

Syrian Arab Republic	 الجامعة الافتراضية السورية SYRIAN VIRTUAL UNIVERSITY	الجمهورية العربية السورية
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Course Description: Management Information Systems

1- Basic Information

Course Name	Management Information Systems
Course ID	MIS.32
Contact Hours (Synchronized Sessions)	28
Contact Hours with the tutor outside the Synchronized Sessions	17
Contact Hours (Registered Sessions)	130
Exam	
Registered Sessions Work Load	
Synchronized Session Work Load	
Credit Hours	7
Course Level	7

2- Pre-Requisites

Course	ID
Data Analysis by Computer	DAC.23

3- Course General Objectives

This course provides an overview of management information systems domain in the business world. It also gives an organizational view of using information systems to create competitive organizations, manage global organizations, and provide customers with suitable products and services. The topics covered by this course include computer hardware, software, databases and communications systems, strategic use of information systems, development of information systems, and social, ethical and security aspects related to information systems.

The objective of this course is to introduce the student to each of the strategic role of management information systems in business organizations and their role in decision-making, in addition to clarifying the basic concepts of management information systems, computer components, the process of developing management information systems, studying business ethics and information security and the basic concepts of digital organizations and electronic commerce through the following:

1. Understand how organizations use information systems as a competitive advantage.
2. Clarify terms related to all aspects of information systems in organizations.
3. See the most important information systems applications in organizations and link them with their partners, suppliers and customers.

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4. Understand concepts related to computer hardware, software, databases and communications.
5. Learn about the process of developing information systems and aspects related to information security.
6. Be aware of the recent trends in information technology that will affect organizations in the future.
7. Prepare the students to be able to assume the future tasks and responsibilities related to management information systems and to give them a holistic view of how to obtain information and benefit from it in the different situations facing the organization.
8. Providing the student with the ability to analyze, research, innovate and transfer the acquired ideas from theory to application in order to find possible solutions to the problems he faces using management information systems.

4- Intended Learning Outcomes (ILO)

Code	Intended Learning Outcomes
I	Information systems in organizations
ILO1	Evaluate the role of information systems in today's competitive business environment.
ILO2	Explain relationships between concepts of information systems, organization, management and strategy.
ILO3	Define an information system from both a technical and business perspective and distinguish between computer literacy and information systems literacy.
ILO4	Assess the relationship between the digital firm, electronic commerce, electronic business and internet technology.
ILO5	Identify the major management challenges to building and using information systems in organizations.
ILO6	Identify managerial risks related to information systems development and utilizing.
III	Information technology infrastructure
ILO7	Identify the hardware components in computer system
ILO8	Describe the major types of software.
ILO9	Compare the principal types of databases.
ILO10	Describe the basic components of telecommunications systems and compare the various types of telecommunications networks.
ILO11	Describe how the internet works and identify its major capabilities.
ILO12	Analyzes challenges related to information technology infrastructure management and management solutions
II	Information systems applications
ILO13	Analyze the role played by the six major types of information systems in organizations and their relationship to each other.
ILO14	Evaluate the role of information systems in supporting various levels of business strategy.

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ILO15	Describe the types of information systems supporting the major functional areas of the business.
ILO16	Assess the relationship between organizations, information systems and business processes, including the processes for customer relationship management and supply chain management.
ILO17	Explain how enterprise systems and industrial networks increase the organization's efficiency.
ILO18	Evaluate the benefits and limitations of enterprise systems and industrial networks.
IV	Information systems development and security
ILO19	Identify the core activities in the information systems development process.
ILO20	Evaluate models for determining the business value of information systems.
ILO21	Identify appropriate strategies to manage the information system implementation process.
ILO22	Analyze the principal causes of information system failure.
ILO23	Evaluate information systems security problems and how to respond to security threats
ILO24	Define the three primary information security areas: (1) authentication and authorization, (2) prevention and resistance, and (3) detection and response.

