



KINGDOM OF SAUDI ARABIA IMAM MOHAMMAD IBN SAUD ISLAMIC UNIVERSITY COLLEGE OF COMPUTER AND INFORMATION SCIENCES INFORMATION SYSTEMS DEPARTMENT BACHELOR IN INFORMATION SYSTEMS المملكة العربية السعودية جامعة الإمام محمد بن سعود الإسلامية كلية علوم الحاسب والمعلومات قسم نظم المعلومات بكالوريبوس نظم المعلومات

# SYLLABUS

# **IS 442: Business Intelligence**

PREREQUISITE

IS336 (Project Management)

CREDIT HOURS 3

Instructor: Dr. Saleha AlOtaibi Contact information and office hours

Office No: 2A-321

Office Hours: Tuesday, Wednesday from 9:10 to 10:00 a.m.

E-mail: sfosimi@imamu.edu.sa

### **COURSE DESCRIPTION**

This course provides an introduction to the concepts of business intelligence (BI) as components and functionality of information systems. It explores how business problems can be solved effectively by using operational data to create data warehouses, and then applying data mining tools and analytics to gain new insights into organizational operations. Detailed discussion of the analysis, design and implementation of systems for BI, including: the differences between types of reporting and analytics, enterprise data warehousing, data management systems, decision support systems, knowledge management systems, big data and data/text mining.

	Aligned SOs	
1	Knowledge and Understanding	
1.1	Understand the key concepts and current practices of business intelligence	1(I)
1.2	Outline decision support models, methods, and technologies	1(I)
2	Skills :	
2.1	Demonstrate skills related to the BI technology in data preparation and analysis.	<i>l(P)</i>
2.2	Apply business intelligence tools and algorithm to optimize and solve problems	l(P)
3	Values:	
3.1	Function effectively on teams to accomplish a common goal.	5(P)
3.2	Present a topic in a compelling manner.	$\mathcal{Z}(P)$





**TEACHING Strategies** 

Lectures Class Discussions Self-study

No	List of Topics	Contact Hours		
1	An overview of business intelligence, business analytics and decision support	4		
2	Business Analytics: descriptive, predictive and prescriptive	4		
3	Foundations and technologies for decision making	4		
4	Data warehousing fundamentals	4		
5	Business reporting and visual analytics	4		
6	Business performance measurement	4		
7	Text Analytics, text mining and sentiments analysis	4+1		
8	Web Analytics, web mining and social analytics	3+2		
9	Business Analytics: emerging trends and future impacts	2+3		
10	Presentations and discussions	3		
<b>Total</b> 36+6(SL)				

## **TEXT BOOK**

Business Intelligence and Analytics: Systems for Decision Support Authors: Sharda, Delen, Turban

#### REFERENCES

Course Assessment Methods						
No	Assessment Method	Due Week	%Total Assessment			
1	Quiz	4	10			
2	Assignment	6	10			
3	Midterm	8	20			
4	Project / Lab Exam	11	20			
5	Final Exam	13	40			