



COURSE SYLLABUS

Course Number MATH 114 – B03 Summer Session B 2021 June 1 - July 24	Course Title Analytic Geometry and Calculus II Lecture Times: Asynchronous Recitation Times: MTWH 8:20 - 9:10 am
Instructor: Doniray Brusaferrero Email: dbrusafe@gmu.edu	Mode of Instruction: Online Office Hours: Tues, Thurs 10:30 - 11:30 am
Final Exam Thursday Jul 22, 2021	

Textbook: Thomas' Calculus (Early Transcendentals) by Hass, Heil and Weir (fourteenth edition, Pearson publisher). We cover most of Chapters 6 to 11. We will also use MyMathLab from Pearson, which comes bundled with the book in the various formats.

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

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 definite integrals, use techniques of to evaluate integrals, understand infinite series and power series, and be able to identify and graph conic sections and basic parametric and polar curves.

Technology:

- The synchronous part of lectures and recitations will be conducted via Blackboard Collaborate or Zoom sessions. You are required to attend these live sessions.
- The recorded part of the lectures will be posted on Blackboard.
- The exams will be administered either via Zoom or Blackboard Collaborate. To be able to take the exams you will need a working webcam.
- 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.
- Recorded lectures will be posted on the Blackboard page of the course.
- 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: brusaferrero55428 (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	20%	Tests (3)	30%
Quizzes (7)	15%	Final Exam	20%
Recitation	10%	Participation	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; **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.

Schedule for Math 114 Summer 2021

Day	Sections Covered	Topic
June 1	Review, 5.6	Regions Between Curves
June 2	6.1	Volume by Slicing
June 3	6.2	Volume by Shells
June 7	6.3	Length of Curves
June 8	6.4	Surface Area
June 9	6.5, 6.6	Physical Applications
June 10	7.1, 7.2	Logarithmic and Exponential Functions
June 14	7.3, 7.4	Hyperbolic Functions, Relative Rates of Growth
June 15	8.2	Integration by Parts
June 16	<u>Test 1</u>	
June 17	8.3, 8.4	Trigonometric Integrals, Trigonometric Substitutions
June 21	8.5	Partial Fractions
June 22	8.6, 8.7	Other Integrations Strategies, Numerical Integration
June 23	8.8	Improper Integrals
June 24	9.1, 9.2	Introduction to Differential Equations
June 28	10.1	Sequences
June 29	<u>Test 2</u>	
June 30	10.2	Infinite Series
July 1	10.3, 10.4	Convergence Tests
July 5	10.5, 10.6	Convergence Tests
July 6	10.7	Power Series
July 7	10.8	Taylor Series
July 8	10.9	Convergence of Taylor Series
July 12	10.10	Applications of Taylor Series
July 13	11.1	Parametric Equations
July 14	<u>Test 3</u>	
July 15	11.2	Parametric Curves
July 19	11.3	Polar Coordinates
July 20	11.6	Conic Sections
July 21	Review	
July 22	<u>Final Exam</u>	

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 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/>.