Mathematics 331
Spring, 2015, Section 2
Wieting

LINEAR ALGEBRA

Basic Concepts

- (•) Fields: **R**, **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 $\longrightarrow$ Thursday

Examination

End of Term: Take Home/Open Book