

# CSPB 4502 - Data Mining

## Course Details

*\*Note: This course description is only applicable for the Computer Science Post-Baccalaureate program. Additionally, students must **always** refer to course syllabus for the most up to date information.*

- **Credits:** 3.0
- **Prerequisites:** CSPB or CSCI 2270 Computer Science 2: Data Structures **or** CSPB or CSCI 2275 Programming and Data Structures
- **Minimum Passing Grade:** C-
- **Textbook:** Jiawei Han, Micheline Kamber, Jian Pei “Data Mining: Concepts and Techniques”, 3rd Edition, Morgan Kaufmann, 2011

## Brief Description of Course Content

Introduces basic data mining concepts and techniques for discovering interesting patterns hidden in large-scale data sets, focusing on issues relating to effectiveness and efficiency. Topics covered include data preprocessing, data warehouse, association, classification, clustering, and mining specific data types such as time-series, social networks, multimedia, and Web data.

## Specific Goals for the Course

[Specific Outcomes of Instruction](#)

- Apply the concepts and techniques of Data mining on data sets
- Preprocess and clean data for use in data mining
- Discover interesting patterns from large amounts of data

#### [Brief List of Topics to be Covered](#)

- Data preprocessing
- Data warehouse
- Association
- Classification
- Clustering
- Mining specific data types such as time-series, social networks, multimedia, and Web data

#### [Mathematical Concepts Used in Course](#)

Statistics

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