INSTITUTE OF MATHEMATICS
College of Science
University of the Philippines Diliman

Math 147 Course Syllabus

A. Course Catalogue Description

Course Number	Math 147
Course Title	Introduction to Algebraic Geometry
Course Description	Projective spaces; algebraic varieties; algebraic and elliptic curves
Prerequisite	Math 110.1 and Math 140
Course Credit	3 units
Number of Hours	3 hours/week

B. Course Content

    I. Affine Algebraic Curves

    II. Intersection multiplicities

    III. Multiplicity of a point

    IV. Intersection of lines and curves

    V. Rational parametrization of affine lines

    VI. Projective Plane

    VII. Projective Transformation

    VIII. Projective intersection multiplicities

    IX. Projective tangents

    X. Rational parametrization

    XI. Projective equivalence

    XII. The affine charts on the projective plane

    XIII. Peeling-off theorems

    XIV. Elliptic Curves

For a more detailed syllabus, send an email request to ddapr@math.upd.edu.ph.