Course Specifications

General Information

Course name	Management Information Systems
Course number	ITIS4306
Faculty	
Department	
Course type	Major Needs
Course level	4
Credit hours (theoretical)	3
Credit hours (practical)	0
Course Prerequisites	

Course Objectives

1 - Analyzing the role of information in public sector organizations
2 - The latest developments in information systems and how they are applied
3 - Analyzing the different types of information system, their capabilities, benefits and costs
4 - Demonstration of different ways in which information systems can be managed
5 - Techniques for developing new information systems
6 - Understand the necessity of having a decision support system
7 - Demonstrate the capabilities of Customer Relationship Management (CRM).
8 - Describe main elements of marketing information systems

Intended Learning Outcomes

Knowledge and Understanding	* a1. Define the basic concepts, objective of information system and system definition * a2. Interpreting and analyzing data qualitatively and/or quantitatively * a3. Explain the fundamental topics in computing, including software architectures and software tools * a4. Explain roles, components, and applications of information systems * a5. Explain some aspects of knowledge discovery, information storage and retrieval systems * a6. Describe basic knowledge and understanding of a core of analysis * a7. Explain the broad context within computing including issues such as quality, reliability and enterprise * a8. Discuss technologies for the design, development and management of multi-user database systems, theory and methods of systems analysis and design and of the implementation of database systems and information retrieval systems
Intellectual Skills	* b1. Define traditional and nontraditional information systems problems, set goals towards solving them, and. observe results * b2. Perform comparisons between (methods, techniques...etc). * b3. Identify attributes, components, relationships, patterns, main ideas, and errors * b4. Summarize the proposed solutions ad their results * b5. Restrict solution methodologies upon their results * b6. Establish criteria, and verify solutions * b7. Identify a range of solutions and critically evaluate and justify proposed design solutions * b8. Solve computer science problems with pressing commercial or industrial constraints * b9. Generate an innovative design to solve a problem containing a range of commercial and industrial constraints * b10. Perform problem analysis from written descriptions; derive requirements specifications from an understanding of problems (analysis, synthesis). * b11. Create and/or justify designs to satisfy given requirements (synthesis, evaluation, application).
Professional Skills	* c1. Apply the principles of effective information system management, information organization, and information-retrieval skills * c2. Design efficient computer based information systems * c3. Master the fundamental management concepts of computer based information systems * c4. Perform independent information acquisition and management, using the scientific literature and Web sources * c5. Specify, investigate, analyze, design and develop computer-based systems using appropriate tools and techniques * c6. Use appropriate programming languages, web-based systems and tools, design methodologies, and database systems * c7. Specify, investigate, analyze, design and develop computer-based systems using appropriate tools and techniques * c8. Apply tools and techniques for the design and development of applications
General Skill	* d1. Communicate effectively by oral, written and visual means * d2. Work effectively as an individual and as a member of a team * d3. Demonstrate efficient IT capabilities

General Skill	* d4. Lead and motivate individuals * d5. Manage tasks and resources * d6. Acquire entrepreneurial skills * d7. Effectively employ information-retrieval skills, (including the use of browsers, search engines, and on-line library catalogues).

Course Contents

1 - Fundamental concepts, objective of information system, system definition, subsystem definition, message passing in information system, message levels data, information, knowledge, needs, characteristics, sources, data processing (DP), electronic data processing (EDP)

2 - Management information system (MIS), economics of information systems, decision support system (DSS), office automation system (OAS), and executive information system (IS), expert system (ES).

3 - Computer based information system (CBIS), type of CBIS, relationships among CBISs, the evolutionary view, the hierarchical view, the contingency view, the importance of CBIS, the nature of information system in different organization.

4 - Management concepts in CBIS, data management, the organization of data, application oriented files, database approach, decision-making concepts and tools, decision support system (DSS), building a DSS, application of DSS, evaluation of information systems.

Teaching and Learning Methods

1 - Lectures

2 - Case Study

3 - Projects

4 - Exercises

Students Assessment

Assessment Method	TIME	MARKS
Mid-Term Exam I	6th week	20
Mid-Term Exam II	12th week	20
Class Work	During the 16 weeks	10
Final Exam	6th week	50

Books and References

Essential books	Kenneth C. Laudon, Jane P. Laudon, Management Information Systems: Managing the Digital Firm, Prentice Hall; 9 edition, 2005

Knowledge and Skills Matrix

Main Course Contents	Study Week	Knowledge and Understanding	Intellectual Skills	Professional Skills	General Skill
Fundamental concepts, objective of information system, system definition, subsystem definition, message passing in information system, message levels data	1	a1, a3, a4	b1, b10		d3
information, knowledge, needs, characteristics, sources, data processing (DP), electronic data processing (EDP)	2	a1, a3, a4	b1, b10		d3
Management information system (MIS), economics of information systems, decision support system (DSS), office automation system (OAS), and executive information system (IS), expert system (ES).	3-6	a2, a4-a8	b1, b10	c1, c2, c4, c8	d3
CBIS, type of CBIS, relationships among , the evolutionary view, the hierarchical view, the contingency view, the importance of CBIS, the nature of information system in different organization.	7-10	a4, a5	b2, b3, b8, b10, b11	c2, c5, c6	d3, d7
Management concepts in CBIS, data management, the organization of data, application oriented files, database approach, decision-making concepts and tools	11-13	a2, a4, a5, a7, a8	b2-b9	c3-c6	d1, d3, d4-d7
decision support system (DSS), building a DSS, application of DSS, evaluation of information systems.	14-15	a2, a4, a5, a7, a8	b2-b9	c3-c6	d1, d3, d4-d7