Code	Subject Title	Cr. Hrs	Semester
BBA-403	**Mathematics (Advanced)**	**3**	**VII**
Year	Discipline		
4	**Business Administration**		

Objectives:

The primary goal of this course is to teach the techniques of integral calculus that is likely to be encountered in business and economics courses in college and in subsequent professional activities. The course is designed to provide a sound, intuitive understanding of the basic concepts without sacrificing mathematical accuracy. Student performance will be evaluated on group projects handed out in class, pop quizzes and term exams.

Course Contents:

Introduction to Ant- differentiation:

The indefinite integral integration by substitution area and the definite integral. Applications to business and economics, Integration by parts; integral tables. Review on integration.

Further Topics in Integration:

The definite integral as the limit of a sum improper integrals. Probability density functions numerical integration review on further topics on integration.

Functions of Two Variables:

Functions of two variables surfaces and level curves. Partial derivatives the chain rule; Approximation by the total differential relative maxima and minima. Lagrange multipliers. The method of least squares. Double integrals review on functions of two variables.

The Trigonometric Functions:

Introduction to trigonometric functions; Differentiation and integration of trigonometric functions; Additional applications involving trigonometric functions.

Differential Equations:

Differential equations an introduction; Second order differential equations; Difference equations; Reviewing differential & difference equations.

Recommended Books: