# 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.