

Department: Mathematics and Computer Sciences

Division: Statistics

Level and Major: Graduate

Course Title: Advanced Data Mining

Number of Credits: 4

Prerequisite: Mathematical Statistics 2

Lecturer:

Course Description:

Acquaintance with data mining methods for classification and clustering of data and providing the best structure of data by reducing the errors

Course Topics:

- 1- Description of conception, famous techniques and processes in data mining
- 2- Application of data mining in Statistics and Machin learning
- 3- Famous methods in classification like decision tree and dimension reduction methods like principal components and factor analysis
- 4- Clustering and hierarchical methods, model based and non parametric clustering methods. Using R and Python software

The Course aims to: Acquaintance with data mining methods for classification and clustering of data and providing the best structure of data by reducing the errors

Reading Resources:

- 1- Introduction to Dara Mining, 2nd Edition, 2016, written by: Tan,Steinbach and Kumar. addison Wesley
- 2- Mining Concepts and Techniques,3rd Edition, Written by Han,Kamberand Pei. Morgan Kaufmann

Evaluation: