



COURSE SYLLABUS

Course Number MATH 213 – B03	Course Title Analytic Geometry and Calculus III	
Summer Semester	2021	
Instructor: <i>Heath Camphire</i>		
Meeting Day and Time TR 4:30 pm –5:20 pm		
Office Hours MTWR 5:30 - 6:30 pm, or by appointment		
E-mail hcamphir@gmu.edu		
Course Coordinator: <i>Dr. Anton Lukyanenko</i> , E-mail: alukyane@gmu.edu		

Textbook: *Thomas' Calculus (Early Transcendentals)* by Hass, Heil and Weir (fourteenth edition, Pearson publisher). We cover most of Chapters 12 to 16. We will also use MyMathLab from Pearson, which comes bundled with the book in the various formats.

Technology: We will be using the online homework and testing system MyMathLab associated with the textbook. Lectures and recitations will also be held over Zoom.

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 @ <http://www.mymathlab.com> from each section which will be graded. Your two lowest homework grades will be dropped.

MyMathLab course: For instructions on how to register, see the handout posted on Blackboard. Note that some browsers don't work well with MyMathLab, like Chrome, so you'll need to download one that will.

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.

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

15% Test 1 Friday, June 10-12

15% Test 2 Friday, June 24-26

15% Test 3 Friday, July 8-10

20% Final Exam, Friday, July 22-24

30% Homework

5% Recitation

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.

Schedule for this semester (subject to change)

Week of	Sections Covered	Topic
June 1	12.1-12.4	Review of Calculus I, trigonometry; vectors in 2D and 3D, dot product, cross product, rotation
June 8	12.5-12.6, 15.4, 15.7, 13.1-3, Test 1	Shapes, coordinate systems, parametrization; curves, integrals, arc length
June 15	14.1-14.4	Derivatives, level surfaces, limits, and continuity, partial derivatives, chain rule, gradient
June 22	14.6-14.8, 15.1-15.4, Test 2	Tangent planes, linear approximation, optimization; integrals, area, averages, polar coordinates
June 29	15.5-15.8	3D integrals, center of mass, review of polar/spherical/cylindrical coordinates; derivatives and integrals using polar/spherical/cylindrical coordinates, Jacobian derivative, 2D u-substitutions
July 6	16.2-16.4, Test 3	Vector fields, work, flow, flux, curl, div; conservative vector fields, Fundamental Theorem of Line Integrals, Green's Thm
July 13	16.5-16.8	Parametrizing surfaces, computing their area, center of mass, etc.; surface integrals, Stokes and Divergence Theorems
July 20	Final Exam review	

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Honor Code: - It is expected that each student in this class will conduct themselves 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: Office of Disability Services, Student Union Building I (SUB I), room 4205, Phone: 703-993-2474, <https://ds.gmu.edu/>

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