MATH2160J, Calculus IV

Teaching Assistant in Fall 2021, Advisor: Prof. Olga Danilkina

Instructors: OLGA DANILKINA;Zachiri McKenzie;Congyi Li;Heidi Andersen

Credits: 4 (No credit after Vv256 or Vv286.)

Pre-requisites: MATH2150J Obtained Credit

Description:

Course topics include single, first-order differential equations; the eigenvalue problem and diagonalization of symmetric matrices; linear systems of first-order equations with constant coefficients; single, second-order, linear differential equations with constant coefficients; the Laplace transform; Fourier series; series method for solving ODEs; basic separation of variables for PDEs

Course Topics:

- Single, first-order differential equations
- The eigenvalue problem and diagonalization of symmetric matrices
- Linear systems of first-order equations with constant coefficients
- Single, second-order, linear differential equations with constant coefficients
- The Laplace transform
- Fourier series
- Series method for solving ODEs
- Basic separation of variables for PDEs