Multivariable Calculus
Math 250
Fall 2024

Instructor

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

Class Meetings

Monday, Wednesday, Friday 2:40 PM – 3:45 PM
Brothers College 201

Zoom (when necessary)

When necessary, we will hold class online on Zoom. All Zoom meetings will be recorded.

Zoom link: https://drew.zoom.us/s/705701040

Meeting ID: 705 701 040

Likely dates for Zoom classes: Wednesday, September 11; Friday, September 13; Monday, November 25 (just before Thanksgiving)

Office Hours

Monday 1:15 PM – 2:30 PM
Tuesday 10:30 AM – 11:45 AM
Wednesday 10:30 AM – 11:30 AM
or by appointment

Office hours will typically be held in person whenever Drew classes are meeting in person. However, you may always request to meet online during these times. Occasionally I will hold office hours online only.

Office hour Zoom link: https://drew.zoom.us/s/284748767

Office hour meeting ID: 284 748 767

Course Description

Extending the concepts of calculus from two to three or more dimensions: partial differentiation, multiple integration; analytic geometry in three dimensions, vectors, line and surface integrals, applications.

Prerequisite

Math 151: Calculus II with a grade of C- or higher

Textbook and Course Outline

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

Chapter 12, Vectors and the Geometry of Space
Chapter 13, Vector Functions
Chapter 14, Partial Derivatives
Chapter 15, Multiple Integrals
Chapter 16, Vector Calculus

It is possible to purchase WebAssign plus the ebook, without purchasing a print textbook. You will see this option once you create a WebAssign account.

Grading

20% Homework via WebAssign
16% Exam 1, Friday, September 20
16% Exam 2, Friday, October 18
16% Exam 3, Friday, November 15
22% Final Exam, Wednesday, December 11
10% Average of highest two of four exams

Homework via WebAssign

Homework will be assigned most weeks. We will use WebAssign, an online interface for completing homework assignments. You are encouraged to work in groups, but each student must turn in their 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 Friday 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 9462 5397**.

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. The final exam is currently scheduled for Wednesday, December 11 from 4:00–7:00 PM.

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. If you miss an exam without doing so, a make-up exam will NOT be allowed, unless you have a valid absence verification from the CAE.

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.

Student Learning Outcomes

Student Learning Outcomes – By the end of the course, students will be able to:

- Convert real-world problems into appropriate mathematical problems, solve them, and appropriately interpret the results
- Analyze and solve problems in two and three dimensional Euclidean space using methods of Vector Analysis
- Calculate and interpret limits, derivatives, and integrals of functions of several variables and vector functions, including partial derivatives, directional derivatives, multiple integrals, and line integrals
- Use technology to support problem solving and enhance understanding
- Provide clear, complete, self-contained solutions in written form in which they express mathematical ideas via the correct use of clear, concise notation
- Explain and interpret their work and results, communicating mathematical material with clarity and coherence through writing and speaking

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, which is located in the academic policies section of the catalog.

Absence Policy Statement

In addition to the course attendance policy, students should be aware of their rights and responsibilities regarding absences for legitimate reasons as described in the Absence Policy: Student Rights and Responsibilities, which is located in the academic policies section of Drew's course catalog. Legitimate planned absences may include religious holidays, NCAA-sanctioned competition, academic conference or some Drew-sanctioned events. Students need to inform the faculty member of planned absences in the first week of the semester. For unforeseen extended health issues please see the academic accommodations statement.

Academic Accommodations

Your experience in this class is important to me. If you have already established accommodations with the Office of Accessibility Resources (OAR), please provide me with a copy of your accommodation letter at your earliest convenience so we can discuss your needs in this course.

If you have not yet established services through the Office of Accessibility Resources (OAR), but have a temporary health condition or permanent disability that requires accommodations (conditions include but not limited to: mental health, attention-related, learning, vision, hearing, physical or health impacts), you are encouraged to contact OAR. OAR offers resources and coordinates reasonable accommodations for students with disabilities and/or temporary health conditions.

Although a 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.

Office of Accessibility Resources contact information:
Director: Dana Giroux
Location: Brothers College, Room 119B
Phone: 973-408-3962
Email: dgiroux@drew.edu, disabilityserv@drew.edu

Center for Academic Excellence

All Drew students can access subject tutoring, writing support and academic coaching free of charge in the Center for Academic Excellence (CAE), located in the library. Seeking help through learning support resources in the CAE can help you achieve your academic goals. To access the appointment schedule, please visit drew.mywconline.com and follow the instructions on the landing page; if a tutor is not available, please submit the Tutor Request form. For any other questions, email cae@drew.edu

Final Exam Policy Statement

If extenuating circumstances occur, students may submit a Final Exam Reschedule request for review by the Associate Provost. Students may not negotiate a make-up date directly with the course instructor. Students may request to reschedule an exam under the following circumstances:

1. Two final exams scheduled at the same time;
2. Three finals are scheduled in one calendar day; one of the exams will be rescheduled at the convenience of the instructor and the student;
3. Serious illness, or personal emergency; the student is required to present documentation to validate.

The final exam schedule is visible on the Registrar's website by the beginning of each semester. Students are expected to schedule travel plans for AFTER their final exams.