

346 Class Schedule

Text: *Linear Algebra with Applications, 5th ed., Pearson*, by Otto Bretscher.

Class	Topic(s)	Sections
1	Linear Systems; Gaussian Elimination	1.1
2	Gaussian Elimination	1.2
3	On the Solutions of Linear Systems	1.3
4	Introduction to Linear Transformations and Their Inverses	2.1
5	Linear Transformations in Geometry	2.2
6	Matrix Products	2.3
7	The Inverse of a Linear Transformation	2.4
8	Image and Kernel	3.1
9	Subspaces; Bases; Linear Independence	3.2
10	Dimension	3.3
11	Coordinates	3.4
12	Linear Spaces	4.1
13	Linear Transformations	4.2
14	Matrix of a Linear Transformation	4.3
15	Orthogonal Projections and Bases	5.1
16	Gram-Schmidt, Orthogonal Matrices	5.2, 5.3
17	Least Squares, Data Fitting	5.4
18	Intro Determinants	6.1
19	Properties of the Determinant	6.2
20	Geometric Interpretation of Determinant; Cramer's Rule	6.3
21	Diagonalization	7.1
22	Finding Eigenvalues	7.2
23	Finding Eigenvectors	7.3
24	Symmetric Matrices	8.1
25	Singular Values	8.3