Homework –Applied Linear Algebra
MATH 310, Fall 2014 (22632)
MWF 10:00AM - 11:00AM, BH 308

See the table below for the homework assignments for Math 310, taken from *Linear Algebra and it's Applications* (Fourth Edition) by David Lay.

Date	Section	Problems
Aug 25	1.1 Systems of Linear Equations	1,4,7,8,11,12,18, 19*, 20*
Aug 27	1.2 Row Reduction and Echelon Form	1,2,3,4,7,11,19*
Aug 29	1.3 Vector Equations	1,3,5,9,11,13,15,19,20, 22, 29*, 30*, 31*
Sep 3	1.4 The Matrix Equation $Ax = b$	1,2,3,4,5,7,9,13,14,17, 18, 25, 15*, 26*
Sep 5	1.5 Solution Sets of Linear Systems	1,3,5,7,11,14,17, 28, 29
Sep 8	1.7 Linear Independence	1,3,5,7,9,11,12,15,16,23,24,31,41*,43*
Sep 10	1.8 Intro to Linear Transformations	1,2,3,4,5,11,13,17,19,20,23*,35*,36*
Sep 12	1.9 Matrix of a Linear Transformation	1,2,3,4,5,8,13,14,15,17,18,21,29,30
Sep 15	2.1 Matrix Operations	1,2,3,4,5,7,10,12,18,22*
Sep 17	2.2 Inverse of a Matrix	1,2,3,4,5,6,7,31,32,33,37*,38*
Sep19	2.3 Invertible Matrices	1,2,3,4,5,6,11,12,33,34
Sep 22	2.5 Matrix Factorizations	2,3,4,5,7,9,10,12,16,17,18,31*,32*
Sep 24	3.1 Introduction to Determinants	1,2,3,9,10,12,25,26,37*,38*
Sep 26	3.2 Properties of Determinants	1,2,3,4,5,7,9,21,23,24,26,32*,34*,36*
Sep 29	3.3 Matrix Factorizations	2,3,4,5,7,9,10,12,16,17,18,31*,32*
Oct 1	In Class Review	Bring questions to class ...
Oct 3	**Midterm 1**	
Oct 6	4.1 Vector Spaces & Subspaces	1,2,3,5,6,9,10,11,13,14,15,17
Oct 8	4.2 Null & Column Spaces	1,2,3,4,6,7,9,10,11,12,15,16,17,18,21,22,27,31,32
Oct 10	4.3 Bases	1,2,3,5,6,9,10,11,13,15,16,19
Oct 13	4.4 Coordinates	1,3,5,7,9,11,13,17,27,29,31
Oct 15	4.5 Dimension	1,3,5,7,11,13,15,17,19,21
Oct 17	4.6 Rank	1,3,5,7,17,31,32
Oct 20	4.7 Change of Coordinates	1,3,5,7,8,9,12,13
Oct 22	5.1 Eigenvectors & Eigenvalues	1,3,5,7,9,13,15,17,19
Oct 24	5.2 Characteristic Equation	1,3,5,7,9,13,15,16
Oct 27	5.3 Diagonalization I	1,3,5,6,7,11,13,15,19
Oct 29	5.4 Diagonalization II	1,3,5,7,9,11,13,15,17
Oct 31	4.9 Markov Processes	1,3,5,7
Oct 31	5.7 Differential Equations I	1,3,5,7
Nov 3	5.5 Complex Eigenvalues	1,3,5
Nov 3	5.7 Differential Equations II	9,11,13
Nov 5	In Class Review	Bring questions to class ...
Nov 7	**Midterm 2**	
Nov 10	6.1 Dot Products	1,3,5,7,9,11,13,15,17,23
Nov 12	6.2 Orthogonal Sets	1,3,5,7,9,11,13,15,17,19
Nov 14	6.3 Orthogonal Projections	1,3,5,7,9,11,13,15,17
Nov 17	6.4 Gram-Schmidt	1,3,5,7,9,11,13,15
Nov 19	6.5 Least Squares	1,3,5,7,9,11,15
Nov 21	6.7 Inner Products	(No Homework)
Nov 24	7.1 Spectral Theorem	1,3,5,7,9,11,13,15,17,19,21,23
Nov 26	7.2 Quadratic Forms	1,3,5,7,9,11,13
Dec 1	7.4 Singular Values	1,3,5,7,9,11,13,15
Dec 3 & 5	Review	