COURSE DESCRIPTIONS

Faculty	College of business				
Department	**Management Information system**			**NQF level**	7
Course Title	**Business Intelligence**	**Code**	306452	**Prerequisite**	
Credit Hours	3	**Theory**	√	**Practical**	
Course Leader	Dr hassan rawash	**email**	Hassan_raw@jadara.edu.jo		
Lecturers		**emails**			
Lecture time	11:30 - 13:00	**Classroom**	C 107		
Semester	1st semester	**Production**	2021	**Updated**	2021
Awards				**Attendance**	fulltime

Short Description

Business Intelligence Systems have become increasingly important in today's competitive environment. According to recent studies, companies that use BI and manage their data as a strategic resource and invest in its quality are already pulling ahead in terms of reputation and profitability. This course will examine Business Intelligence (BI) technologies that help a company to improve its business. It discusses BI topics from both managerial and technical perspectives. Managerial perspectives discuss how BI affects the organization's decision-making process, while technical perspectives discuss the foundation for an intelligent system (The course will discuss key issues starting from BI as a process and architecture, Warehousing, Online Analytical Processing, Data Mining, different data mining algorithms such as decision tress, KNN and K-means, Association rules and Neural Networks). Practical exercises and projects will be assigned to enhance students' experience in business intelligent

Course Objectives

This course is intended to give BIT students an overview of the business Intelligence topics. At the course completion, students will understand the fundamentals of the Business Intelligence and they .will be able to evaluate BI techniques to be used for certain applications

Learning Outcomes

A. Knowledge - Theoretical Understanding

a1: provide an understanding of BI concepts and techniques
a2: understand data warehousing and data visualization concepts

B. Knowledge - Practical Application

B1. Understand the concepts of data mining.
B2: introduce and deal with data mining algorithms

C. Skills - Generic Problem Solving and Analytical Skills

c1. Use techniques such as decision trees, neural network, k-mean clustering, K nearest neighbor and association rules.
D. Skills - Communication, ICT, and Numeracy
E. Competence: Autonomy, Responsibility, and Context
Teaching and Learning Methods
Classroom teaching, group work and discussion
Assessment Methods
Mid-term exams, Quiz, Assignment, case study presentations ,Final exam and Presentation

Course Contents					
Week	**Hours**	**CLOs**	**Topics**	**Teaching & Learning Methods**	**Assessment Methods**
1.	3	a1	**Introduction to Business Intelligence (BI)**	Lectures, Assignment, Class participation Group Discussions	Mid term Exam, final
2.	3	A2	**Data Warehouse**	Lectures, Assignment, Class participation Group Discussions	Mid term Exam, final Assignments
3.	3	A2	**Business Analytics**	Lectures, Assignment, Class participation Group Discussions	Mid term Exam, final ,
4.	3	A2	**Data Preparation and Visualization**	Lectures, Assignment, Class participation Group Discussions	Mid term Exam, final quizzes
5.	3	b1+b2	**Data Mining**	Lectures, ,Assignment Class participation Group Discussions	Mid term Exam, final
6.	3	a1	**Decision Trees**	Lectures, Assignment, Class participation Group Discussions	Mid term Exam, final
7.	3	a2	**Decision Trees**	Lectures, Assignment, Class participation Group Discussions	Mid term Exam, final Assignments

8.			**Mid-Term Exam**		
9.	3	C1	**K-mean & K-nearest neighbor**	Lectures, Assignment, Class participation Group Discussions	Mid term Exam, final Assignments
10.	3	C1	**Association Rules**	Lectures, Assignment, Class participation Group Discussions	Mid term Exam, final
11.	3	B2	**Practical Power BI**		Mid term Exam, final
12.	3	C1	**Artificial Neural Networks**	Lectures, Assignment, Class participation Group Discussions	Mid term Exam, final Quizzes,
13.	3	C1	Artificial Neural Networks	Lectures, Assignment, Class participation Group Discussions	Mid term Exam, final
14.	3	C1	Artificial Neural Networks	Presentations and Group Discussions	Discussions
15.	2		**Final exam**		

Infrastructure	
Textbook	Business Intelligence: A Managerial Approach (2014) Turban, Sharda, Delen, King, Publisher: Prentice Hall, Edition: 2nd, ISBN: 13-978-0-136-10066-9
References	Turban, Efraim, Ramesh Sharda, and Dursun Delen. "Decision support and business intelligence systems (required)." Google Scholar (2010)
Required reading	- Chen, Hsinchun, Roger HL Chiang, and Veda C. Storey. "Business intelligence and analytics: From big data to big impact." MIS quarterly 36.4 (2012). Turban, Efraim, Ramesh Sharda, and Dursun Delen. - Business intelligence and analytics: systems for decision .support. Pearson Higher Ed, 2014
Electronic materials	**ealearning@jadara.edu.jo**
Other	

Course Assessment Plan							
Assessment Method		**Grade**	**CLOs**				
			a1	**a2**	**b1**	**B2**	**C1**
First (Midterm)		30	20	5	5		
Second (if applicable)							
Final Exam		50	10	10	10	10	10
Coursework		20					
Coursework assessment methods	Assignments	5	1	1	1	1	1
	Case study	5	1	1	1	1	1
	Discussion and interaction	5	1	1	1	1	1
	Group work activities						
	Lab tests and assignments						
	Presentations						
	Quizzes	5	1	1	1	1	1
Total		20	4	4	4	4	4

Plagiarism
Plagiarism is claiming that someone else's work is your own. The department has a strict policy regarding plagiarism and, if plagiarism is indeed discovered, this policy will be applied. Note that punishments apply also to anyone assisting another to commit plagiarism (for example by knowingly allowing someone to copy your code). Plagiarism is different from group work in which a number of individuals share ideas on how to carry out the coursework. You are strongly encouraged to work in small groups, and you will certainly not be penalized for doing so. This means that you may work together on the program. What is important is that you have a full understanding of all aspects of the completed program. In order to allow proper assessment that this is indeed the case, you must adhere strictly to the course work requirements as outlined above and detailed in the coursework problem description. These requirements are in place to encourage individual understanding, facilitate individual assessment, and deter plagiarism.