5- Course Syllabus

(21 hours of total Recorded Sessions, 28 hours of total synchronized sessions)

- **RS:** Recorded Sessions; **SS:** Synchronized Sessions;

ILO	Course Syllabus	RS	SS	Type	Additional Notes
ILO1 ILO2 ILO3 ILO4 ILO5 ILO6	Part one: Fundamentals of Management Information Systems 1. Introduction to management information systems 2. Types of information systems 3. Information systems in organizations	4	4	<input type="checkbox"/> Exercises <input checked="" type="checkbox"/> Assignments <input checked="" type="checkbox"/> Seminars <input type="checkbox"/> Projects <input type="checkbox"/> Practices <input type="checkbox"/> Others	Additional readings as weekly homework to enhance the student understanding of information systems and their role in organizations. Discussion about these reading could be done during the session. The assignment, which is a practical case of an information systems of a particular company, through which the student is asked to apply the

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					concepts covered by the course on the case of the company and answer the questions mentioned in the case study.
ILO7 ILO8 ILO9 ILO10 ILO11 ILO12	Part Two: Management Information Systems Infrastructure 4. Computer hardware and software 5. Databases 6. Networks and communications	6	6	<input type="checkbox"/> Exercises <input checked="" type="checkbox"/> Assignments <input checked="" type="checkbox"/> Seminars <input type="checkbox"/> Projects <input type="checkbox"/> Practices <input type="checkbox"/> Others	Additional readings as weekly homework to enhance the student understanding of information systems and their role in organizations. Discussion about these reading could be done during the session. The assignment, which is a practical case of an information systems of a particular company, through which the student is asked to apply the concepts covered by the course on the case of the company and answer the questions mentioned in the case study.
ILO13 ILO14 ILO15 ILO15 ILO17 ILO18	Part III: Applications of management information systems 7. E-commerce and e-business 8. Enterprise systems (ERP, supply chain management, customer relationship management) 9. Knowledge management systems 10. Decision support systems & Business intelligence	10	10	<input type="checkbox"/> Exercises <input checked="" type="checkbox"/> Assignments <input checked="" type="checkbox"/> Seminars <input type="checkbox"/> Projects <input type="checkbox"/> Practices <input type="checkbox"/> Others	Additional readings as weekly homework to enhance the student understanding of information systems and their role in organizations. Discussion about these reading could be done during the session. The assignment, which is a practical case of an information systems of a particular company, through which the student is asked to apply the

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					concepts covered by the course on the case of the company and answer the questions mentioned in the case study.
ILO19 ILO20 ILO21 ILO22 ILO23 ILO24	Part IV: Development and management of information systems 11. Development of information systems 12. Information systems security	4	4	<input type="checkbox"/> Exercises <input checked="" type="checkbox"/> Assignments <input checked="" type="checkbox"/> Seminars <input type="checkbox"/> Projects <input type="checkbox"/> Practices <input type="checkbox"/> Others	Additional readings as weekly homework to enhance the student understanding of information systems and their role in organizations. Discussion about these reading could be done during the session. The assignment, which is a practical case of an information systems of a particular company, through which the student is asked to apply the concepts covered by the course on the case of the company and answer the questions mentioned in the case study.

6- Assessment Criteria (Related to ILOs)

ISC	Interactive Synchronized Collaboration	Ex	Exams	Rpt	Reports
PF2F	Presentations and Face-to-Face Assessments	PW	Practice Work		

ILO Code	ILO	Intended Results	Assessment Type				
			ISC	PW	Ex	PF2F	Rpt
ILO1	Evaluate the role of information systems in today's competitive business environment.	Give examples of success stories for companies that use information technology as leverage for	X		X	X	X

