**Department:** Mathematics and Computer Sciences

**Division:** Pure Mathematics **Level and Major:** Graduate

Course Title: Special Topics

**Number of Credits:** 3

Prerequisite: Lecturer:

**Course Description:** 

## **Course Goals and Objectives:**

## **Course Topics:**

- Constractivity in mathematics
- Algorithmic algebra
- Grobner basis for binomial ideals
- Artin and Noetherian rings
- The radical of a binomial ideal
- Binomial algebraic sets
- Some binomial ideal quotients
- Primary decomposition into binomial ideals
- Cellular binomial ideals
- Cellular decomposition
- Binomial Edge ideals

## **Reading Resources:**

**Evaluation:**