Math 3013 : Linear Algebra Sequence of Lectures

- Lecture 1: Vectors and Vector Spaces
- Lecture 2: Vector Space Geometry
- Lecture 3: Matrices
- Lecture 4: Matrix Algebra
- Lecture 5: Solving Systems of Linear Equations
- Lecture 6: Inverses of Square Matrices
- Lecture 7: Review Session for Midterm 1
- Lecture 8: Subspaces, Bases, and Linear Independence
- Lecture 9: Construction of Bases, Dimension, and Rank
- Lecture 10: Linear Transformations
- Lecture 11: Review Session for Midterm 2
- Lecture 12: Determinants
- Lecture 13: Eigenvalues and Eigenvectors
- Lecture 14: Diagonalization of Matrices
- Lecture 15: Coordinatization and Change of Basis
- Lecture 16: Orthogonality
- Lecture 17: The Gram-Schmidt Algorithm
- Lecture 18: Abstract Vector Spaces and Concrete Examples