

# Меѓународен Универзитет Визион - International Vision University Universiteti Ndërkombëtar Vizion - Uluslararası Vizyon Üniversitesi

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## **SYLLABUS**

COURSE NAME	COURSE CODE	SEMESTER	COURSE LOAD	ECTS
FUNDAMENTALS OF DATA MINING AND WAREHOUSES	4043	8	180	6

Prerequisite(s)	None
Course Language	Turkish
Course Type	Elective
Course Level	First Cycle
Course Lecturer	
Course Assistants	
Classroom	
Extra Curricular	Meeting:
Office Hours and	Consultancy:
Location	
Course Objectives	Data mining is the process of finding useful patterns in data. The objective of data mining is to use discovered patterns to help explain behavior or to predict future outcomes.
<b>Course Learning</b>	After finishing this course the students will have the basic knowledge and application
Outcomes	ability about the data mining methods.
<b>Course Contents</b>	The aim of the course is give information about Data Mining Concepts, Preparing the Data, Statistical Classification Method (Naïve Bayes), Clustering Methods(K-Means,
	Hierarchical), Decision Trees and Decision Rules, Association Rules.

# WEEKLY SUBJECTS AND RELATED PREPARATION STUDIES

Week	Subjects	Related Preparation
1	Introduction to Data Mining	Related Chapters of Course Sources
2	Data Mining Concepts	Related Chapters of Course Sources
3	Preparing the Data	Related Chapters of Course Sources
4	Data Reduction	Related Chapters of Course Sources
5	Statistical Classification Method (Naïve Bayes)	Related Chapters of Course Sources
6	Clustering Methods(K-Means)	Related Chapters of Course Sources
7	Mid-term Exam	Related Chapters of Course Sources
8	Clustering Methods (Hierarchical)	Related Chapters of Course Sources
9	Decision Trees and Decision Rules	Related Chapters of Course Sources
10	Association Rules	Related Chapters of Course Sources
11	Artificial Neural Networks	Related Chapters of Course Sources
12	Project Presentation	Related Chapters of Course Sources
13	Project Presentation	Related Chapters of Course Sources
14	Project Presentation	Related Chapters of Course Sources
15	Final Exam	Related Chapters of Course Sources

#### ECTS / WORKLOAD TABLE

Presentation / Seminar			
Hours for off-the-classroom study (Pre-study, practice)	14	3	42
Midterm Exam	1	12	12
Final examination	1	14	14
Total Work Load			
ECTS	6		

#### GENERAL PRINCIPLE RELATED WITH COURSE

Dear students,

In order to be included, learn and achieve full success that you deserve in the courses you need to come well prepared by reading the basic and secondary textbooks. We are expecting from you carefully to obey to the course hours, not to interrupt the lessons unless is very indispensable, to be an active participant on the courses, easily to communicate with the other professor and classmates, and to be interactive by participating to the class discussions. In case of unethical behavior both in courses or on exams, will be acting in framework of the relevant regulations. The attendance of the students will be checked in the beginning, in the middle or at the end of the lessons. Throughout the semester the students who attend to all lectures will be given 15 activity-attendance points in addition to their exam grades.

#### **SOURCES**

	COMPULSORY LITERATURE			
No	Name of the book	Author's Name, Publishing House, Publication Year		
1	Kavram ve Algoritmalarıyla Temel Veri Madenciliği	Doç. Dr. Gökhan Silahtaroğlu, Papatya Yayıncılık Eğitim, 2013		
2	Data Mining	J. Han – M. Kamber, Morgan-Kaufman, Academic Press, 2001		
3				

	ADDITIONAL LITERATURE			
No	Name of the book	Author's Name, Publishing House, Publication Year		
1	Veri Madenciliği Kavram ve Teknikler	Yrd. Doç. Dr. Aysan Şentürk, Ekin Kitabevi Yayınları, 2006		
2	Data Mining – Concepts, Models, Methods and Algorithms	Mehmed Kantardzic		
3				

#### **EVALUATION SYSTEM**

Underlying the Assessment Studies	NUMBER	PERCENTAGE OF GRADE
Attendance/Participation	15	%10
Project / Event	1	%20
Mid-Term Exam	1	%35
Final Exam	1	%35
TOTAL	17	%100

## ETHICAL CODE OF THE UNIVERSITY

In case of the students are cheating or attempt to cheat on exams, and in the case of not to reference the sources used in seminar studies, assignments, projects and presentations, in accordance to the legislations of the Ministry of Education and Science of Republic of Macedonia and International Vision University, will be applied the relevant disciplinary rules. International Vision University students are expected never to attempt to this kind of behavior.