CALCULUS I

## **CLASS INFORMATION:** Note that the "R" below is used for Thursday.

SCHEDULED MEETING TIMES							
Туре	Tme	Days	Where	Date Range			
Lecture	1:00pm – 3:40pm	MTWRF	St. Mary's 107 208	May 18, 2020 – June 12, 2020			

## **INSTRUCTOR:** Erblin Mehmetaj

Office:	Department of Mathematics & Statistics	Phone:	(202) 687 – 2767
	322 St. Mary's Hall	E–mail:	Erblin.Mehmetaj@georgetown.edu
	37th and O Streets, N.W.	Hours:	M W R 12:00 pm – 12:45 pm
	Washington, D.C. 20057		

**<u>TEXTBOOK:</u>** *Calculus: Early Transcendentals,* Third Edition, Briggs, Cochran, and Gillett, Pearson (2018).

**<u>COURSE OUTLINE:</u>** The purpose of this course is to teach basic differential and integral calculus, and address the needs of a diverse audience. In particular, it prepares you for courses in disciplines that use this material, including (but not limited to) mathematics, the physical sciences, engineering, and economics.

This course has both computational and theoretical aspects. You will learn basic techniques to calculate limits, derivatives, and integrals. You will learn what the basic concepts (limits, continuity, derivatives, and integrals) mean and you will gain experience in applying these concepts to solve problems (e.g., related-rate, optimization, and volume problems). You will learn elementary parts of the theory of calculus as appropriate for a first course in calculus at the university level; in particular, most theorems will be proven in class and you will be responsible for knowing and applying them.

## **EXAMS:** There will be **three exams** and a **cumulative final exam**.

Use of calculators is also **not permitted**.

**HOMEWORK POLICY:** Homework will be assigned from the textbook after every class. The announcement will be made on Blackboard. Homework will not be collected, however, it will be

discussed the following class. It is your responsibility to solve the problems before the following class.

<u>**GRADES:**</u> The course grade will be based upon the scores on the homework assignments, exams, and final exam.

Total	100%
Final Exam	25%
Exam 3	25%
Exam 2	25%
Exam 1	25%

The final grade will be assigned according to the following grading scale:

<b>Final Grade</b>	<b>Final Score</b>
А	93% - 100%
A-	90% - 92%
B+	87% –89%
В	83% - 86%
B-	80% - 82%
C+	77% – 79%
С	73% – 76%
C-	70% – 72%
D+	67% - 69%
D	60% - 66%
F	0 - 59%

**STUDENT RESPONSIBILITIES AND CLASSROOM COURTESY:** You are responsible for knowing about all announcements made in class related to tests, homework, etc., and for all material covered in class.

Be aware of the University's Honor System; see

http://honorcouncil.georgetown.edu/system for details. If cases of academic dishonesty arise, whether on homeworks or exams, they will be pursued to their conclusion. Assistance of any type (notes in any form, books, etc.) is strictly banned during exams. Using the work of others on exams is strictly prohibited.

Make-up exams are rarely granted. Except under exceptional circumstances (e.g., death of a family member), there are no make-up exams without proper arrangements *made in advance*. It is *not* sufficient to leave a message asking the instructor to call you back; it is not sufficient to send the instructor e-mail; if you must miss an exam, it is your obligation to talk *directly with the instructor in advance*.

Each student must conduct him or herself in a manner that promotes a positive atmosphere, conveys mutual respect, and creates no distractions, thereby allowing all students to focus on our goal: learning calculus. In particular:

- *cell phones, texting devices, laptops, and all other potentially distracting devices must be turned off during class;*
- everyone should make a serious effort to arrive promptly for the start of class;
- except for serious reasons, once in class everyone should remain in class until the class is over,
- apart from the lecture, students asking the instructor questions, and students responding to the instructor's questions, the class should be silent.

These rules are established to create an atmosphere that optimally enables student academic achievement; it is only fair that violations of these rules may result in significantly less partial credit on the exams of any violators.

While, on rare occasions, students may need to be absent from class for valid reasons, more than a few absences without valid explanations will be interpreted as a sign of an unsatisfactory level of effort. Students are expected to put substantial effort into this course, starting with regular attendance, so those who have more than a few absences without valid explanations may receive significantly less generous partial credit on exam.

**QUESTIONS:** Everyone is strongly encouraged to ask questions during class and during office hours! Your priorities for asking questions should be: first try to ask the instructor; should you need further assistance, you may consider utilizing the Math Assistance Center for free tutoring or hire a private tutor (see http://mathstat.georgetown.edu/resources/math-assistance-center/ for additional information).

**DISABILITIES:** Students with disabilities needing accommodations to fully participate in this class should contact the Academic Resource Center. All accommodations must be approved through the Academic Resource Center prior to being implemented. To learn more about the accommodation process, visit the Academic Resource Center's website at http://academicsupport.georgetown.edu.

## HOW TO SUCCEED IN THIS COURSE: practice, practice, practice ...

On exams you will have to solve problems that you have not seen before. So, to prepare for exams, practice what you will encounter on the exams: do many, many practice problems. The textbook has plenty of worked examples and practice problems.

Material builds up quickly in this course. It is crucial to keep up by working all assigned problems and asking about any you cannot solve. Do not let yourself fall behind, hoping to catch up before

exams — this rarely works. It is ultimately far easier and more efficient to stay on top of the material than to cram before the exams.

You are responsible for your own education. You must make sure that you understand what is presented in the lectures and in the text. You must puzzle things out for yourself and ask questions when you get stuck. You must use the problems as self-tests. Lectures only assist in the learning process. The instructor exposes you to the material, explains the flow of ideas, and shows you some examples illustrating the material. The vast majority of learning occurs outside the classroom when you grapple with the ideas presented in the classroom and in the text, and when you apply these ideas yourself to solve problems. The instructor is only a guide; you have to do the hard work.