

CS525 DATA MINING SYLLABUS

**YÜCEL SAYGIN
SABANCI UNIVERSITY**

Contact Info

- ysaygin@sabanciuniv.edu
- <http://people.sabanciuniv.edu/~ysaygin>

Course Info

- **Reference Book:** Data Mining Concepts and Techniques
- **Author:** Jiawei Han and Micheline Kamber
- **Publisher:** Morgan Kaufmann

Course Info

- **Grading:**
 - Midterm : 40%
 - Survey Paper : 20%
 - Project : 40%

Topics that will be covered

- Different Data Mining Techniques
 - ♦ Association Rules
 - ♦ Classification
 - ♦ Clustering
- Data Mining and Privacy Issues
- Applications of Data Mining

A Rough Schedule

- March, April:
 - ♦ Lectures on various data mining techniques
- Remaining weeks: Project presentations and discussions about research issues

What I will do

- Give the basics on data mining
 - ♦ broad data mining concepts
 - ♦ research issues
- Project supervision
- Give directions and advise on the projects I proposed (will be provided in the next slides)
- Coordination of the project presentations

What I expect you to do

- ♦ I expect you to do things wrt your background and expertise.
- ♦ Students with CS background will do projects involving implementation and/or research

What I expect you to do

- ◆ Understand the basic data mining concepts
- ◆ Choose a specific area and two related papers on the same topic for presentation in class
- ◆ Attendance is required for paper presentations and you will lose 2% of your overall for each presentation you missed.
- ◆ Write a term paper on the two papers presented.
- ◆ Do a project and a final report describing what you learned or achieved in the scope of the project.

Projects

- Text Mining
- Graph Mining (Social Networks)
- Web mining
- Bioinformatics
- Privacy preserving data mining
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Some references

- Choose the latest papers (2019-2022)
- Here are the main DM Conferences
 - ♦ ACM KDD Conference
 - ♦ ECMLPKDD Conference
 - ♦ IEEE ICDM Conference
- Other related conferences
 - ♦ WWW Conference (The WEB Conf)
 - ♦ ACM SIGIR
 - ♦ CIKM