Survey of Calculus

Last Updated: Tue, 12/16/2025

Course prefix: MATH

Course number: 1712

Section: E, G

CRN (you may add up to five):
34828 27200

Instructor First Name: Amanda

Instructor Last Name: Hampton

Semester: Spring

Academic year: 2026

Course description:

This course provides an overview of the key concepts needed for an understanding of calculus. Topics covered include: functions, the derivative, applications of the derivative, techniques of differentiation, integration, applications of integration to probability and statistics, and multidimensional calculus.

Course learning outcomes:

This course provides an overview of the key concepts needed for an understanding of calculus. Topics covered include: functions, the derivative, applications of the derivative, techniques of differentiation, integration, applications of integration to probability and statistics, and multidimensional calculus.

Required course materials:

Calculus and Its Applications, 10th edition, by Bittinger/Ellenbogen/Surgent; published by Addison-Wesley. The platforms Canvas and Gradescope will be used to communicate and submit assignments. Note that the textbook is posted on the Canvas page!

Grading policy:

Final grades will be determined as the maximum of (1) the weighted average of Quizzes (20%), Midterm Exams (50%), and the Final Exam(30%) and (2) the grade of the Final Exam.

Attendance policy:

N/A

Academic honesty/integrity statement:

Students are expected to maintain the highest standards of academic integrity. All work submitted must be original and properly cited. Plagiarism, cheating, or any form of academic dishonesty will result in immediate consequences as outlined in the university's academic integrity policy.

Core IMPACTS statement(s) (if applicable):

This is a Core IMPACTS course that is part of the STEM area.
Core IMPACTS refers to the core curriculum, which provides students with essential knowledge in foundational academic areas. This course will help master course content, and support students' broad academic and career goals.
This course should direct students toward a broad Orienting Question: How do I ask scientific questions or use data, mathematics, or technology to understand the universe?
Completion of this course should enable students to meet the following Learning Outcome: Students will use the scientific method and laboratory procedures or mathematical and computational methods to analyze data, solve problems, and explain natural phenomena.
Course content, activities and exercises in this course should help students develop the following Career-Ready Competencies: Inquiry and Analysis, Problem-Solving, and Teamwork.