

Math 1B03 Course Calendar – Fall 2012

Week 1: September 6-7	
Lecture 1	Introduction 1.1 Systems of Linear Equations
Week 2: September 10-14	
WORK ON ASSIGNMENT #1: Due at 11:59pm on Monday Sept. 17 th	
Lecture 2	1.2 Gaussian Elimination
Lecture 3	1.3 Matrices and Matrix Operations
Lecture 4	1.3 Matrices and Matrix Operations (Continued) 1.4 Inverses, Properties of Matrices
Week 3: September 17-21	
LAB #1 (Matlab): Due at 11:59pm on Thursday Sept. 20 th	
Lecture 5	1.4 Inverses, Properties of Matrices (Continued)
Lecture 6	1.5 Elementary Matrices
Lecture 7	1.5 Elementary Matrices (Continued) 1.6 More on Linear Systems and Invertible Matrices
Week 4: September 24-28	
ASSIGNMENT #2: Due at 11:59pm on Thursday Sept. 27 th	
Lecture 8	1.6 More on Linear Systems and Invertible Matrices (Continued)
Lecture 9	1.7 Diagonal, Triangular, and Symmetric Matrices
Lecture 10	2.1 Determinants by Cofactor Expansion
Week 5: October 1-5	
LAB #2 (Matlab): Due at 11:59pm on Thursday October 4 th	
Lecture 11	2.2 Evaluating Determinants by Row Reduction
Lecture 12	2.3 Properties of Determinants (Omit Cramer's Rule)
Lecture 13	5.1 Eigenvalues and Eigenvectors
Week 6: October 9-12	
ASSIGNMENT #3: Due at 11:59pm on Thursday October 11 th	
Lecture 14	5.1 Eigenvalues and Eigenvectors (Continued)
Lecture 15	5.2 Diagonalization
Lecture 16	5.2 Diagonalization (Continued)
Week 7: October 15-19	
TEST 1: Evening of Tuesday October 16 th	
Lecture 17	4.12 Dynamical Systems and Markov Chains
Lecture 18	4.12 Dynamical Systems and Markov Chains (Continued)
Lecture 19	10.1 (from 9 th Edition) Complex Numbers

Week 8: October 22-26**LAB #3 (Matlab):** Due at 11:59pm on Thursday October 25th

Lecture 20	10.2 (from 9 th Edition) Division of Complex Numbers
Lecture 21	10.3 (from 9 th Edition) Polar Form of a Complex Number
Lecture 22	3.1 Vectors in 2-space, 3-space, and n -space

Week 9: October 29 – November 2**ASSIGNMENT #4:** Due at 11:59pm on Thursday November 1st

Lecture 23	3.2 Norm, Dot product, and Distance in R^n
Lecture 24	3.3 Orthogonality 3.4 The Geometry of Linear Systems
Lecture 25	3.4 The Geometry of Linear Systems (Continued) 3.5 Cross Product

Week 10: November 5-9**LAB #4 (Matlab):** Due at 11:59pm on Thursday November 8th

Lecture 26	4.1 Real Vector Spaces
Lecture 27	4.1 Real Vector Spaces (Continued) 4.2 Subspaces
Lecture 28	4.2 Subspaces (Continued)

Week 11: November 12-16**ASSIGNMENT #5:** Due at 11:59pm on Thursday November 15th

Lecture 29	4.3 Linear Independence
Lecture 30	4.3 Linear Independence (Continued) 4.4 Coordinates and Basis
Lecture 31	4.4 Coordinates and Basis (Continued)

Week 12: November 19-23**Test 2:** Evening of Tuesday November 20th

Lecture 32	6.3 Gram-Schmidt Process (Omit Example 8 and QR-Decomposition)
Lecture 33	6.3 Gram-Schmidt Process (Continued) 4.5 Dimension
Lecture 34	4.5 Dimension (Continued) 4.7 Row Space, Column Space, and Null Space

Week 13: November 26-30**LAB #5 (Matlab):** Due at 11:59pm on Thursday November 29th

Lecture 35	4.7 Row Space, Column Space, and Null Space (Continued)
Lecture 36	10.15 Cryptography
Lecture 37	10.15 Cryptography (Continued) Review

Week 14: December 3-7 (Classes end on Dec. 3)

Lecture 38	Review
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