Math 20580 Syllabus & Tentative Schedule

Math 205	80 Syllabus & Tentative Schedule	Fall 2008
Aug 27	Lay 1.1-1.2: System, Row reduction	
29	1.3 Vector Equation	
Sept 1	1.4. The matrix equation	
3	1.5 Solution sets	
5	1.7 Linear independence	
Sept 8	1.8-1.9: Linear transformations	
10	2.1-2.2: Matrix operations and inverses	
12	2.3 More inverses	
Sept 15	Leeway	
17	2.8 Subspaces	
19	2.9 Dimension and rank	
22	3.1-2: More Determinants	
Sept 23	Exam I	
24	3.3 Cramer's Rule	
26	4.1-2: Null spaces and column spaces	
Sept 29	4.3 Linear independence and Bases	
Oct 1	4.4 Coordinates	
3	4.5 Dimensions of sub-spaces	
Oct 6	4.6-7: Rank and changes of bases	
8	5.1-2: eigenvalues and characteristic equations	
10	5.3 Diagonal matrices	
$\overline{-0}$	5.4 Eigenvectors	
Oct 13 Oct 14	Exam II	
15	5.5 Complex eigenvalues	
17	6.1-2: Inner product and orthogonality	
Oct 18-26	Fall Break	
Oct 27	6.3 Orthogonal projections	
29	6.4 The Gram-Schmidt Process	
31	Leeway	
Nov 3	6.5 The least square method	
5	New book (Boyce-DiPrima) 1.1-2: Solutions to Diff Equations	
7	1.3 Classifications of equations	
Nov 10	2.1-2.2: Integrating factors	
12	2.3 Modeling and Leeway	
14	2.4 Linear and non-linear equations	
Nov 17	2.5 Autonomous equations	
Nov 18		
19	2.6 Exact equations and integral factors	
21	3.1-3.2: Diff Equations with constant coefficients	
Nov 24	3.3 Wronskian	
$\frac{100^{\circ} 24}{100^{\circ} 26-30}$	Thanksgiving Holiday	
Dec 1	3.4 Complex roots	
3	3.5 Repeated roots	
5	3.6 Undetermined coefficients	
Dec 8	3.7: Variation of parameters	
10	3.8-3.9: Vibrations	
Dec 17	Final Exam 1:45–3:45 P.M.	