

# Reading\_HW\_Schedule

Class	Day	Section	Title	Homework	Mathematica	Due
				Problems	Problems	Date
1	01/13	2.1	Linear Systems of Equations	1, 2, 5, 11	1, 2	01/17
2	01/15	2.2	Augmented Matrix of a Linear System and Row Operations	3, 4, 5(a, f), 6(a, f), 7	5(a, c, h)	01/22
3,4	01/22	2.3	Some Matrix Arithmetic	1, 2, 3, 4, 5(a, d), 6, 9	1, 2, 3, 4	01/27
5	01/24	3.1	Gauss–Jordan Elimination and <i>rref</i>	1, 2, 3(a, d, e), 7a, 8, 11	1, 2, 5, 6	01/29
6	01/27	3.2	Elementary Matrices	1, 3(a, d, e), 5, 9	1, 4	01/31
7,8	01/31	5.1	Determinants and Inverses from the Adjoint Formula	1(a, b, h, i), 2, 3, 4(a, b, e, f), 5, 6, 7(a, b)	1(a, b, e, f), 2(a, d), 6, 9	02/05
9	02/05	5.2	Finding Determinants by Expanding along...	1(a, c, f), 3, 4, 7, 8(a, d), 9, 13, 16	1(a, b, f), 2, 5	02/10
10	02/07	5.3	Determinants Found by Triangularizing Matrices	1(a, d, e, f), 2, 4	1, 2, 5	02/12
11	02/10	5.4	<i>LU</i> Factorization	1(a, c), 2a, 4a	1	02/14
12	02/12	5.5	Inverses from <i>rref</i>	none	none	
13	02/14	5.6	Cramer's Rule	none	none	
14	02/17	6.1	Vectors	1(a, h, i), 5, 6	2, 3	02/21
15	02/19	6.2	Dot Product	1, 2, 3(a, d, e), 4(a, f), 9, 10, 14, 18	6, 7	02/24
16	02/21	6.3	Cross Product	1, 2, 3, 7, 9	1, 2	02/26
17	02/24	6.4	Vector Projection	none	none	
18, 19	03/10	8.1	Subspaces of $\mathbb{R}^n$	1, 2, 3, 4(a), 5(a), 8	1, 2	03/14
20	03/14	8.2	Independent and Dependent Sets of Vectors in $\mathbb{R}^n$	1(a, d, f), 2, 3(a, d, f), 5, 6, 7, 8, 9, 10	1, 2(a, d, f), 3	03/26
21	03/24	8.3	Basis and Dimension for Subspaces of $\mathbb{R}^n$	1, 2, 3, 4, 5, 8, 9	1, 2, 3, 4	03/28
22	03/26	8.4	Vector Projection onto a Subspace of $\mathbb{R}^n$	2, 4, 7, 8(a, e), 17	1, 3, 4, 5(a, c, d, f)	03/31
23-25	03/28	8.5	The Gram–Schmidt Orthonormalization Process	1, 2, 3, 4, 9	1, 2	04/04
26, 27	04/04	9.1	Basics about Linear Maps	1, 2, 3, 4, 5, 7, 10	1, 2, 3	04/09
28, 29	04/09	9.2	The Kernel and Image Subspaces of a Linear Map	1, 2, 3, 4	1, 2	04/14
30	04/14	9.3	Composites of Two Linear Maps and Inverses	1, 2, 3, 4, 5, 6	1	04/21
31	04/16	9.4	Change of Bases for the Matrix Representation of a Linear Map	1-9 all	3	04/23
32	04/21	11.1	Pseudoinverse to a Nonsquare Matrix and Almost...	1, 2(a, c, d, i), 3(a, d, f), 4(a, d, f), 5, 7, 8	1, 2, 3, 4	04/25
33	04/23	11.2	Fits and Pseudoinverses	1, 2, 6	1, 2, 3, 7	04/28
34	04/25	11.3	Least-Squares Fits and Pseudoinverses	none	none	
35	04/28	12.1	What Are Eigenvalues and Eigenvectors...	1-4 all	1, 2	05/02
		12.2	Summary of Definitions and Methods for...			
		12.3	Applications of the Diagonalizability of Square Matrices			
		12.4	Solving a Square First-Order Linear System of...			
		12.5	Basic Facts about Eigenvalues, ...			