UNIVERSITY OF MITROVICA "ISA BOLETINI"

Course Curriculum Model (Syllabus)		
Faculty:	Faculty of Mechanical and Computer Engineering	
Department:	Computer Science and Engineering	
Level:	VI	
Code of the course:	214-CSE	
Course:	Business Intelligence	
Course Status:	Elective	(mandatory)
Semester:	IV	(summer)
Number of hours per week:	2+2	
ECTS:	5	
Time / location:		
Year of studies:	II	
Lecturer:	Ass. Halil Sadiku, PhD Cand.	
Assistant:		
Contact details:	Lecturer	Assistant
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Content	Data has become an important strategic asset to gain and maintain competitive advantage for many organizations. This course provides the foundational knowledge, skills and tools to support data driven decision making. Organizations (whether they are businesses, non-profits, or governmental) generate, collect, and store vast amounts of data. Decision makers increasingly rely on the systematic analysis and interpretation of data to improve the quality of their decisions.
Purpose	We will examine aspects of data and analytics to gain understanding of the principles and applications of the ideas that can lead improved decision making. We will examine real-world examples and develop data oriented thinking and skills that are of interest to business professionals.
Accessibility	Understand the essentials of data analytics and the corresponding terminologies. Be familiar with the steps involved in the analytics process. Be able to interact competently on the topic of data analytics. Have had some hands-on experience in using data analytics techniques. To better understanding of data visualizing by using tools such as Power BI.

Program	weeks	Lecture
	First week:	Intro to Business Intelligence
	Second week:	Data Warehousing
	***Third week*:**	Business Performance Management
	Fourth week:	Text, & Web Mining
	Fifth week:	BI Emerging Trends
	***Sixth week*:**	Introduction to Data Mining
	Seventh week:	Overview of the Data Mining Process
	Eighth week:	Data Exploration
	***Ninth week*:**	Evaluating Classification and Predicative Performance
	***Tenth week*:**	Classification Methods: The Naïve Rule, Bayes Rule & *k*-Nearest Neighbors
	***Eleventh week*:**	Data visualization, pivot table, pivot chart, drill through
	Twelfth week:	Clustering , segmentation and hierarchical clustering
	***Thirteenth week*:**	Classification (Naïve Bayes, Regression, Decision Tree)
	Fourteenth week:	Classification II (Logistic Regression)
	Fifteenth week :	User-generated content analysis
Literature	**Principal literature:** Business Intelligence, Analytics, and Data Science: A Managerial Perspective **Recommended Literature:** ● IBM Cognos Business Intelligence 10, by Dan Volitich and Gerard Ruppert ● Predictive analytics : the power to predict who will click, buy, lie, or die, by Eric Siegel, Wiley, ISBN: 9781119145677	
Teaching methodology	Lecture, Tutorials, Assignments, Lab Experiments, Lab Report and presentation.	

Contribution to student workload (which should correspond to student learning outcomes - 1 ECTS credit = 25 hours)

Activity	Hours	Days/weeks	Total
Lectures	2	15	30
Exercise sessions (with TA)	2	15	30
Practical work	0	0	0
Office hours	1	15	15
Fieldwork	0	0	0
Midterms, seminars	2	2	4
Homework	2	2	4
Self-study	1	20	20
Final exam preparation	2	9	18
Time spent in exams	2	1	2
Projects, presentations, etc	2	1	2
Total			**125**

Evaluation

Teaching methodology:
(according to the Statute and Regulation for studies of UMIB)

Tests / Colloquia	
Practical test during exercises	40%
Seminary work	-
Interpretation and presentation of artistic creativity and other works	-
Assignments and other courses during the semester	
Professional activities	-
Others (specify) -	-
Final exam	60%

Mitrovica

Course provider:

Ass. Halil Sadiku, PhD Cand.

(Signature)