

**DEPARTMENT OF MATHEMATICS,**

**UNIVERSITY OF KARACHI,**

**Course Outline**

**MATH 648: PROJECTIVE GEOMETRY - II**

**Course contents:**

Projective geometry of three dimensions, point, straight line and plane. Duality, cross ratios, Quadric surfaces. Line geometry. Twisted cubic.

**Books Recommended:**

1. Maxwell, E. A., Methods of Plane Projective Geometry, C.U.P.,1993
2. Maxwell, E. A., General Homogenous CO-ordinates in Space of Three Dimensions. C.U.U.,1999
3. Sample, J. G. and Kenton, G. T. , Algebraic Projective Geometry, C.U.P.,1987