

Calculus I

Math 150

Spring 2018

Instructor

Dr. Seth Harris
Hall of Sciences 302
Email (preferred): sharris2@drew.edu
Phone: (973) 408-3401

Class Meetings

Monday, Wednesday, Friday 11:50 AM – 12:55 PM
Brothers College 201

Recitation Math 150R-D
Tuesday, 9:25 AM – 10:25 AM
Brothers College 215

Recitation Math 150R-F
Tuesday, 10:25 AM – 11:15 AM
Brothers College 215

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 1, Functions
Chapter 2, Limits and Derivatives
Chapter 3, Differentiation Rules
Chapter 4, Applications of Differentiation
Chapter 5, Integrals

Grading

- 20% Homework via WebAssign
- 15% Exam 1, Wednesday, February 14
- 15% Exam 2, Friday, March 16
- 15% Exam 3, Wednesday, April 11
- 5% Recitations
- 5% Mathematica assignments
- 25% 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.

The WebAssign key for this class is: **drew 6581 7897**.

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.

Recitations

During most Tuesday recitations, we will hold problem-solving sessions where you will earn credit for completing a short assignment. Some of these will be more challenging than the typical homework or exam questions. You are encouraged to work in groups, though this is not required. If you do work in groups, you can turn in one answer sheet per group, but please make sure that everyone in the group has signed their name on the answer sheet. Recitations will be graded credit/no credit; if I see that you have made a reasonable effort, you will receive credit. You will need credit for all but two sessions to get the full 5%.

Tuesday recitations immediately before a Wednesday exam will be devoted to exam review.

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

By the end of the course, students will be able to:

- Compute limits and derivatives of algebraic, trigonometric, and piece-wise defined functions,
- Compute definite and indefinite integrals of algebraic and trigonometric functions using formulas and substitution,
- Use the derivative of a function to determine the properties of the graph of the function and use the graph of a function to estimate its derivative,
- Solve problems in a range of mathematical applications using the derivative or the integral,
- Apply the Fundamental Theorem of Calculus,
- Determine the continuity and differentiability of a function at a point and on a set, and
- Use appropriate modern technology to explore calculus concepts.