# 資料探勘 Data Mining 資訊程系碩士班 課號 7413

Instructor: 洪士程 副教授

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Room:理工大樓E726

Tel: 7801

### Course Time & Office Hours

- **Course Time**
- Monday 5,6,7 (13:30 16:20)
- Classroom: E-518
- Office Hours
- Wednesday 9:00-12:00

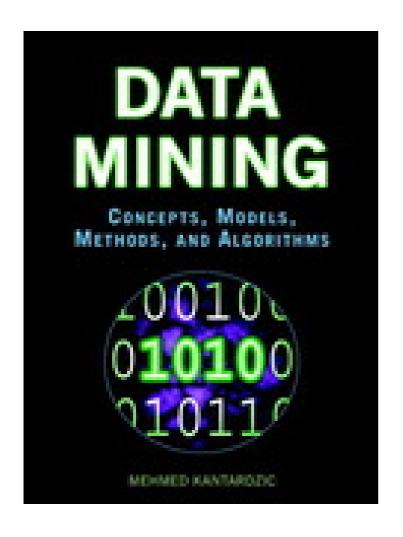
## Credits

- Required or Elective Elective (選修)
- 【Credits 3 Credits (三學分)

## Goal

- Understand the underlying algorithms and methods of data mining.
- Develop data mining programs and applications using available data mining tools and general-purpose languages.
- Understand visualization and navigation of data mining results.
- Learn basic programming in Matlab and use toolboxes of Matlab to perform feature selections, rule generations, classifications, or predictions.

#### Text Book

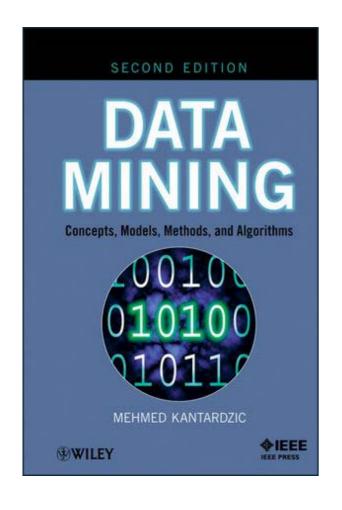


Kantardzic, M.,

Data Mining—Concepts,
Models, Methods, and
Algorithms, 1<sup>st</sup> Edition,
2003, Wiley-Interscience,
NJ.

http://ieeeexplore.com/xpl/bka bstractplus.jsp?reload=true &bkn=5265979

#### Reference Books

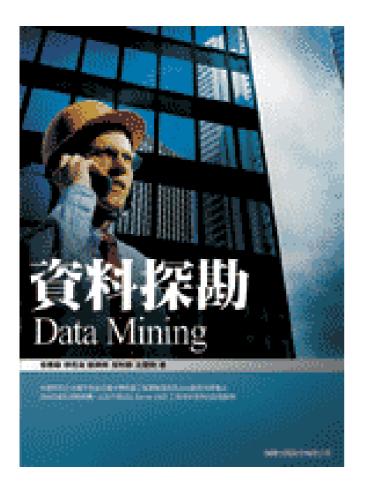


Kantardzic, M.,

Data Mining—Concepts,
Models, Methods, and
Algorithms, 2<sup>nd</sup> Edition,
2011, Wiley-Interscience, NJ.

http://akademik.maltepe.edu.tr/~kadirerdem/772s\_Data.Mining.Concepts.and.Techniques.2nd.Ed.pdf

#### Reference Books



資料探勘 (Data Mining)

作者: 曾憲雄、蔡秀滿、蘇

東興、曾秋蓉、王慶堯

出版商:旗標

2005年

## Schedule of Progress (1/2)

- Introduction to course (week 1)
- Chap 1 Data Mining Concepts (week 1)
- Chap 2 Preparing the Data (week 2)
- Chap 3 Data Reduction (week 3)
- Chap 4 Learning from Data (week 4)
- Chap 5 Statistical Methods (weeks 5,6)

## Schedule of Progress (2/2)

- Chap 6 Cluster Analysis (week 7,8)
- Midterm exam (week 9)
- Chap 7 Decision trees and Decision Rules
- (weeks 10,11,12)
- Chap 8 Association Rules (weeks 13,14)
- Case study and oral presentation (weeks 15,16,17)
- Final project evaluation (week 18)

#### Resources

- Text Book
- Slides

http://lms.ctl.cyut.edu.tw/

LMS-數位學習系統

### Evaluation

- Homework (30%)
- Participation (10%)
- Midterm exam (30%)
- Final project and Oral presentation (30%)