

Department: Mathematics and Computer Sciences
Division: Pure Mathematics
Level and Major: Graduate

Course Title: Commutative Algebra 2

Number of Credits: 3

Prerequisite:

Lecturer:

Course Description:

Course Goals and Objectives:

Course Topics:

- Affine spaces, convex sets and their properties
- Polytopes, polyhedra and cones with their examples
- Classification theorems for polytopes, polyhedra and cones
- Farkas Lemma and its applications
- Face polytopes, dual polytope, simplicial polytopes and simple polytopes
- Polyhedron complexes and simplicial complexes and their properties
- Some ideals and algebras associated to the above geometrical and combinatorial objects

Reading Resources:

Evaluation: