

Course Title	Business Analytics and Information Systems				
Course Code	DBA730				
Course Type	Compulsory				
Level	D.B.A. (3 rd Cycle)				
Year / Semester	1 st Year / 2 nd Semester				
Teacher's Name	TBA				
ECTS	10	Lectures / week	3 Hours / 14 weeks	Laboratories / week	None
Course Purpose and Objectives	<p>Business Analytics is not based on rote memorization of equations or facts, but focuses on honing your understanding of key concepts, your managerial judgment, and your ability to apply course concepts to real business problems. This course begins with basic descriptive statistics and progresses to regression analysis. You'll learn course concepts in the context of performing A/B testing on a website, using sampling to check warehouse inventory, predicting home video sales based on box office performance, and forecasting staffing needs. Throughout the course, you will receive clear guidance on how to implement analytical techniques in SPSS. No matter your job function or career aspirations, this course will demystify data analysis and equip you with concrete skills to apply in your work or further studies.</p> <p>Successful organizations must deal effectively with intense global competition, a heightened focus on the bottom line, an increasingly rapid pace of change, and a close scrutiny of their ethical practices. For an organization to thrive in today's business environment, managers and functional specialists in all areas - accounting, finance, marketing, production and operations management, and human resources - must perform their jobs effectively, efficiently, and ethically. Information technology provides the tools that enable all organizational personnel to solve increasingly complex problems and to capitalize on opportunities that contribute to the success of the organization.</p>				
Learning Outcomes	<p>Upon succesful completion of this course, students should be able to:</p> <ul style="list-style-type: none"> • Evaluate the usage and the application of business analytics to formulation and examination business problems and decision making. • Synthesize and evaluate the processes needed to develop, report, and analyze business data. 				

	<ul style="list-style-type: none"> • Explain and evaluate the terminology and concepts related to hardware, software, and networks. This includes: <ul style="list-style-type: none"> a. Describe basic information technology concepts b. Define various business information systems, including transaction processing systems, management information systems, decision support systems, group support systems, and enterprise resource planning systems c. Define and distinguish among the Internet, Intranets, and Extranets • Judge and recommend ethical issues related to using technology in business contexts • Experiment information technology as a tool to do essential business tasks. This includes: <ul style="list-style-type: none"> a. Create documents, presentations, and spreadsheets b. Use the web to find information and/or create web pages 		
Prerequisites	None	Co-requisites	None
Course Content	<ol style="list-style-type: none"> 1. Introduction to Analytics 2. Visualization/ Data Issues <ul style="list-style-type: none"> • Organization/sources of data • Importance of data quality • Dealing with missing or incomplete data • Data Classification 3. Data Mining <ul style="list-style-type: none"> • Introduction to Data Mining • Data Mining Process • Data mining tool • Market Basket Analysis • Regression Trees 4. Decision Modeling <ul style="list-style-type: none"> • Optimization • Decision Making under Uncertainty / Simulation 5. Demonstrate computer literacy by recalling terminology and concepts related to hardware, software, and networks 6. Critically communicate effectively with technical and non-technical colleagues 7. Use MIS to enhance decision making 8. Generate informational reports 9. Build and/or interpret models for planning 		

	10. Organize, summarize, and analyze data 11. Create meaningful and effective information 12. Critically analyse business Transaction Processing Systems and Enterprise Resource Planning Systems 13. Critically analyse various Business Information Systems and concepts in Information Technology 14. Critically analyse the Internet, Intranets, and Extranets 15. Critically analyse ethical issues in business related to technology.								
Teaching Methodology	Face to face								
Bibliography	Kenneth C. Laudon, Jane P. Laudon, Management Information Systems: Managing the Digital Firm (16th Edition). Pearson Ramesh Sharda, Dursun Delen. Business Intelligence, Analytics, and Data Science: A Managerial Perspective. (4th Edition) . Pearson Baltzan, P., <i>Business-driven information systems</i> . McGraw Hill Higher Education. Bocij, P., Greasley, A. and Hickie, S., <i>Business Information Systems: Technology, Development and Management</i> . Pearson education.								
Assessment	<table> <tr> <td>Examinations</td><td>60%</td></tr> <tr> <td>Assignments</td><td>30%</td></tr> <tr> <td>Class Participation and Attendance</td><td>10%</td></tr> <tr> <td></td><td>100%</td></tr> </table>	Examinations	60%	Assignments	30%	Class Participation and Attendance	10%		100%
Examinations	60%								
Assignments	30%								
Class Participation and Attendance	10%								
	100%								
Language	English								