Matrices and Boundary Value Problems
Professor Raluca Felea
Calendar

1. Matrix algebra

March 13: Basic operation; Simultaneous linear equations
March 20: Square matrices, Matrix inversion; Determinants
March 27: Vectors; Eigenvalues and Eigenvectors, Review
Exam I: April 3/4.

2. Fourier Series

April 3: Orthogonal functions
April 10: Fourier series, Fourier cosine and sine series
April 17: Sturm Liouville Problem, Review
Exam II: April 24/25.

3. Partial Differential Equations

April 24: Separable Equations
May 1: PDEs and Boundary value problems, Heat equation
May 8: Wave equation, Laplace equation
May 15: Nonhomogeneous boundary value problems, Review