

## **COURSE SYLLABUS**

Course Number MATH 114 – 006	Course Title Analytic Geometry and Calculus II				
Fall Semester	2018				
Instructor: <i>Gabriela Bulancea</i> TA: Long Nguyen Inguye33@gmu.edu					
Meeting Day, Time, and Room Number Lectures: TR 10:30 am – 12:20 pm, Robinson Hall B104 / Recitations: Friday					
Final Exam Thursday, December 13, 2018, 10:30 am - 1:15 pm					
Office Hours, Location, Phone MW 1:00 - 3:00 pm, Exploratory Hall, Room 4217, or by appointment					
E-mail gbulance@gmu.edu	em	ail is the best way to reach me			

**Textbook:** *Calculus: Early Transcendentals,* second edition by Briggs, Cochran, and Gillett, 2015 The textbook bundled with a MyMathLab access code can be purchased in the campus bookstore. Material to be covered: Most of Chapters 6-10 in the text.

Prerequisites: C or better in Calculus I (MATH 113).

**Broad purpose of the course:** At the end of the semester the students should be able to use various techniques of integration, and understand conic sections, parametric curves, infinite series and power series.

**Technology:** We will be using the iClicker technology and the online homework system MyMathLab associated with the textbook. Students can purchase an *iClicker Reef* app subscription from within the Reef web, iOS, or Android applications or can use an Iclicker remote. All students receive a free 14-day trial when they sign up for a Reef account. We will also use of the computational software program Mathematica which you can download (free of charge) from <u>https://cos.gmu.edu/mathematica/</u>.

**Teaching and learning method:** As a university student, you are responsible for your own learning. Lecture, demonstration, discussion, problem-solving, quizzes, tests, and group tasks will be used to help you learn. Class attendance and completion of assignments are expected. **Homework:** Students are expected to read the sections to be covered in class prior to attending the class on that subject. There will be online homework problems @ <u>http://www.mymathlab.com</u> from each section which will be graded.

**MyMathLab course id: bulancea28283** (For instructions on how to register see the handout posted on Blackboard.)

**Lab assignment:** There will be an optional lab assignment that will make use of the computational software program Mathematica.

Quizzes: There will be weekly quizzes.

Tests: There is a tentative schedule for tests below. You are responsible for keeping up with all information announced in the classroom and on Blackboard. There will be no makeup tests. You may replace your lowest test grade with your final exam percentage. In order for this to happen *you* must write a note **above** your name on your final exam (ex. Please replace my ch 2 test grade of 0/100 with my final exam percentage).

**Grading:** Grades will be assigned according to the percent system given below:

15% Test 1 Thursday, September 27
15% Test 2 Thursday, October 25
15% Test 3 Thursday, November 15
30% Final Exam
10% Homework
10% Quizzes
5% I-clicker questions and class participation

The lowest quiz score will be dropped. The grading scale will be:

A-:	90 - 92;	A: 92 – 98;	A+: 98 – 100
B-:	80 - 82;	B: 82 – 88;	B+: 88–90
C-:	70 - 72;	C: 72 – 78;	C+ : 78 – 80
D:	60 - 70;	F: 0 – 60.	

Additional Help: The Math Tutoring Center in the Johnson Center, Room 344, offers help on a walk-in basis. See http://math.gmu.edu for the most current schedule.

Week of	Sections Covered	Торіс	
Aug 27	6.1, 6.2	Velocity and Net Change; Regions Between Curves	
Sept 3 6.3, 6.4		Volume by Slicing, Volume by Shells	
Sept 10	6.5, 6.6, 6.7	Length of Curves; Surface Area; Physical Applications,	
Sept 17	6.8, 6.9, 6.10*	Logarithmic and Exponentials Functions; Exponential Models;	
		Hyperbolic Functions*	
Sept 24	7.1, 7.2, <b>Test 1</b>	Integration by Parts;	
Oct 1	7.3, 7.4	Trigonometric Integrals, Trigonometric Substitutions;	
Oct 8	No class on	Partial Fractions;	
	<b>Tuesday</b> , 7.5		
Oct 15	7.6, 7.7	Other Integration Strategies; Numerical Integration;	
Oct 22	7.8, 7.9*, <b>Test 2</b>	Improper Integrals; Introduction to Differential Equations*;	
Oct 29	8.1, 8.2, 8.3,	Sequences, Infinite Series	
Nov 5	8.4, 8.5, 8.6	Convergence Tests	
Nov 12	9.1, 9.2 , <b>Test 3</b>	Approximating functions with Polynomials; Power Series	
Nov 19	9.3, 9.4,	Taylor Series	
	Thanksgiving Break		
Nov 26	10.1, 10.2	Parametric Equations; Polar Coordinates	
Dec 3	10.4, Review	Conic Sections	

## Schedule for Math 114 - 006 Fall 2018

**UNIVERSITY POLICIES:** The University Catalog, <u>http://catalog.gmu.edu</u>, is the central resource for university policies affecting student, faculty, and staff conduct in university academic affairs. Other policies are available at <u>http://universitypolicy.gmu.edu/</u>. All members of the university community are responsible for knowing and following established policies.

Honor Code: - It is expected that each student in this class will conduct himself or herself within the guidelines of the Honor Code. Among other things, this means that sharing information of any kind about exams or quizzes (either before or during the exam) will result at a minimum in a grade of zero for all parties involved. Violations will also be reported to the university Honor committee where further consequences such as probation or expulsion from the university may be incurred. See <u>http://academicintegrity.gmu.edu/honorcode</u> for a copy of the Honor code.

**Disability Services:** Reasonable accommodations are available for students who have a documented disability. Please contact Disability Services if you require accommodations: Office of Disability Services, Student Union Building I (SUB I), room 4205, Phone: 703-993-2474

## COUNSELING AND PSYCHOLOGICAL SERVICES (CAPS): (703) 993-2380; http://caps.gmu.edu

**Regarding electronic devices** (such as laptops, tablets, cell phones, etc.), please be respectful of your peers and your instructor and do not engage in activities that are unrelated to class. *Such disruptions show a lack of professionalism and may affect your participation grade.* Cell phones shall be set to silent/vibrate and placed out of sight during class, and especially during exams and quizzes.