

## Math 310 Linear Algebra -- Spring 2012 Tentative Schedule

The schedule below shows what I tentatively plan to cover in class each day. As circumstances dictate, this schedule may change over the course of the semester, but it should serve as a guide to what we will be doing. In general, homework for each section will be due for discussion the class meeting after the one in which it is first covered, and for collection the following meeting.

1/16	MLK Birthday -- No Class	1/19	Course Intro, Mathwright & 1.1 Systems of Linear Equations
1/23	1.2 Row Reduction and Echelon Forms. Computer Lab	1/26	1.3 Vector Equations
1/30	1.4 Matrix Equation $A\mathbf{x} = \mathbf{b}$ and 1.5 Solutions of Linear Systems	2/2	1.7 Linear Independence
2/6	1.8 Linear Transformations, Computer Lab	2/9	1.8 + 1.9 Matrix for a Linear Transformation
2/13	Review	2/16	Exam 1, through 1.9; Homework for Monday: 2.1 Matrix operations
2/20	2.1 Matrix Operations and 2.2 Inverse Matrices	2/23	2.2 Inverse Matrices & 2.3 Invertible Matrices
2/27	Determinants Handout	3/1	4.1 Vector Spaces and Subspaces & 4.2 Null and Column Spaces and Linear Transformations
3/5	4.2 & 4.3 Linear Independence, Bases.	3/8	4.3 & 4.4 Coordinate Systems
3/12	<b>Spring Break - no class</b>	3/15	<b>Spring Break - no class</b>
3/19	4.4 & 4.5 Dimension	3/22	4.5 & 4.6 Rank
3/26	Review	3/29	Exam 2, 2.1 through 4.7
4/2	4.7 Change of Basis	4/5	5.1 Eigenvectors and Eigenvalues.
4/9	5.2 Characteristic Equation. Possible computer lab.	4/12	5.2 & 5.3 Diagonalization, Symmetric Case
4/16	5.3 & 5.4 Eigenvectors of Linear Transformations	4/19	6.1 Inner Product, Length, Orthogonality & 6.2 Orthogonal Sets, Symmetric Diagonalization
4/23	6.2 & 6.3 Orthogonal Projections	4/26	6.5 Least Squares, Possible Computer Lab
4/30	Review -- Last day of class.		
5/7	Final Exam: Monday, May 7, 2:35 - 5:05PM		