

Course Number

MTH-140-01

Course Description

Linear algebra has an enormous number of applications to the sciences and engineering. This course will cover the basics of linear algebra in Euclidean n -space, including linear systems, linear transformations, determinants, eigenvalues and eigenvectors, orthogonality, and the singular value decomposition. An emphasis will be placed on applications, chosen from least-squares fitting, linear programming, image compression, Markov chains and discrete dynamical systems, computer graphics, principal component analysis, the Google PageRank algorithm, and others. Computer software such as MATLAB or Mathematica will be used in this course to perform numerical calculations.

Academic Term

21/FA

Instructor

Gasparovic, Ellen

Location & Meeting Time

Bailey Hall-100+ T/TH 10:55AM-12:40PM LEC

Credits

1.00

Capacity

25

Total Students

24

Academic Department

Mathematics

Field Of Study

Mathematics (MTH)