LINEAR ALGEBRA

LINEAR MODELS AND DECISIONS

(HERSTEIN, MIDDENHALL, BOCK)

SCALARS — GROUP, RING, FIELD

VECTORS — VECTOR SPACE OVER FIELD

LINEAR COMBINATION

LINEAR INDEPENDENCE

BASES - SPAN, SUBSPACES

ISOMORPHISM

INNER PRODUCTS - LENGTH, ANGLE, DISTANCE

LINEAR TRANSFORMATIONS

MATRIX REPRESENTATIONS

VECTOR SPACE - INVERSES (OF PRODUCTS)

RING - MATRIX MULTIPLICATION

EIGENVECTORS, EIGENVALUES - GEOMETRIC PERSPECTIVE

TRANSPOSE (OF PRODUCTS)

ORTHOGONALITY

PROJECTIONS

HADAMARD PRODUCT

KRONECKER (TENSOR) PRODUCT