Course Outline (Tentative)

Week	Date	#	Sections	Topics
0	Fri Sep 24	1	App. C	Fields
1	Mon Sep 27	2	App. C, 1.2	Fields; Vector Spaces over a Field
	Wed Sep 29	3	1.2	Vector Spaces over a Field
	Fri Oct 01	4	1.3	Subspaces
2	Mon Oct 04	5	1.4, 1.5	Linear Combinations and Systems of Linear Equations; Linear Dependence and Linear Independence
	Wed Oct 06	6	1.5, 1.6	Linear Dependence and Linear Independence; Bases and Dimensions
	Fri Oct 08	7	1.6	Bases and Dimensions
3	Mon Oct 11	8	1.6	Bases and Dimensions
	Wed Oct 13	9	2.1	Linear Transformations, Null Spaces, and Ranges
	Fri Oct 15	10	2.1	Linear Transformations, Null Spaces, and Ranges
4	Mon Oct 18		**Midterm 1**	
	Wed Oct 20	11	2.2	The Matrix Representation of a Linear Transformation
	Fri Oct 22	12	2.3–2.4	Composition of Linear Transformations and Matrix Multiplication
5	Mon Oct 25	13	2.3–2.4	Composition of Linear Transformations and Matrix Multiplication; Invertibility and Isomorphisms
	Wed Oct 27	14	2.3–2.4	Invertibility and Isomorphisms
	Fri Oct 29	15	2.5	The Change of Coordinate Matrix
6	Mon Nov 01	16	4.4	Summary - Important Facts about Determinants
	Wed Nov 03	17	5.1	Eigenvalues and Eigenvectors
	Fri Nov 05	18	5.1	Eigenvalues and Eigenvectors
7	Mon Nov 08	19	5.2	Diagonalizability
	Wed Nov 10	20	5.2	Diagonalizability
	Fri Nov 12	21	5.2	Diagonalizability
8	Mon Nov 15		**Midterm 2**	
	Wed Nov 17	22	6.1	Inner Products and Norms
	Fri Nov 19	23	6.1, 6.2	Inner Products and Norms; The Gram-Schmidt Orthogonalization Process and Orthogonal Complements
9	Mon Nov 22	24	6.2	The Gram-Schmidt Orthogonalization Process and Orthogonal Complements
	Wed Nov 24	25	6.3	The Adjoint of a Linear Operator
	Fri Nov 26		Holiday	Thanksgiving break
10	Mon Nov 29	26	6.4	Normal and Self-Adjoint Operators
	Wed Dec 01	27	6.4	Normal and Self-Adjoint Operators
	Fri Dec 03	28		Catch-up , Review
Finals	Fri Dec 10		**Final Exam**	8:00–11:00 AM, MS 5147