



Course No.	Course Title	No. of Units			Pre-requisites
		Th.	Pr.	Credit	
MATH 241	Linear Algebra	3	-	3	MATH 151

#### Course Objectives:

- Making the student acquainted with fundamental techniques in Linear Algebra such as: Solving linear systems, Matrix calculus, Determinants.
- Allowing the student to get autonomy for finding the right method to be applied
- Helping the student in how to use adequately a text book to get the appropriate information

#### Course Description:

Systems of linear equations, Gauss-Jordan elimination method, Matrix algebra, The inverse of a matrix, Determinants, Cramer's rule, Vector spaces and subspaces, Euclidean spaces, Linear transformations, The kernel and the range of a linear transformation, Spanning sets, Independent sets, Bases, Dimension, Eigenvalues and eigenvectors.

#### Main Text Book:

- Linear Algebra and its Applications, by David C. Lay, Pearson edition, 2006.

#### Subsidiary Books:

- Elementary Linear Algebra, by H. Anton, John Wiley, 2001.
- Elementary Linear Algebra, by R. E. Larson and B. E. Edwards, 5<sup>th</sup> edition, Houghton Mifflin, 2004.