## Class Assignments for Math 285-1 Fall 2008 R. Clark Robinson

Book: "Linear Algebra and Its Applications" by David Lay, Updated 3rd Edition

Date	Subject	Section	Homework
Sept 23	Introduction		
	Systems of Linear Equations	1.1	$5, 13, 15, 16^*, 21, 22^*, 23$
24	Row Reduction	1.2	$1, 4^*, 8^*, 12^*, 15, 18, 19, 22^*, 23, 33$
26	Vector and Matrix Equations	<b>1.3</b> , <b>1.4</b>	<b>1.3</b> : 5, 6*, 10*, 11, 12*, 14*, 15, 17, 21
29	Vector and Matrix Equations	<b>1.3</b> , <b>1.4</b>	<b>1.4</b> : 3, 5, 7, 9, $13^*$ , $14^*$ , $20^*$ , $22^*$ , 23, 31, 32
30	Quiz 1		Homework 1: 1.1, 1.2
Oct 1	Solution Sets	1.5	$1, 2, 5, 6^*, 7, 12^*, 13, 15, 16^*, 17, 21, 23, 24^*$
3	Linear Independence	1.7	$1, 6^*, 7, 11, 14^*, 18, 19, 21, 22, 27, 38^*, 40^*$
6	Linear Transformations	<b>1.8</b> , <b>1.9</b>	<b>1.8</b> : $6^*$ , $10^*$ , $12^*$ , $13$ , $15$ , $17$ , $19$ , $21$ , $25$ , $26$ , $31^*$
7	Quiz 2		Homework 2: 1.3, 1.4, 1.5, 1.7
8	Linear Transformations	<b>1.8</b> , <b>1.9</b>	<b>1.9</b> : 1, 3, 6*, 9, 18*, 23, 28*, 31, 32*, 35; <b>Page 102</b> : 1
10	Matrix Operations	2.1	$1, 3, 5, 7, 8^*, 10^*, 12^*, 15, 16, 19, 23, 24^*, 25, 27, 33$
13	Inverse of a Matrix	2.2	$3, 6, 7, 9, 10, 13, 14^*, 16^*, 18^*, 21, 22^*, 23, 24, 31, 35$
14	Quiz 3		Homework 3: 1.8, 1.9, 2.1
15	Invertible Matrices	2.3	$3, 4, 6, 7, 11, 12^*, 13, 14^*, 15, 16^*, 34^*$
17	Leontief Models	<b>1.6</b> , <b>2.6</b>	<b>1.6</b> : 4*; <b>1.10</b> : 2*; <b>2.6</b> : 1, 2*, 3, 4*, 5, 6, 7
20	Review (No quiz)		Homework 4: 2.2, 2.3
21	Midterm Test 1		Covers chapters 1 & $\S$ 2.1 – 2.3, 2.6
22	Determinants	3.1	$9, 14^*, 19, 22^*, 23, 24^*, 25, 27, 29, 33, 34, 36, 38^*$
24	Determinants	3.2	$3, 6, 10^*, 12, 16, 18^*, 20^*, 23, 26^*, 27, 28, 29, 39$
27	Determinants	3.3	$20, 22, 24^*, 28^*$
28	Quiz 4		Homework 5: 1.6, 1.10, 2.6, 3.1, 3.2
29	Vector Spaces	4.1	$2, 4^*, 6, 8, 9, 12^*, 15, 17, 20^*, 23, 24^*, 32, 33$
31	Null Spaces	4.2	$1, 6^*, 7, 10^*, 11, 13, 15, 17, 21, 24^* 25, 26^*, 28, 33$
Nov 3	Linear Independence and Bases	4.3	$1, 6, 8, 10^*, 14^*, 16^*, 20, 21, 22^*, 24$
4	Quiz 5		Homework 6: 3.3, 4.1, 4.2
5	Coordinate Systems	4.4	$3, 8^*, 11, 14, 15, 22, 23^*, 24^*, 28^*, 30$
7	Dimension	4.5	6*, 8, 14*, 19, 24, 26, 30*, 32*
10	Rank	4.6	$4^*, 5, 7, 9, 11, 13^*, 15, 17, 20^*, 22^*, 24, 26, 28, 29$
11	Quiz 6		Homework 7: 4.3, 4.4, 4.5
12	Inner product	6.1	$3, 5, 7, 12^*, 13, 15, 17, 20, 24^*, 26, 29^*, 30^*, 31$
14	Orthogonal sets	6.2	$3, 5, 8, 11, 13^*, 15, 17, 21, 22, 24^*, 25^*, 28^*, 30, 33$
17	Review		Homework 8: 4.6
18	Midterm Test 2		Covers Chapters 3 & 4
19	Orthogonal projections	6.3	$1, 5, 10^{+}, 12^{+}, 13, 16^{+}, 21, 22^{+}, 23, 24$
21	Gram-Schmidt	6.4	1, 10 <sup>+</sup> , 16 <sup>+</sup> , 17
24	Least-squares	6.5	$3, 5, 9, 12^{*}, 13^{*}, 17, 19^{*}, 20^{*}, 21^{*}, 22^{*}$
25	Linear models	6.6	$3, 5, 8^{+}, 9, 12^{+}, 14^{+}, 17, 18^{+}$
00	NT 1		Homework 9: 6.1, 6.2, 6.3, 6.4 (can turn in by Dec 2)
20	The planting V+		
D 1	nanksgiving vacation		
Dec 1	Ne Ouiz ne class		
	Dowiew		
) F	Boview		
0	Final: Tuesday 0.11 AM		
9	r mai. rucsuay, 9-11 AM	1	