

*Montgomery College - Department of Mathematics
Takoma Park/Silver Spring Campus*

**MA284 – Linear Algebra
4 Semester Hours**

Description Basic concepts of linear algebra including vector spaces, linear equations and matrices, determinants, linear transformations, similar matrices, eigenvalues, and quadratic forms. Matlab is used to explore these topics.

MA284 meets for 5 hours each week.

Prerequisites A grade of C or better in MA 182 or equivalent or consent of department.

Topics

- I. Linear equations, transformations
- II. Matrix Algebra
- III. Determinants
- IV. Vector Spaces
- V. Eigenvalues and eigenvectors
- VI. Orthogonality and least squares
- VII. Symmetric matrices and quadratic forms

Text *Elementary Linear Algebra* (5th edition), by Larson, Edwards, and Falvo. Houghton Mifflin Publishing Company