

COURSE SYLLABUS

MATH 113 – D01/3D1	Analytic Geometry and Calculus I	
Summer Session D 2022	Lecture Times: MWF 10:30 am - $12:30$ pm	
May 23 - July 30	Recitation Times: W 1:30 - 2:45 pm	
Instructor: Doniray Brusaferro	Room: Horizon Hall, 3010	
Email: dbrusafe@gmu.edu	Office Hours: Tues, Thurs 10:30 - 11:30 am	
	Final Exam	
Thu	ursday Jul 29, 2022	

Textbook: Thomas' Calculus (Early Transcendentals) by Hass, Heil and Weir (fourteenth edition, Pearson publisher). We cover most of Chapters 1 to 5. We will also use MyMathLab from Pearson, which comes bundled with the book in the various formats.

Prerequisites: Satisfactory score on the math placement exam.

Broad purpose of the course: At the end of the semester the student should be able to solve various geometry and physics problems that require the use of functions, limits, the derivative, maximum and minimum problems, the integral, and transcendental functions.

Technology:

• We will be using the online homework system MyMathLab associated with the textbook.

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.
- During the live sessions we will solve additional problems and you will be assigned problems to be worked in class.

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 @ http://www.mymathlab.com from each section, which will be graded.

MyMathLab course id: brusaferro88305 (For instructions on how to register see the handout posted on Blackboard.)

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 score.

Quizzes: There will be weekly quizzes administered via Mymathlab.

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

Homework	25%	Tests (3)	30%
Quizzes (6)	20%	Final Exam	20%
Attendance	5%		

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;	$\mathbf{C}+:$	78-80
D:	60-70;	F:	0-60.		

Additional Help: The Math Tutoring Center will offer online tutoring via questions/answers posted on Piazza and via Blackboard Collaborate sessions. See http://math.gmu.edu for information about how to access the Tutoring Center and for the current schedule.

Academic Integrity: Student Members of the George Mason University community pledge not to cheat, plagiarize, steal, or lie in matters related to academic work.

Students found in violation of the University's honor code will be reported to the honor committee for disciplinary action.

Title IX: Diversity and Ethics: As a faculty member and designated "Responsible Employee," I am required to report all disclosures of sexual assault, interpersonal violence, and stalking to Mason's Title IX Coordinator per university policy 1412. If you wish to speak with someone confidentially, please contact the Student Support and Advocacy Center (703-380-1434), Counseling and Psychological Services (703-993-2380), Student Health Services, or Mason's Title IX Coordinator (703-993-8730; cde@gmu.edu); https://diversity.gmu.edu/sexual-misconduct.

Special Accommodations: If you are a student with a disability and you need academic accommodations, please see your professor and contact the Office of Disability Services (ODS) at 993-2474. All academic accommodations must be arranged through the ODS.

Campus Resources

- If you feel harassed or threatened by another student, please report it to me, your professor, or to Compliance, Diversity, and Ethics in Aquia Hall 373, MS 2C2, or at (703) 993-8730.
- Title IX protects any person from sex-based discrimination, including sexual assault. Call 703-993-8730, email cde@gmu.edu, or complete the intake form online at https://diversity.gmu.edu/intake-form.
- Office of Student Conduct, 703-993-6209, studentconduct.gmu.edu National Sexual Assault Lifeline: 1-800-656-4673 (on back of GMU ID card)
- Counseling and Psychological Services (Caps), 703-993-2380, caps.gmu.edu
- Here are numbers if you or a student you know is in crisis: Crisis Text Line: Text 741-741 CrisisLink: 703-527-4077 National Suicide Prevention Lifeline: 800-273-8255 (on back of GMU ID card)
- Student Support and Advocacy Center: Provides comprehensive services for students in an effort to foster the safety and well-being of the Mason community. Call 703-993-3686. http://ssac.gmu.edu. Call 703- 380-1434 for the 24-hour sexual and intimate partner violence helpline.

In an emergency you can dial 911 or 703-993-2810 (University Police and Public Safety; on back of GMU ID card) police.gmu.edu

 Sign up for the following to receive texts to your phone: Visit alert.gmu.edu today to add your cell phone to receive text message notifications from Mason Alert. Rave Guardian is a campus safety mobile application that enhances preparedness and safety

Rave Guardian is a campus safety mobile application that enhances preparedness and safety on-campus. The app is free for all students with a university email address through the iTunes store and the Google Play store. See ready.gmu.edu for more information.

• Office of Housing and Residence Life: Professional and student staff are available 24 hours a day to assist students and ensure safety. For 24-hour, non-emergency line, Call 703-993-2720. https://housing.gmu.edu/.

Day	Sections Covered	Topic	
May 23	1.1, 1.2	Functions & their graphs; Shifting & scaling graphs	
May 25	1.3, Quiz 1		
May 27	2.1	Rates of change & Tangent lines to a curve	
May 30	2.2	Limit of a function & limit laws	
June 1	2.4, Quiz 2	One sided limits	
June 3	2.5	Continuity	
June 6	2.6	Limits involving infinity, Asymptotes of Graphs	
June 8	3.1, Quiz 3	Tangent lines & Derivative at a point	
June 10	3.2	The derivative as a function	
June 13	3.3	Differentiation rules	
June 15	3.4, <u>Test 1</u>	The derivative as a rate of change	
June 17	3.5	Derivatives of trigonometric functions	
June 20	-	University Closed	
June 22	3.6, 3.7, Quiz 4 The chain rule; Implicit differentiation		
June 24	3.8	Related Rates	
June 27	3.9	Linearization & Differentials	
June 29	4.1, Quiz 5	Extreme values of functions on closed intervals	
July 1	4.2	The Mean Value Theorem	
July 4	-	University Closed	
July 6	4.3,	Monotonic functions, the first derivative test;	
	4.4, <u>Test 2</u>	Concavity & curve sketching	
July 8	4.5	Applied optimization	
July 11	4.6	Newton's method	
July 13	4.7, Quiz 6	Antiderivatives	
July 15	5.1	Area & estimating with finite sums	
July 18	5.2	Sigma notation & Limits of finite sums	
July 20	5.3, <u>Test 3</u>	The definite integral	
July 22	5.4	The Fundamental Theorem of Calculus	
July 25	5.5	Indefinite integrals & The substitution method	
July 27	5.6	Definite integral substitutions & Area between curves	
July 29	Final Exam		

Schedule for Math 113 Summer 2022