

Virginia Commonwealth University
Department of Mathematics and Applied Mathematics
Calculus with Analytic Geometry II

Math 201 - Section 012 - Fall 2020

Course Syllabus

Meeting Times: MW 11:00 - 12:15pm

F 11:00 - 11:50am

Location: <https://vcu.zoom.us/j/97311482596>

First class: Monday, August 17 at the above Zoom link

Contact Information

Instructor: Brent Cody

Website: <http://www.people.vcu.edu/~bmcody/>

Office Hours: by appointment or M 2:00 - 2:50 pm & W 4:00 - 4:50 pm in the above zoom room.

Email: bmcody@vcu.edu

Prerequisite: MATH 200 with a minimum grade of C.

About the Course

Math 201 is the second part of a two-semester introductory calculus sequence at VCU for students majoring in the mathematical sciences, the physical sciences, the biological sciences, and engineering. Math 201 continues the study of the integral calculus, with applications, and covers the theory of infinite series and power series.

Summary of Online Aspects of Course

- I encourage you to attend lectures at the Zoom link above during our regular class times. However, I will be recording and posting lectures so that live attendance is not mandatory.
- You are required to watch all lectures. For example, I will provide access codes during video lectures that you will need in order to complete assignments. See below for more information.
- For some assignments, once you open them on Canvas, you will have a limited time to upload your work. You will NOT be able to pause the clock and submit your work later. So, when starting a quiz or a test, be sure you will have enough time as well as a stable internet connection to complete the assignment.

Course Goals

The course will focus on integral calculus, its applications, and infinite sequences and series. Topics to be covered include:

- A variety of integration techniques, among them integration by parts, trigonometric substitution, and partial fractions.
- Methods of numerical integration.
- Using integrals to calculate arc lengths, areas, and volumes.
- Applications of integrals to problems in physics, biology, economics, and other areas.
- The calculus of parametric and polar curves.
- The convergence of infinite sequences and series.
- Power series and their use in approximating analytic functions.

Textbook

Textbook: Briggs, *Calculus: Early Transcendentals* (3rd Edition), ISBN-13: 978-0134763644, Pearson (Note: an electronic copy of the book is available through MyLab.)

MyLab Math: You will need to obtain an access code to the web-based textbook/homework system. Your login information from Math 200 should work.

Course Website: Course assignments and grades will be available on Canvas.

<https://canvas.vcu.edu/>

Calculator

Calculators will be allowed on most assignments, but you will be required to show all of your work on quizzes, discussion assignments and tests.

Expectations

“For a student of mathematics to hear someone talk about mathematics does hardly any more good than for a student of swimming to hear someone talk about swimming. You can’t learn swimming techniques by having someone tell you where to put your arms and legs; and you can’t learn to solve problems by having someone tell you to complete the square or to substitute $\sin u$ for y .” —Paul Halmos

The only way to truly learn mathematics is to be actively engaged with it yourself. I therefore expect you to watch all lecture videos, complete all assignments to the best of your ability, and ask questions either in class, during office hours or in the course discussion forum. It is important that you stay up-to-date with the material being covered in the course; please make use of office hours or course discussion forums if anything covered in class is not clear. If the scheduled office hours do not work for you, send me an email to schedule a different time.

In addition to watching the 3 hours and 20 minutes of lectures each week, I expect that you will spend at least 7 hours per week outside of class working on this course.

Grading

The usual 10-point grading scale will be used to average course grades (90–100 is an A, 80–89 is a B, etc.). Here is a chart indicating the weights of individual assignments. The graded assignments for the course are broken up into four categories as follows.

Homework	10%
Quizzes	10%
Discussion Quizzes	10%
Tests	45% (15% each)
Final Exam	25%
Total	100%

(1) **Homework:** Homework assignments will be submitted through the MyLab Math system, and will typically be due on Mondays by midnight. To enroll in our MyLab Math course you will need the following information.

Course Name: Calculus with Analytic Geometry II
Course ID: cody62985

Follow the directions for how to enroll in our MyLab Math course here:

https:
[//drive.google.com/file/d/19Ug-FVryyousYKweUNT4sX1pYr2RpUjJ/view?usp=sharing](https://drive.google.com/file/d/19Ug-FVryyousYKweUNT4sX1pYr2RpUjJ/view?usp=sharing)

The first homework assignment is due on Monday, August 24 by midnight.

(2) **Quizzes:** Every Friday a timed quiz will be given as follows. I will display a passcode during the recorded lecture, it will be up to you to log into Canvas and type the passcode in to view the quiz. You will have a 20 minute window on the day that the passcode is displayed to work on your solution and upload a document for me to grade. You can either write your solution on paper and upload a photo of your work, or you can do your work on a tablet and upload a common file type such as JPG or PDF. To receive credit you must show all of your work.

- Each quiz will be worth 10 points and partial credit will be given.

