DATE	DUE	SECTION AND TOPIC
M 8.27		1.1-1.2: Course introduction
W 8.29		1.2-1.3: Vector spaces
F 8.31		1.3-1.4: Examples of vector spaces
M 9.3		*No class - Labor Day*
W 9.5		2.1-2.2: Matrix vocabulary
F 9.7	Ch. 1: 1-18	2.2-2.3: Matrix operations
M 9.10		3.1: Subspaces
W 9.12	Ch. 2: 1-7	3.2-3.3: Linear independence and dimension
F 9.14		3.4: Affine subspaces of $\mathbb{R}^n$ (lines and planes)
M 9.17		3.5: A more rigorous discussion of linear independence
W 9.19	Ch. 3: 1-9	3.5-3.6: Basis and dimension
F 9.21		3.6: More on basis and dimension
M 9.24		4.1-4.2: Dot product (definition and properties)
W 9.26	Ch. 3: 10-24	4.2-4.3: Dot product and geometry (norm, distance, etc.)
F 9.28		4.4: Orthogonality and projection
M 10.1	**EXAM 1**	4.4: Orthogonal decomposition theorem
W 10.3		4.5: Gram-Schmidt procedure
F 10.5	Ch. 4: 1-10	4.6: More on projections; Cauchy-Schwarz inequality;
M 10.8		4.7: Normal equations of hyperplanes; review of dot products
W 10.10		5.1: Linear transformations: introduction
F 10.12	Ch. 4: 11-22	5.2: Standard matrices of linear transformations
M 10.15		5.3: How to prove transformations are linear
W 10.17	Ch. 5: 1-9	5.4: Examples of linear transformations
F 10.19		5.5: Kernels and images
M 10.22		5.6: Injectivity, surjectivity, bijectivity
W 10.24		5.7: Fundamental subspaces associated to a matrix
F 10.26	Ch. 5: 10-16	5.8: Invertibility; review of linear transformations
M 10.29		6.1: Systems of linear equations
W 10.31	Ch. 5: 17-24	6.2: Theoretical approach to linear systems
F 11.2	**EXAM 2**	6.3: Row reduction and echelon forms I
M 11.5		6.3: Row reduction and echelon forms II
W 11.7		6.4: Row reduction and echelon forms III
F 11.9		6.5: Matrix inverses; Gauss-Jordan method
M 11.12		6.5: Review of systems of linear equations
W 11.14	Ch. 6: 1-17	6.6: Least-squares approximations
F 11.16		7.1: Determinants: definition and properties
M 11.19	Ch. 6: 18-26	7.2: Determinants: computational techniques
W 11.21		*No class - Thanksgiving break*
F 11.23		*No class - Thanksgiving break*
M 11.26	Ch. 7: 1-5	8.1: Eigenvalues and eigenvectors: theory
W 11.28		8.1-8.2: Computing eigenvalues and eigenvectors
F 11.30		8.2: Matrix diagonalization
M 12.3		8.3: Matrix powers and exponentials
W 12.5		8.3: Applications to difference and differential equations
F 12.7	Ch. 8: 1-12	Review/ catch-up / reflection on course material
M 12.10	**EXAM 3**	
R 12.13		**FINAL EXAM:** 10-11:40 AM in STR 137