

Day #	Date	Book section	Topic	HW
1	<b>M 8/29</b>	1.1	Introduction and systems of linear equations	
2	<b>W 8/31</b>	1.2	Row reduction and Echelon forms	
3	<b>W 9/7</b>	1.3	Vector equations	HW1
4	<b>M 9/12</b>	1.4-1.5	Matrix equation $Ax=b$ and solution sets	
5	<b>W 9/14</b>	1.6	Applications of linear systems	HW2
6	<b>M 9/19</b>	1.7	Linear independence	
7	<b>W 9/21</b>	1.8-1.9	Linear transformations	HW3
8	<b>W 9/28</b>	2.1-2.2	Matrix operations	
9	<b>Th 9/29</b>	2.3	Invertibility	HW4
10	<b>M 10/3</b>	2.8-2.9	Subspaces, dimension, and rank	
11	<b>W 10/12</b>	3.1-3.2	Determinants	HW5
12	<b>M 10/17</b>	4.1	Vector spaces	
13	<b>W 10/19</b>	4.2-4.3	Bases, linear transformations of vector spaces	HW6
14	<b>M 10/24</b>	4.4-4.6	Coordinates, dimension, change of basis	
15	<b>W 10/26</b>	5.1-5.2	Eigenvectors and eigenvalues, characteristic eqn	HW7
16	<b>M 10/31</b>	5.3	Diagonalization 1	
17	<b>W 11/2</b>	5.4	Diagonalization 2	HW8
18	<b>M 11/7</b>	5.6, 5.9	Discrete dynamical systems, Markov chains	
19	<b>W 11/9</b>	6.1	Inner products, orthogonality	HW9
20	<b>M 11/14</b>	6.2-6.3	Orthogonal projections	
21	<b>W 11/16</b>	6.4	Gram-Schmidt process	HW10
22	<b>M 11/21</b>	6.5-6.6	Least squares method and applications	
23	<b>W 11/23</b>	7.1-7.2	Diagonalization of symmetric matrices	HW11
24	<b>M 11/28</b>	7.4	Singular Value Decomposition	
25	<b>W 11/30</b>	7.4-7.5	Applications of Singular Value Decomposition	HW12
26	<b>M 12/5</b>	8.x-9.x	Convex geometry and linear programming	
27	<b>W 12/7</b>		Review	
28	<b>M 12/12</b>		Review	

**M 12/19**

FINAL EXAM at GI-305, 11:30am - 1:30pm