

MATH 221R: Ordinary Differential Equations with Linear Algebra

Ordinary Differential Equations with Linear Algebra is an introductory course in differential equations. Topics include first-order differential equations; higher-order differential equations; series solutions; The Laplace Transform; matrix algebra, Gaussian and Gauss-Jordan elimination, eigenvalues, and eigenvectors; systems of linear first-order differential equations; and selected applications. Student centered, the course focuses on activity-based instruction that integrates technology and emphasizes the conceptual understanding of the concepts studied.

Credits: 4

Lecture Hours: 4

Prerequisites:

MATH 211R

Program: [Mathematics](#)