

DATE	DUE	SECTION AND LECTURE TOPIC
M 8.31		§1.1-1.2: Course introduction
W 9.2		§1.2-1.3: Vector spaces
F 9.4		§1.3-1.4: Examples of vector spaces
<b>M 9.7</b>	<i>No class - Labor Day</i>	
W 9.9		§2.1-2.2: Matrix vocabulary
F 9.11	§1.6: 1-18	§2.2-2.3: Matrix operations
M 9.14		§3.1: Subspaces
W 9.16	§2.5: 1-7	§3.2-3.3: Linear independence and dimension
F 9.18		§3.4: Affine subspaces of $\mathbb{R}^n$ (lines and planes)
M 9.21		§3.5: A more rigorous discussion of linear independence
W 9.23	§3.8: 1-9	§3.5-3.6: Basis and dimension
F 9.25		§3.6: More on basis and dimension
M 9.28		§4.1-4.2: Dot product (definition and properties)
W 9.30	§3.8: 10-24	§4.2-4.3: Dot product and geometry (norm, distance, etc.)
F 10.2		§4.4: Orthogonality and projection
M 10.5	<b>EXAM 1</b>	§4.4: Orthogonal decomposition theorem
W 10.7		§4.5: Gram-Schmidt procedure
F 10.9	<i>No class - Professor absent</i>	
M 10.12	§4.9: 1-10	§4.6-4.7: Cauchy-Schwarz inequality; equations of hyperplanes
W 10.14		§5.1: Linear transformations: introduction
F 10.16	§4.9: 11-22	§5.2: Standard matrices of linear transformations
<b>M 10.19</b>	<i>No class - Fall Break</i>	
W 10.21		§5.3: How to prove transformations are linear
F 10.23	§5.10: 1-15	§5.4: Examples of linear transformations
M 10.26		§5.5: Kernels and images
W 10.28	§5.10: 16-24	§5.6: Injectivity, surjectivity, bijectivity
F 10.30		§5.7: Fundamental subspaces associated to a matrix
M 11.2		§5.8: Invertibility; review of linear transformations
W 11.4	§5.10: 25-37	§6.1-6.2: Theoretical approach to linear systems
F 11.6	<b>EXAM 2</b>	§6.3: Row reduction and echelon forms I
M 11.9		§6.3: Row reduction and echelon forms II
W 11.11		§6.4: Row reduction and echelon forms III
F 11.13	§6.8: 1-5	§6.5: Matrix inverses; Gauss-Jordan method
M 11.16		§6.5: Review of systems of linear equations
W 11.18	§6.8: 6-17	§6.6: Least-squares approximations
F 11.20		§7.1: Determinants
M 11.23	§6.8: 18-26	§7.2: Computing determinants
<b>W 11.25</b>	<i>No class - Thanksgiving Break</i>	
<b>F 11.27</b>	<i>No class - Thanksgiving Break</i>	
M 11.30		§8.1: Introducing eigenvalues and eigenvectors
W 12.2	§7.4: 1-6	§8.2: More on eigenvalues and eigenvectors
F 12.4		§8.3: Eigentheory of matrices
M 12.7		§8.4: Computing eigenvalues and eigenvectors
W 12.8	§8.6: 1-11	§8.5: Matrix exponentials
F 12.11		Review for Final Exam
M 12.14	§8.6: 12-19	
T 12.15	<b>EXAM 3</b>	
R 12.17		<b>FINAL EXAM: 10-11:40 AM in SCI 132</b>