

Detailed Syllabus, Math 260

Textbook: Tom Apostol, Calculus, volumes I and II, second edition.

Topics covered:

1. Linear spaces. Volume II, Chapter 1 (= Volume I, Chapter 15).
2. Linear transformations and matrices. Volume II, Chapter 2 (= Volume I, Chapter 16).
3. Determinants. Volume II, Chapter 3.
4. Eigenvalues and eigenvectors. Volume II, Chapter 4.
5. Eigenvalues of operators on Euclidean spaces. Volume II, Chapter 5.
6. Introduction to differential equations. Volume I, Chapter 8.
7. Linear differential equations. Volume II, Chapter 6.
8. Systems of differential equations. Volume II, Chapter 7.