TOPICS SCHEDULE

MATH 4A: LINEAR ALGEBRA AND APPLICATIONS
PROFESSOR: PAUL J. ATZBERGER

Dates	Topics	Sections
1/6	Introduction to Linear Algebra, Systems of linear equations	1.1-1.3
1/8	Row reduction and echelon forms	1.1-1.3
1/13	Simple Matrix Equations, Solution Sets	1.4-1.6
1/15	Applications of Simple Matrix Equations	1.4-1.6
1/20	Linear Independence, Bases	1.7-1.9
1/22	Linear Transformations	1.7-1.9
1/27	**Midterm 1**	exam
1/29	Matrix Inverses and Determinants	2.2, 2.3, 3.1
2/3	Matrix Inverses and Determinants	2.2, 2.3, 3.1
2/5	Properties of Determinants, Vector Spaces, Subspaces	3.2, 4.1, 4.2
2/10	Coordinate Systems, Dimension and Rank	4.4-4.6, 5.1
2/12	**Midterm 2**	exam
2/17	Eigenvectors and Eigenvalues	4.4-4.6, 5.1
2/19	Characteristics Equation	5.2-5.3, 6.1
2/24	Diagonalization, Inner-Product, Applications	5.2-5.3, 6.1
2/26	Orthogonal Sets, Least Squares	6.2-6.5
3/3	Gram-Schmidt, Applications	6.2-6.5
3/5	Applications of Linear Algebra	1.1-6.5

3/10	Applications of Linear Algebra	1.1-6.5
3/12	**Review topics**	1.1-6.5
3/19	**Final Exam**	1.1-6.5

[1] Note that this is the anticipated schedule of topics but is subject to change and adjustment as is needed during the quarter.