

DATE	DUE	SECTION AND TOPIC
M 8.28 W 8.30 F 9.1		1.1-1.2: Course introduction 1.2-1.3: Vector spaces 1.3-1.4: Examples of vector spaces
M 9.4 W 9.6 F 9.8	<i>No class - Labor Day</i> Ch. 1: 1-18	2.1-2.2: Matrix vocabulary 2.2-2.3: Matrix operations
M 9.11 W 9.13 F 9.15	Ch. 2: 1-7	3.1: Subspaces 3.2-3.3: Linear independence and dimension 3.4: Affine subspaces of \mathbb{R}^n (lines and planes)
M 9.18 W 9.20 F 9.22	Ch. 3: 1-9	3.5: A more rigorous discussion of linear independence 3.5-3.6: Basis and dimension 3.6: More on basis and dimension
M 9.25 W 9.27 F 9.29	Ch. 3: 10-24	4.1-4.2: Dot product (definition and properties) 4.2-4.3: Dot product and geometry (norm, distance, etc.) 4.4: Orthogonality and projection
M 10.2 W 10.4 F 10.6	EXAM 1 Ch. 4: 1-10	4.4: Orthogonal decomposition theorem 4.5: Gram-Schmidt procedure 4.6: More on projections; Cauchy-Schwarz inequality;
M 10.9 W 10.11 F 10.13	Ch. 4: 11-22	4.7: Normal equations of hyperplanes; review of dot products 5.1: Linear transformations: introduction 5.2: Standard matrices of linear transformations
M 10.16 W 10.18 F 10.20	Ch. 5: 1-15	5.3: How to prove transformations are linear 5.4: Examples of linear transformations 5.5: Kernels and images
M 10.23 W 10.25 F 10.27	Ch. 5: 16-21	5.6: Injectivity, surjectivity, bijectivity 5.7: Fundamental subspaces associated to a matrix 5.8: Invertibility; review of linear transformations
M 10.30 W 11.1 F 11.3	Ch. 5: 22-36 EXAM 2	6.1: Systems of linear equations 6.2: Theoretical approach to linear systems 6.3: Row reduction and echelon forms I
M 11.6 W 11.8 F 11.10	Ch. 6: 1-5	6.3: Row reduction and echelon forms II 6.4: Row reduction and echelon forms III 6.5: Matrix inverses; Gauss-Jordan method
M 11.13 W 11.15 F 11.17	Ch. 6: 6-17	6.5: Review of systems of linear equations 6.6: Least-squares approximations 7.1: Determinants
M 11.20 W 11.22 F 11.24	Ch. 6: 18-26 <i>No class - Thanksgiving break</i> <i>No class - Thanksgiving break</i>	7.2: Computing determinants
M 11.27 W 11.29 F 12.1	Ch. 7: 1-6	8.1: Introducing eigenvalues and eigenvectors 8.2: More on eigenvalues and eigenvectors 8.3: Eigentheory of matrices
M 12.4 W 12.6 F 12.8	Ch. 8: 1-11	8.4: Computing eigenvalues and eigenvectors 8.5: Matrix exponentials Review for Final Exam
M 12.11 T 12.12 R 12.14	Ch. 8: 12-19 EXAM 3	FINAL EXAM: 10-11:40 AM in STR 137