Math 2890-003 Schedule

	Fall 2016	
	Tuesday	**Thursday**
08/23/16	1.1 Systems of Linear Equations; 1.2 Row Reduction and Echelon Form; 1.3 Vector Equations	08/25/16
08/30/16	1.4 The Matrix Equation Ax=b; 1.5 Solution Sets of Linear Equations; 1.7 Linear Independence	09/01/16
09/06/16	1.8 Linear Transformations; 2.1 Matrix Operations; 2.2 Inverse of a Matrix	09/08/16
09/13/16	2.3 Characterizations of Invertible Matrices; 2.4 Partitioned Matrices; 2.5 Matrix Factorizations	09/15/16
09/20/16	Wedderburn Rank Reduction (LU); 2.8 Subspaces of R^n; 2.9 Dimension and Rank	09/22/16
09/27/16	6.1 Inner Product, Length and Orthogonality	**Exam 1 (Chapters 1 & 2)**	09/29/16
10/04/16	**Fall Break**	6.2 Orthogonal Sets; 6.3 Orthogonal Projections	10/06/16
10/11/16	6.4 Gram-Schmidt Process; Wedderburn Rank Reduction (QR); 6.5 Least Squares Problems	10/13/16
10/18/16	6.6 Applications to Linear Models; 3.1 Introduction to Determinants; 3.2 Properties of Determinants	10/20/16
10/25/16	3.3 Cramer's Rule, Volume, Linear Transformations; 4.8 Difference Equations; 4.9 Markov Chains	10/27/16
11/01/16	5.1 Eigenvectors and Eigenvalues; 5.2 The Characteristic Equation; 5.3 Diagonalization	11/03/16
11/08/16	5.4 Complex Eigenvalues	**Exam 2 (Chapters 3.1 - 5.2; 6.1 – 6.6)**	11/10/16
11/15/16	Schur Decomposition; 5.6 Discrete Dynamical Systems; 5.7 Applications to Differential Equations	11/17/16
11/22/16	5.8 Iterative Estimates for Eigenvalues	**Thanksgiving**	11/24/16
11/29/16	7.1 Diagonalization of Symmetric Matrices; 7.2 Quadratic Forms; 7.3 Constrained Optimization	12/01/16
12/06/16	7.4 The Singular Value Decomposition	12/08/16

Final Exam Friday, Dec 16 (12:30 – 2:30pm)