# CENG 514 Data Mining

## Spring 2015-2016

| Instructor          | Pınar KARAGÖZ  
|                    | Office: A404  
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| Lecture Hours      | Monday 09.00 – 12.00  
|                    | Room: BMB2 |
| References         | • Data Mining: Concepts and Techniques, Jiawei Han and Micheline Kamber, Morgan Kaufmann Publishers, ISBN 1558604898  
|                    | • Data Mining Introductory and Advanced Topics M. Dunham, Prentice Hall  
|                    | • Data Mining Practical Machine Learning Tools and Techniques Witten & Frank, Morgan Kaufmann  
|                    | • Introduction to Data Mining, PangNing Tan, Michael Steinbach, Vipin Kumar, 2006, 0321321367 |
| Course Description | This course introduces data mining and data warehousing concepts. Data warehousing, OLAP technology, data preparation, association rule mining, classification and prediction, clustering, mining complex types of data, web mining, multi-relational data mining are the basic concepts covered in this course. |
| Outline            | • Introduction to data mining and data warehousing  
|                    | • Data warehousing and OLAP technology  
|                    | • Data preprocessing  
|                    | • Association rule mining  
|                    | • Classification and prediction  
|                    | • Clustering  
|                    | • A potpourri of advanced topics |
| Grading            | Midterm % 35  
|                    | Assignments % 15  
|                    | Term Project % 25  
<p>|                    | Final Exam % 25 |</p>
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<td>Week 2</td>
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<td>Data Preprocessing, Data Warehousing, OLAP</td>
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