

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

**Course Title:** Data Mining and Applications

**Number of Credits:** 3

**Prerequisite:**

**Lecturer:**

**Course Description:**

**Course Goals and Objectives:**

**Course Topics:**

- Introduction to Data Mining
- Data preprocessing
- Features engineering
- Data cube and on-line processing
- Frequent patterns Mining
- Advanced methods in Frequent Patterns Mining
- Classification
- Advanced methods in classification
- Clustering
- Advanced methods in clustering
- Outlier detection and anomalies
- Regression and time series

**Reading Resources:**

**Evaluation:**