January 10:
Introduction.
1.1. The Geometry and Algebra of Vectors.
1.1 Problems 1--28

January 12:
1.1.(cont.) The Geometry and Algebra of Vectors
1.1 Problems 1--28

January 14:
1.2. Length and Angle. The Dot Product. Projections.
1.2 Problems 1--52.

January 19:
1.2.(cont.) Length and Angle. The Dot Product. Projections.
1.3. Lines and Planes.
1.2 Problems 61--67.
1.3 Problems 1--15.

January 21:
1.3. Lines and Planes.
1.3 Problems 18--30, 35--38.

January 24:
2.1. Introduction to Systems of Linear Equations.
2.1 Problems 1--38.

January 26:
2.2. Direct Methods for Solving Linear Systems.
2.2 Problems 1--18.

January 28:
2.2.(cont.) Direct Methods for Solving Linear Systems.
2.2 Problems 23--46.

January 31:
2.3. Spanning Sets and Linear Independence.
2.3 Problems 1--42.

February 2:
2.3.(cont.) Spanning Sets and Linear Independence.
2.3 Problems 1--42.

February 4:
2.3.(cont.) Spanning Sets and Linear Independence.
2.3 Problems 1--42.

February 7:
Chapters 1 and 2 Review. Applications.

February 9:
3.1 Problems 1--22, 31--36

February 11:
3.2. Matrix Algebra.
3.2 Problems 1--28.

February 14:
3.3. The Inverse of a Matrix. Elementary Matrices. The Fundamental Theorem of Invertible Matrices.
3.3 Problems 1--23.

February 16:
3.3. (cont.) The Inverse of a Matrix. Elementary Matrices. The Fundamental Theorem of Invertible Matrices.
3.3 Problems 24--40.

February 18:
3.3.(cont.) The Inverse of a Matrix. Elementary Matrices. The Fundamental Theorem of Invertible Matrices.
3.3 Problems 48--59.

February 21:
Review.
February 23:
Midterm Exam 1

February 25:
3.5. Subspaces, Basis, Dimension, Rank. Coordinates.
3.5 Problems 1--48, 51, 52.

February 28:
3.5. (cont.) Subspaces, Basis, Dimension, Rank. Coordinates.
3.5 Problems 1--48, 51, 52.

March 2:
3.5. (cont.) Subspaces, Basis, Dimension, Rank. Coordinates.
3.5 Problems 1--48, 51, 52.

March 4:
3.6. Introduction to Linear Transformations.
3.6 Problems 1--25, 29--39.

March 14:
3.6. (cont.) Introduction to Linear Transformations.
3.6 Problems 1--25, 29--39.

March 16:
Chapter 3 Review. Applications.

March 18:
4.1. Introduction to Eigenvalues and Eigenvectors.
4.1 Problems 1--18.

March 21:
4.2. Determinants. The Laplace Expansion Theorem.
4.2 Problems 1--52.

March 23:
4.2 Problems 57--65.

March 25:
4.3. Eigenvalues and Eigenvectors of n x n Matrices
4.3 Problems 1--18.

March 28:
4.3. (cont.) Eigenvalues and Eigenvectors of n x n Matrices
4.3 Problems 1--18.

March 30:
Review

April 1:
Midterm Exam 2

April 4:
4.4. Similarity and Diagonalization.
4.4 Problems 1--41.

April 6:
4.4. (cont.) Similarity and Diagonalization.
4.4 Problems 1--41.

April 8:
5.1 Problems 1--21.

April 11:
5.2. Orthogonal Complements and Orthogonal Projections. The Orthogonal Decomposition.
5.2 Problems 1--22.

April 13:
5.2. (cont.) Orthogonal Complements and Orthogonal Projections. The Orthogonal Decomposition.
5.2 Problems 1--22.

April 15:
5.3. The Gram-Schmidt Process.
5.3 Problems 1--14.

April 18:
5.4. Orthogonal Diagonalization of Symmetric Matrices.
5.4 Problems 1-12.

**April 20:**
5.4. (cont.) Orthogonal Diagonalization of Symmetric Matrices.
5.4 Problems 1-12.

**April 22:**
Chapters 4 and 5 Review. Applications.

**TBA:**
Final exam for all day sections