

Mathematics 250:B1 Introductory Linear Algebra
Rutgers University, Summer 2003, First Session

Tentative Schedule of Classes

Class	Day	Date	Sections	Topics
1	T	5/27	1.1, 1.2	Matrices and Vectors
2	W	5/28	1.3, 1.4	Systems of Linear Equations, Gaussian Elimination
3	Th	5/29	1.4, 1.6	Gaussian Elimination, Span of a Set of Vectors
4	M	6/2	1.7	Linear Dependence and Independence, Homogeneous Systems
5	T	6/3	2.1	Matrix Algebra
6	W	6/4	2.3	Invertibility and Elementary Matrices
7	Th	6/5	2.4	Inverse of a Matrix
8	M	6/9	2.5	LU Decomposition of a Matrix
9	T	6/10	3.1	Determinants, First Midterm Exam
10	W	6/11	3.1, 3.2	Cofactor Expansions, Properties of Determinants
11	Th	6/12	4.1, 4.2	Subspaces, Basis and Dimension
12	M	6/16	4.2, 4.3	Column, Null, and Row Spaces of a Matrix
13	T	6/17	4.4, 5.1	Coordinate Systems, Eigenvalues and Eigenvectors
14	W	6/18	5.2	Characteristic Polynomial
15	Th	6/19	5.3	Diagonalization of a Matrix
16	M	6/23	5.5	Application (Markov Chains)
17	T	6/24	6.1	Geometry of Vectors, Second Midterm Exam
18	W	6/25	6.1, 6.2	Projection onto a Line, Orthogonal Sets, Gram-Schmidt Process
19	Th	6/26	6.2	Orthogonal Projection, Orthogonal Complements
20	M	6/30	6.2, 6.3	Least Squares, Projection Matrices
21	T	7/1	6.4, 6.5	Orthogonal Matrices, Symmetric Matrices
22	W	7/2	6.5	Review
23	Th	7/3		Final Exam, 10:15am-1:15pm

updated 6/30/2003