



**AYDIN ADNAN MENDERES UNIVERSITY
GRADUATE SCHOOL OF SOCIAL SCIENCES
MANAGEMENT INFORMATION SYSTEMS
MANAGEMENT INFORMATION SYSTEMS
MANAGEMENT INFORMATION SYSTEMS MASTER
COURSE INFORMATION FORM**

Course Title	Data Mining Applications								
Course Code	MIS527	Course Level			Second Cycle (Master's Degree)				
ECTS Credit	7	Workload	180 (Hours)	Theory	3	Practice	0	Laboratory	0
Objectives of the Course	To introduce our students to various data mining techniques and to inform them about the applications of real life problems.								
Course Content	Introduction to Data Mining, Data Mining Definitions, Data Mining Techniques, Data Mining Operations and Algorithms, Data Mining Applications, Data Mining Problems, Text Mining, Web Mining, Sample Applications.								
Work Placement	N/A								
Planned Learning Activities and Teaching Methods	Explanation (Presentation), Demonstration, Discussion, Case Study, Project Based Study, Individual Study, Problem Solving								
Name of Lecturer(s)									

Assessment Methods and Criteria

Method	Quantity	Percentage (%)
Midterm Examination	1	40
Final Examination	1	60

Recommended or Required Reading

1	Silahtaroglu, G., Veri Madenciligi, Papatya Yayınevi, 2008
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Week	Weekly Detailed Course Contents	
1	Theoretical	General definitions
2	Theoretical	Data Mining Application Areas and Examples
3	Theoretical	Data Warehouses and OLAP
4	Theoretical	Data Mining Models
5	Theoretical	Classification-Decision Trees
6	Theoretical	Classification-Statistical Algorithms
7	Theoretical	Classification-based algorithms
8	Intermediate Exam	Midterm
9	Theoretical	Classification-Artificial Neural Networks
10	Theoretical	Association Rules and Relationship Analysis
11	Theoretical	Clustering-Hierarchical Methods
12	Theoretical	Partitioning Methods
13	Theoretical	Density Based Algorithms Grid Based Algorithms
14	Theoretical	Web mining
15	Final Exam	Final

Workload Calculation

Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	16	3	3	96
Project	2	0	10	20
Individual Work	16	0	3	48
Midterm Examination	1	5	5	10



Final Examination	1	1	5	6
Total Workload (Hours)				180
[Total Workload (Hours) / 25*] = ECTS				7
*25 hour workload is accepted as 1 ECTS				

Learning Outcomes

1	Ability to reach the knowledge expansion and depth by doing scientific research in the field of engineering, knowledge evaluation, interpretation and application skills
2	Ability to complete and apply knowledge using scientific methods using limited or incomplete data; the ability to integrate knowledge of different disciplines
3	Developing methods to solve and solve engineering problems and applying innovative methods in solutions
4	Ability to develop new and original ideas and methods; the ability to develop innovative solutions in system, component or process design
5	Comprehensive information on modern techniques and methods applied in engineering and their boundaries
6	Ability to design and apply analytical, modeling and experimental based research; the ability to analyze and interpret complex situations in this process

Programme Outcomes (*Management Information Systems Master*)

1	Be aware of the different types of information technologies and systems using in business, have enough knowledge to design a suitable system
2	Analyse the needs for an information systems and have control over the processes at the analysis, design and implementation stages of the database that belongs to the system
3	Convey information about current trends and their own studies both verbally and visually ways.
4	Be able to follow current developments in modern business techniques and technologies, especially information technologies
5	Understand the interaction between his department and other relational departments, if necessary make a team, take responsibility and do the works with team.
6	Know the information technologies and systems using in different types of business, if necessary take the system responsibility.
7	Be aware of the social transformation especially in their own field and social, legal and moral responsibilities belongs to other work field.
8	Develop their knowledge to the level of expertise which they learn them in license level.
9	Carry out a work which requires an expertness in their field.
10	Construct and perform an academic work.

Contribution of Learning Outcomes to Programme Outcomes 1:Very Low, 2:Low, 3:Medium, 4:High, 5:Very High

	L1	L2	L3	L4	L5	L6
P1	4	4	4	4	5	4
P2		5				5
P3	4	5	4	4	5	
P4	4		4	4	5	5
P5	4		4	4	5	5
P6	4	5	5	4	4	5
P7	4	4	5		4	5
P8	4	4	5	4	5	5
P9	4	4	4	4	5	4
P10	4	4	3	4	4	4

