

### Kurdistan Region Government Ministry of Higher Education and Scientific Research Erbil Polytechnic University



# Module (Course Syllabus) Catalogue (2023-2024)

College/ Institute	Erbil Technical Engineering College				
Department	Information Systems Engineering				
	Department				
Module Name	Fundamentals of Information Systems				
<b>Module Code</b>	FIS105				
Degree	Technical Diploma Bachler				
	High Diploma Master PhD PhD				
Semester	1 <sup>st</sup> Semester -First Stage				
Qualification	MSc. in Computer Science\				
	<b>Advanced Information System</b>				
<b>Scientific Title</b>	Assist. Lect.				
ECTS (Credits)	7				
Module type	Prerequisite	Core Assist.			
Weekly hours	4				
Weekly hours (Theory)	(4) hr Class	( 175 )Total hrs			
		Workload			
Weekly hours (Practical)	( 0 )hr Class	( 0 )Total hrs			
		Workload			
Number of Weeks	12				
<b>Lecturer (Theory)</b>	Mrs.Areen Jamal Hamad				
E-Mail	Areen.hamad@epu.edu.iq				
<b>Lecturer</b> (Practical)	None				
E-Mail					
Websites	https://moodle.epu.edu.iq/course/view.php?id=545				

**Course Book** 

## This course is designed to provide an introduction to information systems and their foundational concepts. Topics cover presentation of information systems role in organisations. As well as designed Course to provide students with basic applications in data collection, processing, storage, analysis and **Description** dissemination of information for a particular purpose in organizations. - Course objective: This course aims to: • Discipline the Information Systems with the effective use of IT by people and organisations. • Describe the components of real-world information systems. Course Illustrate how an information system uses people, hardware, software, data, and networks as objectives resources to perform input, processing, output, storage. • Explain the activities that transform data resources into information products. - Student's obligation Cell phone: In order to avoid distracting the class or other students I ask that you turn your cell phone off or set it to silent while in the class. If it's necessary, please excuse yourself from the classroom while on the phone Email Addresses: all students are required to provide the lecturer with their functional email addresses for communication and sharing lecture materials. -Please attend the class on time in case of urgency you must enter the class silently and sit as soon as you find an available seat. - Print the lecture notes provided by lecturer prior to the class Student's - Avoid being distractive or disruptive to others in the class obligation - Participate in class discussions - Let the lecturer know when a subject is vague - Be thoughtful when attending quiz and exam sessions. Drinks: you can have a bottle of water and/or a cup of tea or coffee, but you must respect the hygiene of the class. Plus, when the class is done all the chairs must be seated well in to their regular positions. **Discrimination & Harassment:** This classroom must be an environment that is free of Discrimination and harassment based on a person's sex, race, colour, age, religion, disability, ancestry, or national origin, consistent with applicable laws in the University. All students are required to respect the rights, opinions and beliefs of others. Required lecture halls with data show equipment for lecture presentations, white board, Learning overhead projector, posters **Materials**

					Relevant Learning Outcome		
			We	eight			
	Task		(Marks)				
Paper Review		-					
		Homework	10% 2% theoretical		Understanding of the principles of networking		
	Assignments	Class			Involve in discussion		
		Activity	8%	Ī	Develop the databases and identify the information		
Evaluation	gun	Report	0 /0	16%	sharing in an organization		
	Assi	Seminar	8%				
	7	Project	-				
			00/		Understand the evention of an information system		
	Quiz		8% 00%		Understand the overview of an information system		
	Lab .  Midterm Exam		24%		Overall Understanding of key principles		
	Final Exam		40%		Overall Understanding of key principles		
	Total		100%		o recommended to the principles		
		earning outcom	∟ e:				
	Understand the overview of an information system.						
Specific	<ul><li>2. Recognise the role of information systems in an organization.</li><li>3. Evaluate the components of information systems.</li></ul>						
learning	4. Develop the databases and identify the information sharing in an organization.						
outcome:	5. Demonstrate an understanding of the principles of networking underlying modern information						
	systems. 6. Identify appropriate technologies to support electronic commerce, decision making, and other						
	Organizational activities.						
	7. Analyse and identify the Identify the types of information systems and how AI is effecting the processes						
	•	Reading List and	Reference	s:			
	- Key references:						
	Ralph M. Stair & George W. Reynolds. (2012). Fundamentals of information systems: 6th Edition book. Course Technology, Cengage Learning.						
Course	,		Course re	.ciiilology,	cengage Learning.		
References:	- Useful references:						
	-T. Cornford & M. Shaikh. (2013). Introduction to information systems. University						
	of London: international programs. Retrieved from:						
	http://www.londoninternational.ac.uk/sites/default/files/programme_resources/ lse/l se pdf/subject_guides/is1060_ch1-4.pdf						
	- Yaser Hasan Al-Mamary , Alina Shamsuddin ,and Nor Aziati.(2014). The Role of Different Types of Information Systems In Business Organizations: International						
	Different Types of information Systems in Business Organizations: International						

Journal of Research (IJR) Vol-1, Issue 7. Retrieved from: <a href="http://paulhadrien.info/The%20Role%20of%20Different%20Types%20of%20Information.pdf">http://paulhadrien.info/The%20Role%20of%20Different%20Types%20of%20Information.pdf</a>

- -R. Shipsey.(2010). Information systems: foundations of e-business. University of London International Programmes. Retrieved from: <a href="http://www.londoninternational.ac.uk/sites/default/files/computing\_samples/co1108\_ch1-3.pdf">http://www.londoninternational.ac.uk/sites/default/files/computing\_samples/co1108\_ch1-3.pdf</a>
- Essentials of Management Information Systems.(2011). Ethical and Social Issues in Information Systems chapter12: Pearson Education, Inc. Retrieved from: <a href="http://ramayah.com/wp-content/uploads/2011/12/CH12.pdf">http://ramayah.com/wp-content/uploads/2011/12/CH12.pdf</a>

Course topics (Theory)	Week	Learning Outcome
• Information Systems Overview: Define information system, Compare and contrast data, information, and knowledge. Summarize the difference between information systems and information technology Identify types of information systems, and describe the use of IT.	1&2	1
•Information system in organisations Practicing some samples the of information systems in organisations	3&4	2
•Computer Hardware & Software: Identify the different hardware components of a computer system, including CPU, RAM, input/output devices and storage devices; evaluate examples of software applications	5&6	3
• Database Systems Overview: Data Management and modelling, Key aspects of organizing data and information, identify different database management systems; describe models of database systems; explain the use of structured query language within a database system.	7&8	4
<ul> <li>Networks Identify different types of computer networks; describe methods of securing networks; evaluate the uses of the World Wide Web</li> </ul>	9	5
Mobile & Electronic Commerce Differentiate between different types of e-commerce, including business-to- business and business-to consumer models; explain how the Internet is helping e-commerce reach global markets.	10	6
Types of information systems & the use of Artificial Intelligence Demonstrating and practicing some examples of transaction processing systems in some organisations -	11&12	7

Demonstrating and practicing some examples of of using Al		
in decision support systems		

#### • Examinations (question design):

Compositional: most of exam questions will be compositional as following example:

- Explain the Logical and Physical Access Paths of Storing and Retrieving Data in the Database, with Diagram?
- Define the terms Data, Information and Knowledge. Explain different characteristics of valuable information.

#### 20. Extra notes:

The course content is subject to change, the students will be informed a head.

#### **External Evaluator**

I confirm that the course book covers all the most important topics that student have to be learned during the year of studying

Shahab Wahhab Kareem

10-10-2023