

Wayne County Community College District

COURSE SYLLABUS

MAT 272 Linear Algebra

CREDIT HOURS: 4.00

CONTACT HOURS: 60.00

COURSE DESCRIPTION:

This course covers core materials, vectors, spaces, linear transformations and matrices, systems of linear equations, determinants and digitalization.

PREREQUISITES: MAT 271

EXPECTED COMPETENCIES:

Upon successful completion of this course, the student will:

- Understand core materials, vector space, linear transformations, matrices, systems of linear equations, determinants and diagonalization
- 2. Develop their ability to solve problems and equations related to this material
- 3. Solve systems of linear equations
- 4. Perform operations with matrices
- 5. Discuss the inverse of a matrix
- 6. Explain properties and use of determinants
- 7. Be familiar with vector spaces
- 8. Perform operations with vectors
- 9. Explain general vector spaces
- 10. Perform linear transformations
- 11. Identify Kernel and range
- 12. Explain Eigenvaies and Eigenvectors
- 13. Perform diagonalization of matrices

ASSESSMENT METHODS:

Student performance may be assessed by examination, quizzes, case studies, oral conversation, group discussion, oral presentations. The instructor reserves the option to employ one or more of these assessment methods during the course.

GRADING SCALE:

90%-100% = A

80%-89.9%= B

70%-79.9%= C

60%-69.9%= D

<60% = E