## Math 322 schedule (approximate) Prof. Readdy Fall 2024

Aug 26th	Week 1	
	1.1	Systems of linear equations
	1.2	Row reduction and echelon form
Sept 2nd	Week 2	
		LABOR DAY
	1.3	Vector equations
	1.4	The matrix equation Ax = b
Sont Oth	Wook 3	
Sept 3th	1 A	contid
	1.4	Colution act of a linear system
	1.5	Solution set of a linear system
Sept 16th	Week 4	
	1.7	Linear independence
	1.8	Intro to linear transformations
	1.9	The matrix of a linear transformation
Sept 23rd	Week 5	
	1.9	
	2.1	The algebra of matrices (matrix operations)
	2.2	The inverse of a matrix
Sept 30th	Week 6	
	2.2	cont'd
	2.3	Characterization of invertible matrices
	2.4	Partitioned matrices
Oct /th	Week /	
	2.5	A=LU decomposition
	3.1	Intro to determinants
	3.2	Properties of determinants
Oct 14th	Week 8	
	3.3	Cramer's rule
	4.1	Vector spaces and subspaces
		EXAM I (Weeks 1 through 7 material)

Oct 21st	Week 9		
	4.2	Nullspace, column space & linear transformations	
	4.3	Linear independent sets & bases	
Oct 28th	Week 10		
		FALL BREAK	
	4.4	Coordinate systems	
	4.5	Dimension of a vector space	
Nov 4th	Week 11		
	4.6	Rank	
	4.7	Change of Basis	
Nov 11th	Week 12		
	5.1	Eigenvalues and eigenvectors	
		EXAM II (Weeks 8 through 11 material)	
Nov 18th	Week 13		
	5.2	The characteristic equation	
	5.3	Diagonalization	
	5.5	Complex eigenvalues	
Nov 25th	Week 14		
	6.1 to 6.3	Review of dot product, vector length, orthogonality, projection	
		THANKSGIVING	
Dec 2nd	Week 15		
	6.1 to 6.3	Review of dot product, vector length, orthogonality, projection	
		Preview importance of an orthonormal basis	
	6.4	Gram-Schmidt	
Dec Oth	Wook 16	(2 loctures)	
Dec 9th	VVEEK 10	Diagonalization of symmetric matrices	
	7.1	Diagonalization of symmetric matrices	
	Week 17		
		Final Exam (cumulative)	
		Wed Dec 18th 8 am - 10 am	
Last updated: August 7, 2024			