

Northwood University
Department of Mathematics
Course Catalog - Fall 2025

Department Overview:

The Department of Mathematics provides a rigorous foundation in mathematical theory and its applications. Our courses support a wide range of disciplines, from the physical sciences and engineering to computer science and economics.

Course Listings

Course Code: MATH 150

Course Title: Calculus I

Credits: 4

Description: An introduction to differential calculus. Topics include limits, continuity, derivatives, and their applications to optimization, related rates, and curve sketching. The course also introduces the concept of the integral.

Prerequisites: High School Pre-Calculus or equivalent

Instructor: Professor Isaac Newton

Schedule: Mon/Wed/Fri 9:00 AM - 9:50 AM, Thu 9:00 AM - 9:50 AM (Lab)

Course Code: MATH 210

Course Title: Linear Algebra

Credits: 3

Description: This course covers the fundamentals of linear algebra. Topics include systems of linear equations, matrix algebra, vector spaces, determinants, eigenvalues, eigenvectors, and orthogonality. This course is essential for students in computer science, physics, and engineering.

Prerequisites: MATH 150

Instructor: Dr. Gilbert Strang

Schedule: Tue/Thu 11:00 AM - 12:15 PM

Course Code: MATH 230

Course Title: Discrete Mathematics

Credits: 3

Description: A course on the mathematical structures that are fundamentally discrete rather than continuous. Topics include logic, set theory, proof techniques, combinatorics, graph theory, and Boolean algebra. This is a critical course for computer science majors.

Prerequisites: MATH 150

Instructor: Professor Paul Erdős

Schedule: Mon/Wed/Fri 1:00 PM - 1:50 PM