

Revised 02/02/2026

Ma 311 Linear Algebra ❖ Course Schedule and Assignments ❖ Spring 2026

This assignment sheet is a tentative schedule. We may get ahead or behind; adjust as necessary.

Date	Discussion	Assessment	Suggested Exercises
			<ul style="list-style-type: none"> • The 8th edition of Larson, <i>Elementary Linear Algebra</i>, is required. • Exercises in parenthesis () are for the purpose of reviewing what you should already know from prior math experience. Do only what you need to refresh your knowledge. • Exercises not in parenthesis represent potentially new material. Pay attention to these. • Exercises in bold italic introduce ideas or either build or reinforce theory. Neglect these at your own peril.
Unit 1 Linear Systems, Matrices, and Determinants			
Wk 1 1/14-16	§ 1.1-1.3		1.1 #(1-66), 69, 70, 71, 72, 77, 78, 79, 81, 83, 85, 91, 92 , 93
Wk 2 1/19-23	§ 2.1-2.4 (2.5-2.6 TBD)	1/19 MLK Day – No classes	1.2 #3, 7, 11, 13, 15, 17, 19-21, 22-24, 33, 35, 37, 39, 41, 43, 50, 52, 59, 60, 63, 68
Wk 3 1/26-30	§ 3.1-3.4	1/23,26 storm – classes cancelled	1.3 curve fitting: #3, 7, 11, 13, 14, 15, 37 network analysis: #21, 23, 25 partial fraction decomposition: #31, 33 polynomial zeros #39, 40
Wk 4 2/02-06		2/02 storm – classes cancelled	2.1 #7, 11, 15, 17, 21, 23, 29, 31, 33, 35, 41, 43, 47, 49, 51, 55, 57, 59, 61, 63, 65, 67, 68, 69, 70, 73, 85, 86 2.2 #7, 13, 15, 27, 29, 37, 38, 41, 45, 49, 51, 53, 55, 56, 59, 69, 70, 71, 73 2.3 #5, 7, 13, 15, 25, 27, 41, 45, 47, 53, 55, 57, 59, 69, 71, 72, 74, 75 2.4 #1-11 odd, 15, 17, 19, 21, 23 , 25, 31, 33, 35, 41, 42 , 53 2.5 (TBD) stochastic matrices, Markov chains, steady states 2.6 (TBD) cryptography #1, 3, 5, 7, 9
		Test 1 (Mon 2/09) Project 1 (due ?)	3.1 #1, 5, 9, 15, 17, 19, 27, 29, 31, 39, 41, 43, 44 , 45, 47, 51, 67, 68 3.2 #1-15 odd, 21, 23, 25, 27, 31, 35, 37, 38 , 39, 41, 45 3.3 #3, 5, 13, 17, 21, 23, 25, 33, 37, 39, 41 , 47, 57, 59, 60 , 65, 71, 72, 75, 78 3.4 adjoint #1, 5, 7 Cramer's Rule #9, 13, 17, 21, 27
Unit 2 Vector Spaces			
Wk 5 2/09-13	§ 4.1-4.8		4.1 #1, 5, 9, 13, 15, 17, 21, 23, 27, 31, 33, 37, 39, 57, 58
Wk 6 2/16-20		2/18-20 Bible Conf – No classes	4.2 #1-12 all, 13, 17, 21, 25, 29, 31, 33, 35, 37, 41, 49, 50
Wk 7 2/23-27			4.3 #3, 4, 7, 9, 11, 17, 23, 27, 29, 33, 37, 39, 43, 44, 54, 55
Wk 8 3/02-06			4.4 #1, 3, 5, 9, 13, 17, 19, 23, 25, 31, 33, 35, 37, 41, 49, 53, 55, 57, 63, 64, 74, 76 4.5 #1, 3, 5, 7, 13, 15, 17, 21, 25, 27, 31, 33, 35, 37, 38, 39, 43, 45, 49, 53, 59, 61, 63, 65, 79, 80, 81, 83 4.6 #5, 7, 9, 15, 17, 21, 23, 25, 33, 39, 41, 43, 47, 51, 53, 57, 59, 67, 71, 73, 74, 75, 76 4.7 #7, 9, 13, 15, 17, 19, 21, 23, 27, 31, 33, 39, 41, 45, 49, 55, 56, 57 4.8 LDE Wronskian #9, 13, 17, 23, 27, 29, 31, 35, 39
		Test 2 (Mon 3/09) Project 2 (due?)	

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Unit 3 Inner-Product Spaces			
Wk 9 3/09-13 Wk 10 3/16-20	§ 5.1-5.5	<p style="text-align: center;"><i>3/23-27 Spring Break</i></p> <p>Test 3 (Wed 4/01) Project 3 (due?)</p>	5.1 #5, 7, 9, 11, 13, 15, 21, 25, 29, 33, 37, 41, 45, 47, 53, 57, 61, 65, 73, 74 5.2 #5, 13, 17, 23, 27, 29, 31, 33, 37, 41, 45, 49, 51, 59, 65, 75, 81, 85, 86 5.3 #5, 11, 13, 19, 23, 29, 39, 55, 56, 67 5.4 Orthogonal Subspaces #7, 9, 11, 19, 21, 43, 44 5.5 Cross Products #7, 11, 13, 15, 19, 23, 35 Geometry # 45, 47, 49, 62
Unit 4 Linear Transformations			
Wk 11 3/30-4/03 Wk 12 4/06-10 Wk 13 4/13-17	§ 6.1-6.4 (6.5 TBD)	<p style="text-align: center;"><i>4/15 AACs – No classes</i></p> <p>Test 4 (Fri 4/17) Presentations (Wk 15)</p>	6.1 #3, 15, 19, 21, 23, 25, 29, 31, 33, 39, 49, 53, 65, 67, 68 6.2 #1, 3, 5, 9, 11, 15, 17, 19, 23, 27, 31, 33-36 all, 41-44 all, 49, 51, 53, 65, 66 6.3 #1, 5, 7, 9, 11, 15, 19, 23, 25, 27, 33, 35, 41, 43, 52, 53, 54 6.4 #3, 7, 13, 15, 17, 21, 25, 41, 42 6.5 (TBD) Shears and Rotations
Unit 5 Eigenvalues and Eigenvectors			
Wk 14 4/20-24 Wk 15 4/27-5/01	§ 7.1-7.3 (7.4 TBD)	Presentations	7.1 #1, 3, 5, 9, 11, 15, 19, 23, 27, 33, 51, 53, 59, 67, 68 , 69, 71, 79, 80 7.2 #3, 7, 9, 11, 15, 19, 23, 27, 29, 37, 38 7.3 #9, 13, 17, 23, 27, 35, 41, 45, 49, 51, 53, 54 7.4 (TBD) Rotations of Conics (TBD) Constrained Optimization
Wk 16 5/04-07		Final Exam Wed 3:30-4:40	Final exam according to BJU final exam schedule