

## Tentative Course Schedule for Math 301, Linear Algebra, Fall 2011

<b>Mon</b>	<b>Wed</b>	<b>Fri</b>
Aug 29, 2011	Aug 31, 2011	Sep 2, 2011
(no class)	Introduction Vectors in the plane (1.1)	Length, Angle, Projections (1.1-1.2)
Sep 5, 2011	Sep 7, 2011	Sep 9, 2011
Linear trans. of plane (end of add/drop)	Linear trans. (con't)	Linear trans (con't), Intro to syst of linear eqtns (2.1)
Sep 12, 2011	Sep 14, 2011	Sep 16, 2011
Linear trans recap; solving syst of linear eqtns (con't)	Solving systems of linear eqtns (2.2)	Matrix equations; linear independence (2.3)
Sep 19, 2011	Sep 21, 2011	Sep 23, 2011
Exam 1	3.1 Matrices	3.1 Matrices
Sep 26, 2011	Sep 28, 2011	Sep 30, 2011
3.2 Matrix algebra	3.3 Inverse of a matrix	3.3 Inverse of mx (con't) (Dennis: Algorithms)
Oct 3, 2011	Oct 5, 2011	Oct 7, 2011
3.5 Subsp, dim, rk	3.5 Subsp, dim, rk (con't) (John: Markov chains)	3.6 Linear transformations (Isaac: Pop. gr.)
Oct 10, 2011	Oct 12, 2011	Oct 14, 2011
3.6 Linear trans. (con't)	4.1 Eigenvectors/values (Erin: Graphs)	4.2 Determinants
Oct 17, 2011	Oct 19, 2011	Oct 21, 2011
Fall Break	Fall Break	4.3 Eigenvalues, eigenvectors
Oct 24, 2011	Oct 26, 2011	Oct 28, 2011
4.4 Similarity and diagonalization	Review/recap	Exam 2
Oct 31, 2011	Nov 2, 2011	Nov 4, 2011
4.3 Distinct eigenvals (last day to withdraw)	4.4 Similarity	6.3 Change of basis
Nov 7, 2011	Nov 9, 2011	Nov 11, 2011
5.1 Orthogonality (Emily: Linear recurrence)	5.1 Orthogonality (con't)	5.2 Complements, proj'ns
Nov 14, 2011	Nov 16, 2011	Nov 18, 2011
5.3 Gram-Schmidt	5.4 Spectral theorem	Geom. Interp. of factorizations
Nov 21, 2011	Nov 23, 2011	Nov 25, 2011
6.1 - 6.4 Abstract v.s. (Abe: Tiling, ...)	Abstrac v.s. (con't) (Jing: Quadratic fms) (Greg: Fibonacci in v.s.)	Thanksgiving holiday
Nov 28, 2011	Nov 30, 2011	Dec 2, 2011
7.1 Inner products (Aaron: Magic squares)	Wrap-up	Exam 3 (in class) Take-home distributed
Dec 5, 2011	Dec 7, 2011	Dec 9, 2011
Take-home due (Michelle: Approx e-values)	(no class)	(Final papers due 5pm Email me a pdf)