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		competitive advantage.					
ILO2	Explain relationships between concepts of information systems, organization, management and strategy.	Define strategic analysis models and link them with information systems and give examples.	X	-	X	X	X
ILO3	Define an information system from both a technical and business perspective and distinguish between computer literacy and information systems literacy.	Distinguishing the main concepts in the field of information systems and in the field of informatics and computers.	X	-	X	X	X
ILO4	Assess the relationship between the digital firm, electronic commerce, electronic business and internet technology.	Explain the role of technology as a driver of business in contemporary organizations.	X	-	X	X	X
ILO5	Identify the major management challenges to building and using information systems in organizations.	Explain the role of managers and workers in organizations in developing information systems, and the relationship with technical staff.	X	-	X	X	X
ILO6	Identify managerial risks related to information systems development and utilizing.	Clarify the concept of resistance to change and the tools used to reduce it.	X	-	X	X	X
ILO7	Identify the hardware components in computer system	Remember the various types of computer hardware and its	X	-	X	X	X

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		evolution during the past decades.					
ILO08	Describe the major types of software.	Remember the various types of software and programming languages and their historical evolution.	X	-	X	X	X
ILO09	Compare the principal types of databases.	Define the concept of data and how to manage it through databases.	X	-	X	X	X
ILO10	Describe the basic components of a telecommunications systems and compare the various types of telecommunications networks.	List the types of networks, their components, and their uses in organizations.	X	-	X	X	X
ILO11	Describe how the internet works and identify its major capabilities.	Give examples of Internet use in the business organizations.	X	-	X	X	X
ILO12	Analyzes challenges related to information technology infrastructure management and management solutions	Analyze the organization's infrastructure and its adequacy to run business applications.	X	-	X	X	X
ILO13	Analyze the role played by the six major types of information systems in organizations and their relationship to each other.	List the various possible classifications of management information systems and their relationships.	X	-	X	X	X
ILO14	Evaluate the role of information systems in	Explain how	X	-	X	X	X

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	supporting various levels of business strategy.	information systems help managers at various levels of decisions making.					
ILO15	Describe the types of information systems supporting the major functional areas of the business.	Explain the areas of application of information systems in the various sectors of the organization.	X	-	X	X	X
ILO16	Assess the relationship between organizations, information systems and business processes, including the processes for customer relationship management and supply chain management.	Define the concept of business process and its pivotal role in developing and acquiring modern information systems.	X	-	X	X	X
ILO17	Explain how enterprise systems and industrial networks increase the organization's efficiency.	Give examples of how to link the organization with other organizations, including suppliers and customers, through information systems.	X	-	X	X	X
ILO18	Evaluate the benefits and limitations of enterprise systems and industrial networks.	Identify the most important benefits compared to large investments to acquire enterprise systems and associated challenges.	X	-	X	X	X
ILO19	Identify the core activities in the information systems development process.	Explain the role of administrative staff in the development of information systems.	X	-	X	X	X

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ILO20	Evaluate models for determining the business value of information systems.	Analyze the value of the information system for the organization and justify the investment in it.	X	-	X	X	X
ILO21	Identify appropriate strategies to manage the information system implementation process.	Contribute in the decision making regarding the development or acquisition of ready-made information systems.	X	-	X	X	X
ILO22	Analyze the principal causes of information system failure.	Analyze the risks and causes that can lead to the failure of the information system during its development or during its exploitation.	X	-	X	X	X
ILO23	Evaluate information systems security problems and how to respond to security threats	Perform risk analysis related to the security of the information system and how to respond to it.	X	-	X	X	X
ILO24	Define the three primary information security areas: (1) authentication and authorization, (2) prevention and resistance, and (3) detection and response.	Classify the areas of information and systems security and explaining each of them.	X	-	X	X	X

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7-Practice Tools:

Tool Name	Description
<ul style="list-style-type: none"> - Microsoft Visio - Camunda-Modeler - Process Maker 	Tools for business process description and modelling

8-Main References

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9-Additional References

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- 2- Ralph M. Stair, George W. Reynolds, Principles of information systems, (2018), Cengage Learning.
- 3- Joseph Valacich, Christoph Schneider, Information Systems Today_ Managing the Digital World, (2017), Pearson Education Limited.
- 4- Gabriele Piccoli, Federico Pigni, Information Systems for Managers_ With Cases, 4th Ed (2018), Prospect Press.
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- 6- Angappa Gunasekaran, Maqsood Sandhu, Handbook on Business Information Systems - (2010), World Scientific.