


Sub.	Course Description – توصيف مقرر دراسي	الموضوع	 كلية المعرفة ALMAAREFA COLLEGE
Date		التاريخ	

Course Code & No	INFO461	461نظم	رقم المقرر ورمزه
Course Name	Decision Support Systems	الأنظمة المساندة لإتخاذ القرار	اسم المقرر
Credit Hours	3 (3 + 0 + 0)	(0 + 0 + 3) 3	عدد الساعات المعتمدة
Pre-requisite	INFO 361	361 نظم	المتطلب السابق

General Description	توصيف عام
<p>This course aims at introducing the students with: Models of decision making; introduction to the range of technological tools for decision making; a framework for development of decision support systems; data warehousing; data mining; knowledge-based systems to support decision making; roles of expert systems; and, support for group decision making.</p>	

Course Objectives	أهداف المقرر
<ul style="list-style-type: none"> • Define the conceptual foundation of the decision support system (DSS) and business intelligence (BI) methodology and relate them each other. • Recognize several types of decision support systems. • List the major tools of computerized decision support and major issues in implementing computerized decision support systems. • Define Simon's four phases of decision making: Intelligence, Design, Choice, and Implementation . • Describe data warehouse, 2-tier and 3-tier architectures, and web architecture • Recognize the basic concepts of Expert systems, AI, Knowledge management systems, Group support systems and Inference techniques. • Differentiate and contrast decision support systems. • Justify which type of decision support system to use depending on problem at hand. • Recognize decision support system tools and their deployment in decision making. • Develop the structure of DSS components: the data management subsystem, the model management subsystem, the user interface subsystem, and the knowledge-based management subsystem. • Illustrate responsibility in team work. • Illustrate responsibility for learning and 	

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continuing personal development. <ul style="list-style-type: none"> • Demonstrate adequate communication skills among team members. • Operate supporting tools in DSS. 	
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Course Outlines	مفردات المقرر
<ul style="list-style-type: none"> • Decision support framework. • The modeling process. • Decision-making models/ Static and dynamic models. • Influence diagrams. • Decision tables. • Decision trees. • Heuristic programming. • Management information systems. • Data warehousing. • Data mining /OLAP. • Group support systems. • Executive information support systems. • Knowledge management systems. • Artificial intelligence/ Knowledge-based systems. • Knowledge representation/ Inference techniques. 	

References	المراجع
<ul style="list-style-type: none"> • Turban, E., Aronson, J., and Liang, T., Decision Support Systems and Intelligent Systems, 10th edition, 2014, Prentice Hall. • Marakas, G., Decision Support Systems and Megaputer, 2nd edition, 2002, Prentice-Hall. • Marakas, G., Modern Data Warehousing, Mining, and Visualization: Core Concepts, 2003, Prentice Hall. • Lawrence, J. and Pasternack, B, Applied Management Science: A Computer Integrated Approach for Decision Making, 2nd edition, 2003, John Wiley. 	