

Date	Section(s)	Topics
June 23	1.1	Lines, systems of linear eqns, \mathbb{R}^n , set language/notation
June 25	1.1	Lines, 0,1, ∞ ly many solns, Δ^{ar} and echelon systems
June 27	1.2	Free variables, parameters, Coefficient matrix, augmented matrix, elementary row operations, row reduced echelon form
July 30	2.1	\mathbb{R}^n , vectors, points in \mathbb{R}^n
July 2	2.2	Linear (in)dependence, linear combinations, span
July 4	No class	
July 7	2.3	Linear independence
July 9	3.1	Matrices, Linear Transformations
July 11	3.1, 9.3	Matrices, Linear Transformations
July 14	3.2	Matrix algebra
July 16	3.3	Inverses
July 18	Midterm	
July 21	4.1	Subspaces Rank and nullity
July 23	4.1	Subspaces, basis, bases, and dimension
July 25	4.2, 4.3	Null space, kernel, range, row and column spaces
July 28	4.3	
July 30	5.1	Determinants
Aug 1	5.1, 5.2	Determinants, characteristic polynomial
Aug 4	6.1	Eigenvalues, eigenvectors, 2×2 case
Aug. 6	6.1	Eigenvalues, eigenvectors, 2×2 case
Aug. 8	6.1	Eigenvalues, eigenvectors, $n \times n$ case
Aug. 11	6.3	Change of basis
Aug. 13	6.4	Diagonalization
Aug. 15	8.1	Dot product, orthogonality
Aug. 18	8.2	Projection, least squares
Aug. 20	8.2	Projection, least squares
Aug. 22		Final Exam

TABLE 1. Approximate syllabus for Math 308, Summer 2014