. If this is not possible due to the nature of the event, you must provide written documentation, such as a dated and timed letter from a doctor/hospital in the case of medical excuse, a death certificate in the case of a family death, etc. A flat tire or car trouble is NOT a valid excuse. Oversleeping is not an excuse. Minor medical difficulties such as a headache or flu that does not require being in the doctor's office is not an excuse. A court date to dispute a ticket is not an excuse. If you are not sure if your reason is excusable, and/ or if you can possibly make it to the exam but it's inconvenient, then it is not an excuse.

#### Homework

Homework problems will be assigned regularly, and you may ask questions about homework either during recitation or during class. Homework is graded on the basis of effort, but, as importantly, doing homework is an important component for doing well on exams.

## **Mastery Points**

Back by popular demand! Mastery Points are an extra credit program to boost exam scores. These extra credit points are generally earned during the LA and TA office hours. More details will be provided in class. Mastery points will begin in Week 2 of the course.

# **Grading**

Your grade for the course will be calculated based on homework completion and attendance (5%), Quizzes (25% total), Midterms 1 and 2 (20% each), and a final exam (30%). Of the four quizzes, the lowest scored quiz will be dropped.

The grading scale is non-traditional:

90-100 A 83.0-89.9 A-77.0-82.9 B+ 73.0-76.9 B 70.0-72.9 B-67.0-69.9 C+ 63.0-66.9 C 50-62.9 D <50 F

There is no change of scale on homework or quizzes, however exams sometimes have an additional curve. You will be notified of any change in this scale after each exam. I do not curve to meet the class average; I curve because the exams are challenging.

I reserve the right at my discretion to increase your grade slightly. I will not decrease your score unless I find a violation of class policy or honor code. However, there is no sympathy for students who do not come to class, do not read in advance, or do not do the homework! Make-up tests are given only in extraordinary situations that require written proof.

#### **Disability statement**

If you are a student with a disability and you need academic accommodations, please see me and contact the Office of Disability Resources at 703.993.2474. All academic accommodations must be arranged through that office.

## **Honor Code**

The University Honor Code is to be followed at all times. Sharing information of any kind about exams or quizzes is prohibited. Any violations will be sent to the Honor Committee and will result in a grade of zero. See the University Honor Code.

## **Getting Extra Help**

There are a few options to get additional help. The key is to recognize early when you need support and to seek it actively.

Go to office hours with worked problems. Don't waste your time -- if you haven't read the problem, you will go slowly when you come to see me. Instead, try the problems aggressively, and come with semi-worked problems to get answers.

The Math Tutoring Center is located in the Johnson Center Room 344. Help is available on a walk-in basis. For hours of operation see <a href="http://math.gmu.edu/tutor-center.php">http://math.gmu.edu/tutor-center.php</a> Use your LA and TA. Go to the office hours even if you're not sure what you don't know. Reach out and ask a question by email even if you think you should know something.

Come to class with questions! Come to office hours with questions! If you're not sure what you don't get, try a homework problem, and then come to office hours!

### **General Remarks**

Please be considerate of other students.

LAPTOPS ARE ALLOWED IN BACK ROW OF THE LECTURE HALL ONLY. If you have a specific need, please see me to discuss. I will call you out in class if you have a laptop or a cell phone which you are using during class time. Please turn off your cell phone before class. Please close your tablets unless you are using them to take notes.

Please get to class on time. If you must arrive late or leave early sit in the back or near the door to minimize the distraction.