



**UNIVERSITY OF PRIZREN
FACULTY OF COMPUTER SCIENCE**

PROGRAM:

Curriculum - – SYLLABUS							
<i>Level of studies</i>	Master	<i>Program</i>		<i>Academic year</i>	2017/2018		
SUBJECT	Data Mining						
<i>Year</i>	1	<i>Status Of the subject</i>	Obligatory	<i>Code</i>	M2O3	<i>ECTS credits</i>	6
<i>Semester</i>	2						
<i>Teaching weeks</i>	15		<i>Hours teaching</i>	60	<i>Lectures</i>	<i>Exercises</i>	
					2	2	
<i>Teaching Methodology</i>	Lectures, exercises, seminar papers, consultations, tests.						
<i>Consultation</i>	One hour / week						
<i>The teacher</i>	Prof.Ass. Ercan Canhasi		<i>E-mail:</i>	ercan.canhasi@uni-prizreni.com			
			<i>Tel.:</i>				
<i>Assistant</i>	TBD		<i>E-mail:</i>				
			<i>Tel.:</i>				

Study goal and table of content	Benefits of student
Data Mining is the study of algorithms and computational paradigms that allow computers to find patterns on the basis of data, to perform predictions, and generally improve the performance of the store through the interaction with the data. Exchange do cover all these issues and make the entire process illustrated with examples. Special emphasis is given to make the learning methods of the car as they provide real tools of discovery of new knowledge from the old data.	<ul style="list-style-type: none"> • To get familiar with basic concepts and techniques of data mining. • To develop skills to use the latest software for data mining with the aim of solving practical problems. • To gaining experience of making and research and independent studies.

Methodology for the implementation of educational topics:		
This is a combined course with lectures, discussions, conversations, practical work, exercises, workshops, seminars, task in which subjects are presented by professor of course and assistant in the laboratory.		
Conditions for realization of educational topics:		
Adequate literature, table, computer, projector and other necessary IT tools for learning and exercises		
Ways of assessing of the student (in %) :	Evaluation in%	Final grade
A seminar paper	10.00 %	51-60% - grade 6 61-70 7 71-80 8 81-90 9 91-100 10
Colloquia	30.00 %	
Final test	60.00 %	
Final Exam included three evaluation criteria;	10 + 30 + 60	
Total	100.00 %	
Obligations of student:		
Lectures	Exercises	

The student must be regular lectures and exercises, to use all possibilities for learning the knowledge required to use literature and wider, to be active and keep regulations on higher education in ethics and courtesy for cooperation.	The student must be active and reflective exercises and knowledge readiness initiatives, ideas and demonstration of knowledge gained in lectures.
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Activities	Hour/ weeks	Days/Weeks	
Lectures	2	15	30
Laboratory exercises	1	15	15
Contacts with teachers / consultations	1	15	15
Practical work	1	2	2
Projects, presentations, etc.	1	2	2
Own study time	5	10	50
Preparation for final exam	3	5	15
Time spent in the assessment (tests, final exam, etc.)	1	15	15
Notice: 1 ECTS credits= 25 hour commitment, e.g. if the subject has 6 ECTS credits student must have 150 hours during the semester commitment.		Total load:	150

Week	Lectures	Hour	Exercises	
	Topic		Topic	
1	Introduction to DM, taxonomy and common DM task	2	Introduction to DM, taxonomy and common DM task	2
2-3	Introduction to DM development environment (scripting, visual programming, R environment)	4	Introduction to DM development environment (scripting, visual programming, R environment)	4
4-5	From Data to Information in DM	4	From Data to Information in DM	4
.6-7	Exploring the data, simple statistics and Visualization	4	Exploring the data, simple statistics and Visualization	4
8	Midterm Exam	2	Midterm Exam	2
9-10	Association Analysis A.K.A Apriori Algortihm	4	Association Analysis A.K.A Apriori Algortihm	4
11-12	Classification	4	Classification	4
13-14	Clustering	4	Clustering	4
15	Second Midterm	2	Second Midterm	2

LITERATURE:

1. Introduction to Data Mining by Tan, Steinbach, Kumar
2. Ian H. Witten and Eibe Frank, Data Mining: Practical Machine Learning Tools and Techniques (Second Edition), Morgan Kaufmann, 2005, ISBN: 0-12-088407-0.

NOTICE:

- In general presentations of lectures will be made through Power Point system, table, use of materials and computer software and the Internet.
- Also, the professor will be provided additional materials (papers, publications, national bulletins and sound research findings and final).
- In the absence of the possibility that practical work is organized every week, in cooperation with the management of the University, this activity will be organized on certain days, organizations, companies, farms, processing manufacturing unit.
- During each session, will be organized conversations with students.

Notice for the student:

- The students are required to be regular in the lectures and exercises.
- The contribution of the students in the form of conversation with the students will be evaluated.
- Arrival time at lectures and exercises is mandatory.