

COURSE SYLLABUS

Course Number	Course Title			
MATH 114 – A01	Analytic Geometry and Calculus II			
Summer Session A	2020			
Instructor: Gabriela Bulancea				
Live Sessions (attendance required)				
MTWRF 11:30 am – 12:30 pm and 1:30 pm - 2:20 pm				
Final Exam				
Thursday, July 2, 2020, 10:30 am - 1:15 pm				
Office Hours				
MWR 2:30 - 3:10 pm, or by appointment				
E-mail				
gbulance@gmu.edu				

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 pre-recorded part of the lectures will be posted on Blackboard.
- The exams will be administered either via Zoom. 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. You should watch these recordings before our live meetings in which we will be discussing the material covered in the respective recording.
- After you watch a recorded lecture, you will have to work on some basic problems related to that lecture and you will have to post your answers on the Piazza discussion board.
- 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: *bulancea99636* (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 percentage.

Quizzes: There will be daily quizzes administered via mymathlab.

In class questions: There will be daily quizzes administered via mymathlab. There will also be daily in class activities, your work in class will account for 10% of the final grade.

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

15% Test 1 Wednesday, June 10
15% Test 2 Thursday, June 18
15% Test 3 Thursday, June 25
25% Final Exam Thursday, July 2
10% Homework
10% Quizzes
10% class participation

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.

Day	Sections Covered	Торіс
June 1	Review, 5.6	Regions Between Curves
June 2	6.1	Volume by Slicing
June 3	6.2	Volume by Shells
June 4	6.3, 6.4	Length of Curves; Surface Area
June 5	6.5, 6.6	Physical Applications

Schedule for Math 114 Summer 2020

June 8	7.1, 7.2	Logarithmic and Exponentials Functions
June 9	7.3, 7.4	Hyperbolic Functions, Relative Rates of Growth
June 10	Test 1 , 8.2	Integration by Parts
June 11	8.3, 8.4	Trigonometric Integrals, Trigonometric Substitutions
June 12	8.5	Partial Fractions
June 15	8.6, 8.7	Other Integration Strategies, Numerical Integration
June 16	8.8	Improper Integrals
June 17	9.1, 9.2	Introduction to Differential Equations
June 18	Test 2 , 10.1	Sequences
June 19	10.2	Infinite Series
June 22	10.3, 10.4	Convergence Tests;
June 23	10.5, 10.6	Convergence Tests
June 24	10.7	Power Series
June 25	Test 3 , 10.8	Taylor Series
June 26	10.9, 10.10	Convergence of Taylor Series, Applications of Taylor Series
June 29	11.1, 11.2, 11.3	Parametric Equations, Polar Coordinates
June 30	11.6, Review	Conic Sections
July1	Review	
July 2	Final Exam	
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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

http://academicintegrity.gmu.edu/honorcode 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.

COUNSELING AND PSYCHOLOGICAL SERVICES (CAPS): <u>http://caps.gmu.edu</u>