

# Linear Algebra II

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## Textbook Recommendations

These lecture notes closely follow the lecture notes, although they are written in German.

These books will serve as great references. There's a mix of book English and German texts, although you can find English translations for some of them.

- Klaus Jänich. Linear Algebra. Springer-Verlag. 1994. New York.
- Siegfried Bosch. Lineare Algebra. 5. Auflage. Springer-Verlag. 2014. Heidelberg.
- Kenneth Hoffman. Ray Kunze. Linear Algebra. 2nd. Edition

Some other recommendations:

- James B. Carell. Groups, Matrices, and Vector Spaces
- B.L. van der Waerden. Modern Algebra (Vol I)
- Stephen H. Friedberg, Arnold J. Insel, Lawrence E. Spence. Linear Algebra. 4th. Ed.
- Sheldon Axler. Linear Algebra Done Right, 4th. Edition
- Serge Lang. Linear Algebra. 3rd. Edition
- Saunders MacLane. G. Birkhoff. Algebra. 1967
- Michael Artin. Algebra
- Paul R. Halmos. Finite-Dimensional Vector Spaces

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# **1 Introduction**

This course is a continuation of Linear Algebra I. We will build upon the concepts introduced in the previous course and explore more advanced topics in linear algebra.