

MATH 436 Linear Algebra Fall 2023 Schedule

Lec.	Date	Section	Topic
1	8/21	1.A	Introduction. Complex numbers. \mathbb{R}^n and \mathbb{C}^n .
2	8/23	1.B,C	Vector spaces. Subspaces.
3	8/25	1.C	Examples. Sums and direct sums of subspaces.
4	8/28	2.A	Linear combinations and span. Polynomials.
5	8/30	2.A	Linear dependence and linear independence.
6	9/1	2.A	Linearly independent and spanning lists. Finite-dimensional subspaces.
-	9/4		<i>Labor Day - no classes.</i>
7	9/6	2.B	Bases.
8	9/8	2.C	Dimension.
9	9/11		Team Worksheet 1.
10	9/13	3.A	Linear maps.
11	9/15	3.A,B	The space of linear maps. Null space and range.
12	9/18	3.B	Fundamental Theorem of Linear Maps and corollaries.
13	9/20	3.C	Matrices. Matrices of linear maps.
14	9/22	3.D	Invertible linear maps. Invertible operators on V .
15	9/25	3.D	Isomorphic vector spaces.
16	9/27		Team Worksheet 2.
17	9/29		Review.
18	10/2		Exam 1 covering Sections 1.A - 3.C.
19	10/4	3.E	Products of vector spaces. Affine subsets.
20	10/6	3.E, p.137	Quotient space. Quotient operator.
21	10/9	4	Zeros and factorization of polynomials.
22	10/11	5.A	Eigenvalues and eigenvectors.
23	10/13	5.B	Existence of eigenvalues.
24	10/16		Team Worksheet 3.