

Calculus II

Math 151

Spring 2018

Instructor

Dr. Seth Harris
Hall of Sciences 302
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Phone: (973) 408-3401

Class Meetings

Section C
Monday, Wednesday, Friday, 9:10 AM – 10:15 AM
Brothers College 215

Section J
Monday, Wednesday, Friday 1:15 PM – 2:20 PM
Brothers College 201

Office Hours

Monday 2:30 PM – 3:30 PM
Tuesday 11:30 AM – 12:30 PM
Wednesday 10:30 AM – 11:30 AM
or by appointment

Textbook and Course Outline

Calculus: Early Transcendentals, 8th Edition, by James Stewart, with WebAssign Bundle

Chapter 6, Applications of Integration
Chapter 7, Techniques of Integration
Chapter 9, Differential Equations
Chapter 10, Parametric Equations and Polar Coordinates
Chapter 11, Infinite Sequences and Series

We will cover chapters 6, 7, and 11 fairly completely. We will be more selective with subsections of Chapters 9 and 10, depending on time.

Grading

- 20% Homework via WebAssign
- 16% Exam 1, Wednesday, February 14
- 16% Exam 2, Friday, March 16
- 16% Exam 3, Wednesday, April 11
- 5% Mathematica assignments
- 27% Final Exam, Date TBA

Homework via Webassign

Homework will be assigned most weeks and will generally be due on Wednesdays. We will use WebAssign, an online interface for completing homework assignments. You are encouraged to work in groups, but each student must turn in his or her own work. You will be allowed to turn in at most two homework assignments late. Any late assignment is due by the next homework deadline (e.g., the Wednesday after it was originally due), and you need not give any explanation to your instructor regarding why it was late.

For section C (9:10 AM section), the WebAssign key is: **drew 4351 9133**.

For section J (1:15 PM section), the WebAssign key is: **drew 6051 3940**.

Exams

There will be three midterm exams and a cumulative final exam. All exams will be sit-down exams with no calculators, notes, or books permitted. If you are unable to make an exam, it is your responsibility to notify your instructor at least 24 hours prior to the exam and arrange a make-up time. The final exam will be scheduled during the week from May 3 through May 9.

Mathematica

Mathematica is a powerful computer algebra system that is widely used in mathematics, the sciences, and industry. Throughout the semester, we will learn how to apply some basic Mathematica tools to solve problems in calculus. You will have a total of three take-home assignments that make use of Mathematica.

Drew University has a network license for Mathematica, so you *do not* need to purchase it yourself. In the next few days, I will email you a link to the installation files and setup instructions.

Attendance

We expect that you will attend class every day. Repeated absences will negatively affect your mathematical understanding and, ultimately, your final grade. Regular attendance will enhance your comprehension of mathematical concepts, and will help you solving your homework and being productive on exams.

Academic Accommodations

Requesting Accommodations for the First Time: Students are instructed to contact Accessibility Resources, Brothers College 119B, 973-408-3962. Although disclosure may take place at any time during the semester, students are encouraged to do so early in the semester, because, in general, accommodations are not implemented retroactively. For additional information, visit:

<http://www.drew.edu/academic-services/disabilityservices>

Returning Students with Approved Accommodations: Requests for previously approved accommodations for the current semester should be sent to Accessibility Resources, ideally within the first two weeks of class. This allows the office sufficient lead time to process the request. Please call 973-408-3962, email disabilityserv@drew.edu , or complete the accommodations request at:

<http://www.drew.edu/academic-services/disabilityservices/request-for-accommodations>

Academic Integrity

All students are required to uphold the highest academic standards. Any case of academic dishonesty will be dealt with according to the guidelines and procedures outlined in Drew University's "Standards of Academic Integrity: Guidelines and Principles." A copy of this document can be accessed on the CLA Dean's U-KNOW space by clicking on "Academic Integrity Standards."

Student Learning Outcomes

During this course, students will:

- Examine various techniques of integration and apply them to definite and improper integrals
- Distinguish between the concepts of sequence and series, and determine limits of sequences and convergence and approximate sums of series
- Define, differentiate, and integrate functions represented using power series expansions, including Taylor series, and solve related problems
- Solve problems in a range of mathematical applications using the derivative and the integral
- Define, graph, compute limits of, differentiate, integrate and solve related problems involving functions represented parametrically or in polar coordinates
- Model physical phenomena using differential equations
- Express mathematical ideas using clear, concise notation
- Explain and interpret their work through writing and speaking
- Use appropriate modern technology to explore calculus concepts