- While you are taking quizzes, use of notes, books and the internet is strictly prohibited, as is communication with other people; such activity will be considered cheating.
- One of your lowest quiz grades will be dropped.
- No makeup quizzes will be given.

The first quiz will be on Friday, August 28 and must be completed by midnight.

(3) Discussion quizzes: Every Wednesday you will participate in a discussion quiz with your group to solve a problem. Each Wednesday I will open a “Discussion Quiz” forum that will display a few problems. You will write solutions for the problems and post your solutions to your group discussion board for that quiz. Working with your group, you will put together “final solutions” to submit. Other group member’s posts will not be visible until you make a post, and your first post must be your own version of a solution. Once your group has developed a solution they want to submit, a designated individual will submit the solutions for your group by making a single post containing the solutions and the words “FINAL SOLUTIONS” at the top. Each week the responsibility of submitting your group’s solution will rotate.

- Each discussion quiz will be worth 10 points and partial credit will be given.
- You are allowed to use your notes and book on discussion quizzes.
- One of your lowest discussion quiz grades will be dropped.
- No makeup discussion quizzes will be given.
- Each group member will receive their own grade, out of 10 points, as follows.
 - Your first post was a solution - 2pts
 - You participated in a discussion to work toward a correct solution - 2pts
 - Your group rotated the person submitting a solution - 1pt
 - Your group’s solution was correct - 5pts (partial credit will be given)

The first (preliminary) discussion quiz will be on Wednesday, August 19, and must be completed by Thursday, August 20. For this assignment you will get to know your group by answering some questions in your group discussion forum. No math problems will be assigned, but this will count as a “discussion quiz”.

The first regular discussion quiz will be on Wednesday, August 26 and must be completed by Thursday, August 27 by midnight.

(3) Tests: There will be three timed tests administered through Canvas, which I will announce at least one week in advance. You will be given a 1 hour and 15 minute window to complete each test on the announced day. You must upload your solutions by midnight on the day of the exam. Be sure to give yourself enough time to complete your work before the midnight deadline. Calculators will typically be allowed for most of the problems, however, you must show all work to receive credit.

- Tests will be graded out of 100 points and partial credit will be given.
- While you are taking tests, use of notes, books and the internet is strictly prohibited, as is communication with other people; such activity will be considered cheating.
- No passcode will be required to access tests.
- Makeup tests will not be given, but, I will replace your lowest test score with your score on the final exam if it helps your grade.

(4) Final Exam: The final exam will be cumulative and will take place on

Wednesday, December 2, 12:30 pm – 3:20 pm .

You will have a 3 hour window to complete the final exam through Canvas on the day of the final. The test policies above also apply to the final exam.

Grading Policies:

- Quiz, test, and exam grades will be available on Canvas. Homework grades will be available on Mylab Math.
- **Make-up policy:** Under normal circumstances I do not make a distinction between excused absences and unexcused absences. I do not give make-up tests or quizzes, rather I drop your lowest quiz/discussion quiz grades (as outlined above) and replace your lowest test score with the final if it helps. If you miss the final exam for a legitimate reason (i.e. a documented illness or emergency) then I can give you a grade of incomplete (I) for the course, and you will need to make up the missed exam.

Course Policies

- The final exam is written under the assumption that you have been studying the material at least 7 hours per week outside of class throughout the semester.
- No cheating on quizzes, tests or exams will be tolerated. If you are caught cheating on an assignment you will receive a 0 on that assignment.

All cellphones and electronic devices must be put away during quizzes, tests and exams. The use of a cellphone during quizzes, tests and exams will be considered cheating unless you ask me first.

Tutoring

There is tutoring available for Math 201. For more information: <https://clc.vcu.edu/tutoring/>.

Important Dates

Tuesday, November 24 Last day of class and last day to **withdraw** with a mark of “W”.
For other important dates visit: <https://academiccalendars.vcu.edu/>.

UNIVERSITY WIDE POLICIES

Students with disabilities

Students with disabilities Section 504 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act of 1990, as amended, require that VCU provide “academic adjustments” or “reasonable accommodations” to any student who has a physical or mental impairment that substantially limits a major life activity. To receive accommodations, students must register with the Office of Student Accessibility and Educational Opportunity on the Monroe Park Campus (828-2253) or the Division for Academic Success on the MCV campus (828-9782). Please also visit the Student Accessibility and Educational Opportunity website via <https://saeo.vcu.edu/> and/or the Division for Academic Success website via <https://das.vcu.edu/> for additional information.

Once students have completed the registration process, they should schedule a meeting with their instructor (s) and provide their instructor (s) with an official accommodation letter. Students should follow this procedure for all courses in the academic semester.

More University Policies

Students should visit <http://go.vcu.edu/syllabus> and review all syllabus statement information. The full university syllabus statement includes information on safety, registration, the VCU Honor Code, student conduct, withdrawal and more.