

1. Matrices and eigenvalue problems (Chapter 10)
 - Eigenvalue problems (10.1-10.2)
 - Normal mode solutions (10.3)
 - Change of basis (10.4)
 - Diagonalization and quadratic forms (10.5-10.6)
2. Ordinary differential equations (Chapters 11 and 12)
 - Linear equations with constant coefficients (11.3,11.6)
 - General first- and second-order equations (11.2,11.5)
 - Power series solutions about ordinary and regular singular points (12.1-12.5)

We have supplemented the text with extra material. Please refer to the class notes.

The test

The test contains 2 multi-part questions; one question will concern the Frobenius method. Questions will be similar to those appearing on the assignments.