MATH 201: CALCULUS WITH ANALYTIC GEOMETRY II COURSE SYLLABUS

VIRGINIA COMMONWEALTH UNIVERSITY

Spring 2022 Section 009

Modality: Online Synchronous Meeting times: MW 2:00 - 3:15 pm

F 2:00 - 2:50 pm

Meeting location: https://vcu.zoom.us/j/97858505389

Instructor:

Brent Cody

Office: Harris Hall 4110 Email: bmcody@vcu.edu

Personal Website: http://www.people.vcu.edu/~bmcody/

Office hours:

Held at my personal Zoom link: https://vcu.zoom.us/j/3488900042 M 11:00am - 12:00noon and W 3:15pm - 4:15pm

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.

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, Homework System and Calculator:

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

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

https://www.pearson.com/store/p/calculus-early-transcendentals/P100003056837/9780135960349

Calculator: You will be allowed to use a graphing calculator (such as a TI-83, 84, or 86) on some quiz and test problems, but all work must be shown to receive full credit unless specifically stated otherwise.

<u>Course Website</u>: All course materials and assignments are on Canvas. To find our course website, log in to Canvas at the link below.

https://ts.vcu.edu/askit/teaching-and-learning/canvas/

Summary of Online Aspects of Course:

- Lecture will be held live on Zoom during class time.
- Lecture notes and videos will be posted on Canvas.
- I encourage you to attend all lectures at the Zoom link above during our regular class times.
- You are required to watch all lectures.
- Quizzes will only be available to take on the day of the quiz.
- Tests and the final exam will only be available at a specific time (during class and during our final exam time slot) for a certain time interval.
- For some assignments (quizzes, tests and final exam), 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.

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 <u>outside</u> of class working on this course.

Grades:

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

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

(1) Homework (due on Wednesdays): Homework assignments will be submitted through the MyLab system, and will typically be due on Wednesdays by midnight. To get started with MyLab visit the fron page of our Canvas site (log in at the link below).

https://ts.vcu.edu/askit/teaching-and-learning/canvas/

The first homework assignment is due on Wednesday, January 26 by midnight.

(2) Quizzes (due on Mondays):

Every Monday a quiz will be due on Canvas. You will upload all of your work for each problem on Canvas (photos of handwritten work, or work written on a tablet is fine). In order to receive credit, your work must be uploaded in a common file type such as jpg, pdf, etc. Work submitted by email will not be accepted.

Directions for quizzes:

 Books, notes, phones, tablets, computers and use of the internet is strictly prohibited during quizzes, as is communication with other people; such activity will be considered cheating.

The first (preliminary) group quiz (Quiz 0) will be due on Monday, January 24. 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 "quiz grade".

The first regular quiz will be on Monday, January 31.

- (3) Tests: There will be three timed tests administered through Canvas, which I will announce at least one week in advance. Once you start a test, you will be given a total of 1 hour and 30 minutes to write solutions and upload your work. You must start each test between 1:50 am and 2:00 pm on the day of the test if you want to be given the full time. You should upload solutions as you go so that you don't run out of time and fail to upload your work on time. 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.
 - Solutions submitted after the deadline or by email will not be accepted.
 - 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, administered through Canvas, will be cumulative and will take place on

Monday, May 9, from 12:30 pm to 3:20 pm.

Grading and makeup policies:

Late homework will be accepted, but a substantial penalty will be applied. Makeup quizzes and tests will not be given. But, I will drop the lowest quiz grade and I will replace your lowest test score with your score on the final exam if it improves your course average.

Important Dates:

Monday, January 24 Last day of add/drop period

Friday, March 25 Last day to withdraw with a mark of "W". For other important dates visit: https://academiccalendars.vcu.edu/.

University syllabus statement:

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.

Requesting Accommodation:

The university recognizes that some students who previously did not need Section 504 Academic Accommodations, and who have a qualifying condition or disability, may need support or assistance during the return to campus process. A modified approach for the temporary and more permanent need for accommodation has been developed and implemented to provide students with full access to programs and activities related to their academic majors. Because every case is different, student requests are evaluated on a case-by-case basis. Please share your need for an accommodation with the Student Accessibility and Education

Nondiscrimination Policy Office (SAEO), or for MCV Campus students, the Division for Academic Success, after you have worked directly with your faculty member.

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.

Health and well-being:

Navigating the anticipated stressors of daily life can often be challenging enough. When unexpected stressors emerge or when we are faced with uncertainty, it can be tough to know how to cope. Try out some of these tips and resources for health and wellness to see if they are the right fit for you. Symptoms or Diagnosis: If an on-campus student identifies symptoms, has tested positive for COVID-19 or has come into contact with someone diagnosed with COVID-19, that student should contact University Student Health Services. At that point, isolation should begin and contact tracing will be performed by Student Health Services. Symptoms will be monitored and the student should refer to a medical provider if symptoms worsen or be released from isolation after 14 days, if symptom-free.

Nondiscrimination policy:

VCU is committed to providing a safe, equitable and inclusive environment for all its employees, patients and students. Discrimination or discriminatory harassment is not only unlawful, it is harmful to the well-being of our university community. Our university's core values, specifically those related to diversity and inclusion, have withstood many difficult situations and trying times, and they will not falter now. Reports of discrimination, bullying, harassment and/or stereotyping of persons of color or those impacted by COVID-19 or otherwise, will not be tolerated. Be assured that VCU will make every effort to address and prevent the occurrence of unlawful discrimination and, if necessary, take prompt and appropriate action to remedy and prevent its recurrence. Every member of our community is asked to:

- Become familiar with the university's policies on Preventing and Responding to Discrimination and Duty to Report and Protection from Retaliation in the VCU Policy Library.
- Consult with Equity and Access Services or VCU Human Resources for additional guidance on how to file a report of discrimination.
- Contact the Office of Institutional Equity, Effectiveness and Success (IES) on how to address and maintain a culture of inclusion.
- Encourage individuals who may need an ADA accommodation for a known or newly acquired disability, to contact the ADA/504 Coordinator in ADA Services.
- Bookmark and share information on university or community agencies that offer support or services, such as VCU's Counseling Services or Ombudsperson.
- Explore training and educational opportunities on diversity and inclusion at IExcel Education and through the Office of Institutional Equity, Effectiveness and Success.

Tips for Success:

- When taking online and hybrid courses, your self-motivation and self-pacing are absolutely critical. For this course, you should plan to work on this course about 7-9 hours per week (in addition to watching lecture videos). Be sure to plan your time accordingly.
- Make yourself a calendar with all of your due dates across ALL of your courses. Plan for when you will work on each one for completion in advance of the due dates.
- Make sure you note any "online" courses that still have a required meeting time (such as a Google Meet or Zoom session).
- Plan Ahead!! Study as you go instead of at the last minute!