

Date	Section Covered/other comments
Jan 8	Section 1.1 (linear independence)
Jan 10	Section 1.1 (span)
Jan 12	Section 1.1 (abstract vector spaces)
Jan 15	MLK Day
Jan 17	Sections 1.2-13. (linear equations and RREF)
Jan 19	Sections 1.2-13. (linear equations and RREF)
Jan 22	Section 1.3-1.4. (Equivalent matrices and column space)
Jan 24	Section 1.4. (Null spaces and subspace)
Jan 26	Section 2.1-2.2 (Bases and dimension)
Jan 29	Section 2.1-2.3 (Rank, nullity, and coordinates)
Jan 31	Section 3.1-3.5 (Matrix of a linear transformation)
Feb 2	Section 3.2 (Matrix multiplication)
Feb 5	Section 3.3 (Inverses)
Feb 7	Section 3.5 (Onto, one-to-one, isomorphisms)
Feb 9	Section 3.5 (Matrix of a linear transformation with respect to a basis)
Feb 12	Review
Feb 14	Review (Midterm 1 at night)
Feb 16	No class
Feb 19	Section 4.1-4.2 (volume distortion)
Feb 21	Section 4.1-4.2 (orientation and determinants)
Feb 23	Section 4.1-4.2 (expansion by minors)
Feb 26	Section 4.3 (formula for inverses and solutions to equations)
Feb 28	Section 5.1 (intro to eigenvalues/vectors)
Mar 1	Section 5.1 (algebraic and geometric multiplicities)
Mar 4	Section 5.2 (diagonalization)

Mar 6	Section 5.3 (complex numbers and eigenvalues)
Mar 8	Review
Mar 11	Spring break
Mar 13	Spring break
Mar 15	Spring break
Mar 18	Section 5.2 (differential equations)
Mar 20	Section 5.2 (Markov chains and Google)
Mar 22	Section 5.3 (fields)
Mar 25	Review
Mar 27	Review (Midterm 2 at night)
Mar 29	Section 6.1 (dot product)
Apr 1	Section 6.2 (orthogonal complements)
Apr 3	Section 6.2 (Gram-Schmidt)
Apr 5	Section 6.5 (Least squares solutions)
Apr 8	Eclipse
Apr 10	No class
Apr 12	Section 6.3 (Inner product spaces)
Apr 15	Section 6.3 (Wave equation)
Apr 17	Section 6.4 (Orthogonal and symmetric matrices)
Apr 19	Section 6.4 (Quadratic forms and second derivative test)
Apr 22	No class
Apr 24	Review
Apr 26	Review
May 2	Final Exam (RHPH 172, 3:30-5:30pm)

10:30

Before Midterm 1:

- Linear independence
- Span
- Basis
- 1-1
- Onto
- isomorphism
- vector space
- subspace
- rank
- nullity
- dimension
- col(A)
- nul(A)
- invertible
- RREF
- row equivalent

Before Midterm 2:

- determinant
- eigen values/vectors
- eigenbasis
- algebraic multiplicity
- geometric multiplicity
- diagonal
- diagonalizable
- characteristic polynomial
- Field
- Markov

After Midterm 2:

- Inner product
- orthogonal matrix
- orthogonal vectors
- proj
- refl
- orthonormal basis
- orthogonal complement ($V^\perp$)
- transpose
- least squares solution
- symmetric
- trace
- positive definite/neg def/indef
- quadratic form

11:30

Before Midterm 1:

- Linear dependence
- span
- column space
- null space
- nullity
- rank
- subspace
- vector space
- basis
- dimension
- linear combination
- RREF
- onto
- one to one
- isomorphism / isomorphic
- invertible
- linear

Before Midterm 2:

- field
- eigenvalue/vector
- diagonalizable
- diagonal
- algebraic multiplicity
- geometric multiplicity
- Markov
- matrix of a linear transformation with respect to a basis
- upper triangular
- determinant

After Midterm 2:

- orthogonal vectors
- orthogonal matrix
- least squares solution
- dot product
- proj
- refl
- orthonormal
- inner product
- Fourier coefficients
- symmetric

- transpose
- orthogonal complement ($V^\perp$)
- quadratic form
- positive/negative/indefinite