

DAY	PACKET	DUE	TOPIC
M 1.13	322-1		Course introduction
W 1.15	322-1		Vector spaces
F 1.17			<i>No class - Professor at conference</i>
M 1.20			<i>No class - MLK Day</i>
W 1.22	322-1	HW 1 Due	Examples of vector spaces
F 1.24	322-2		Matrix vocabulary
M 1.27	322-2		Matrix operations
W 1.29	322-3	HW 2 Due	Subspaces; linear independence and dimension
F 1.31	322-3		Affine subspaces of \mathbb{R}^n (lines and planes)
M 2.3	322-3		More on subspaces and affine subspaces
W 2.5	322-3	HW 3 Due	A more rigorous discussion of linear independence
F 2.7	322-3		Basis and dimension
M 2.10	322-3		More on basis and dimension
W 2.12	322-4	HW 4 Due	Dot product (definition and properties)
F 2.14	322-4	EXAM 1 DUE	Dot product and geometry (norm, distance, etc.)
M 2.17	322-4		Orthogonality and projection
W 2.19	322-4	HW 5 Due	Orthogonal decomposition theorem
F 2.21	322-4		Gram-Schmidt procedure
M 2.24	322-4		More on projections; Cauchy-Schwarz inequality
W 2.26	322-4	HW 6 Due	Review of dot products
F 2.28	322-5		Linear transformations: introduction
M 3.3	322-5		What functions are linear transformations?
W 3.5	322-5	HW 7 Due	Standard matrices of linear transformations
F 3.7	322-5		Compositions of linear transformations
3.10-3.14			<i>No class - Spring Break</i>
M 3.17	322-5		Subspaces associated to linear transformations
W 3.19	322-5	HW 8 Due	Injectivity, surjectivity, bijectivity
F 3.21	322-5		Fundamental subspaces associated to a matrix
M 3.24	322-5		Review of linear transformations
W 3.26	322-6	HW 9 Due	Systems of linear equations
F 3.28	322-6	EXAM 2 DUE	Theoretical approach to linear systems
M 3.31	322-6		Row reduction and echelon forms I
W 4.2	322-6	HW 10 Due	Row reduction and echelon forms II
F 4.4	322-6		Row reduction and echelon forms III
M 4.7	322-6		Rank and related issues
W 4.9	322-6	HW 11 Due	More on injectivity and surjectivity
F 4.11	322-6		Review of systems of linear equations
M 4.14	322-6		Matrix inverses; Gauss-Jordan method
W 4.16	322-7	HW 12 Due	Determinants I
F 4.18			<i>No class - Mid-semester recess</i>
M 4.21	322-7		Determinants II
W 4.23	322-8	HW 13 Due	Eigenvalues and eigenvectors I
F 4.25	322-8		Eigenvalues and eigenvectors II
M 4.28	322-8		Diagonalization of a matrix
W 4.30	322-8	HW 14 Due	Matrix powers and exponentials
F 5.2			Reflection on course material
M 5.5		EXAM 3 DUE	
R 5.8		FINAL EXAM	10-11:40 AM in STR 223