

## Tentative Schedule of Lectures and Examinations

Date	Topic
W Jan. 23	Introduction: n-dimensional Euclidean space
F Jan. 25	Linear space structure in Euclidean space
M Jan. 28	Linear combinations and spans
W Jan. 30	Linear independence
F Feb. 1	Linear independence and bases
M Feb. 4	More on bases
W Feb. 6	On linear transformations between Euclidean spaces
F Feb. 8	Matrix representation of a linear transformation
M Feb. 11	Matrix representation of a linear transformation (continued)
W Feb. 13	Matrix algebra
F Feb. 15	Matrix algebra (continued)
M Feb. 18	Function spaces
W Feb. 20	Spaces of polynomials
F Feb. 22	Vector spaces
M Feb. 25	Subspaces
W Feb. 27	Subspaces (continued): Spans and generating sets
F Mar. 1	Generating sets (continued): Linear independence and bases
M Mar. 4	Bases and Dimension
W Mar. 6	Review
F Mar. 8	<b>Exam 1</b>
M Mar. 11	Linear transformations
W Mar. 13	The dimension theorem for linear transformations
F Mar. 15	Composition of linear transformations and matrix multiplication
M Mar. 18	<i>Spring Recess</i>
W Mar. 20	<i>Spring Recess</i>
F Mar. 22	<i>Spring Recess</i>

<b>Date</b>	<b>Topic</b>
M Mar. 25	Linear transformations and matrices
W Mar. 27	Invertible matrices
F Mar. 29	<i>Cesar Chavez Day (no class)</i>
M Apr. 1	Constructing Inverses (Part I): Invertible linear transformations
W Apr. 3	Constructing Inverses (Part II): Applications to systems of linear equations
F Apr. 5	The determinant of square matrices
M Apr. 8	Properties of the determinant function
W Apr. 10	The eigenvalue problem
F Apr. 12	The eigenvalue problem (continued)
M Apr. 15	Similarity and diagonalization
W Apr. 17	Diagonalization (continued)
F Apr. 19	Geometric transformations
M Apr. 22	Geometric transformations (continued)
W Apr. 24	Symmetric matrices
F Apr. 26	Orthogonal matrices
M Apr. 29	The principal axis theorem
W May 1	Review
F May 3	<b>Exam 2</b>
M May 6	Review
W May 8	Review
Tu May 14	<b>Final Exam</b>