LINEAR ALGEBRA

Basic Concepts

(•) Fields: \( \mathbb{R}, \mathbb{C} \)
(•) Linear Spaces
(•) Bases
(•) Linear Mappings
(•) Matrices
(•) The Rank Theorem
(•) Determinants

Basic Theorems

(•) The Rational Canonical Form
(•) The Jordan Canonical Form

Inner Products

(•) The Spectral Theorem
(•) The Singular Value Decomposition

Text

Finite Dimensional Vector Spaces, Paul Halmos (bookstore)

Homework

Weekly: Thursday → Thursday

Examination

End of Term: Take Home/Open Book