Department of Mathematics **Faculty of Science**

MATH (206)761 **METHODS OF APPLIED MATHEMATICS I** **3(3/3-0/0)**

Prerequisite consent of the instructor

Course Descriptions :

Special functions: Legendre, Bessel, Hermite, Laguerre, hypergeometric, and confluent hypergeometric functions. Partial differential equations of theoretical physics, seperation of variables. Ordinary differential equations, non-homogeneous: Green's function. Complex variables, analytic functions, contour integrals, calculus of residues and applications. Introduction to dispersion relations.