University: ***Fayoum University***
Faculty: ***Computers and Information***
Department: ***Information Systems***

Course Specification

1- Basic Information		
Code: INF 280	**Course Title:** Introduction to Information Systems	**Year/Level:** Second year – First term
Programme: B.Sc degree in Information Systems	**Number of units:** **Lecture:** 3 hrs/ week **Tutorial:** 0 hrs/ week **Practical:** 2 hrs/ week	

2- Aims of Course:	The purpose of this course is to provide students with solid foundations of the fundamentals of information systems, Including computer hardware, software, data resource management, database and different information systems like Management Information System (MIS), Decision Support System (DSS), Transaction Processing Systems (TPS) Office Automation System (OAS), Executive Information System (EIS) and Expert System (ES).

3- Intended Learning Outcomes	
A- Knowledge and Understanding:	A2. List the Fundamental topics in Computer Science and Information systems related to software engineering principles, computer organization and architecture. *a1*) Understand the main information system concepts and fundamentals of information system. A6. Explain essential concepts, principles, and theories related to computer-application development such as: databases, information systems development. *a2*) Know the different classifications and types of information systems. *a3*)Understand the main methodologies used in information system development. A10. Identify and explain the fundamental concepts, principles, and techniques needed for the analysis, development, validation, verification, deployment, and operations of computer-based and information systems. *a4*) understand the different concepts & Principles of information systems. A11. Describe main concept of operating systems, information system and databases. *a5*) understand the different components and applications of information systems.

	A14. List the professional, moral and ethical issues involved in the exploitation of computer technology and be guided by the appropriate professional, ethical and legal practices relevant to the computing and information industry. *a6*) understand the ethical principles and harmful attitudes related to information systems.
B- Intellectual Skills:	B12. Define the standard methodologies for solving information systems problems. *b1)* Use information technologies to improve business process, business decision making, and gain competitive advantage. *b2)* Have the ability to analyze information technology problems. B.15 Define the required tools and techniques to deliver the intended solutions for information systems problems *b3*) Have the ability to analyze the requirements of a range of information systems and examine the design of alternatives based on the constraints imposed by society, organizations, and technology. *B4*) understand the different tools and techniques used to deliver an information system.
C- Professional and Practical Skills:	C10.Evaluate computer-based systems from various perspectives. *c1)* Became comfortable with fundamentals of information systems. *c2)* Be aware of different information technologies, and computer systems.
D- General and transferable Skills	D3. Work as a member of a development team, recognizing the different roles within a team and different ways of organizing teams. *d1)* Practice working in teams through group projects. *d2)* Oral communication skills through the assignments presentations. D5. Communicate effectively through oral, written, and visual means. *d3*) Develop self-professional, scientific, and personal attitude towards continuous education D6. Demonstrate skills in team work, team management, time management and organizational skills. *d4*) Apply team management principles for the tasks given through the course. *d5*) Apply time management for the task given and how to respect time issue

4-Course Content:	1. Fundamental concepts, objective of information system, system definition, subsystem definition, System Characteristics, components and types. 2. Message passing in information system, message levels

	data, Data Processing (DP) and Electronic Data Processing (EDP) 3. Information Systems Development Methodologies (ISDM) 4. Management Information System (MIS), Decision Support System (DSS), Transaction Processing Systems (TPS) and Enterprise Resource Planning (ERP), 5. Value Chain Analysis used in Information Systems, Office Automation System (OAS), Executive Information System (EIS), Expert System (ES) 6. Computer Based Information System (CBIS), the importance of CBIS, the nature of information system in different organizations. 7. Types of CBIS, relationships among CBISs, the evolutionary view, the hierarchical view and the contingency view 8. Management concepts in CBIS, data management and the organization of data 9. application oriented files, database approach 10. decision-making concepts and tools 11. decision support system (DSS), building a DSS, application of DSS, Examples for information systems 12. A brief history of computer hardware, types of computers systems, computer peripherals. 13. Computer Software, Computer system management, Software, Internet fundamentals and technologies including HTML,XML and Web service. 14. E-Commerce fundamentals, ethics, typs and method of payment, E-Learning, fundamentals, computers and delivery method

5- Teaching and Learning Methods:	1. Lectures 2. Tutorials 3. Computer-lab Sessions 4. Practical lab work 5. Class discussions 6. Internet searches 7. E-Learning 8. Group Projects

6- Teaching and Learning Methods for handicapped students :	-

7- Student Assessment	
A- Assessment Methods:	1. Assignments and Quizzes 2. Mid-Term written exam 3. Oral exam 4. Practical exam 5. Final written exam

B- Assessment schedule:	Mid-Term Examination: Week 7 Practical Examination: Week 13 Oral Examination: Week 14 Final Examination: Week 15
C- Weighting of assessments:	Assignments and Quizzes: 0% Mid-Term Examination: 10% Practical Examination: 15% Oral Examination: 10% Final-term Examination: 65%

8- Books and References	
A- Notes:	Handed out to the students part by part.
B- Essential Books (Text Books):	▪ Introduction to Information Systems, by James A. O'Brien. 16th edition (2014)
C- Recommended Books:	▪ Introduction to Information Systems: Supporting and Transforming Business by R. Kelly Rainer. 6th edition (2016)
D- Periodicals, Web sites, … etc	-

Course Professor: Dr. Haytham Al-feel Department Head:Dr. Amira Edress

Course Content Intended Learning Outcomes Matrix

Course Title: Introduction to Information Systems
Course Code: INF 280

Course Content	Week	Knowledge & Understanding						Intellectual Skills				Professional & Practical Skills		General & Transferable Skills				
		a1	a2	a3	a4	a5	a6	b1	b2	b3	b4	c1	c2	d1	d2	d3	d4	d5
1. Objective of information system, system definition, subsystem definition, System Characteristics, components and types.	1	x	X		x					x		x		x	x	x	x	x
2. Message passing in information system, message levels data, Data Processing (DP) and Electronic Data Processing (EDP)	2			x		x			x	x		x		x	x	x	x	x
3. Information Systems Development Methodologies (ISDM)	3			x					x	x		x		x	x	x	x	x
4. Management Information System (MIS), Decision Support System (DSS), Transaction Processing Systems (TPS) and Enterprise Resource Planning (ERP),	4		X					X					x	x	x	x	x	x
5. Value Chain Analysis used in Information Systems, Office Automation System (OAS), Executive Information System (EIS), Expert System (ES)	5		X		X				x	x			x	x	x	x	x	x
6. Computer Based Information System (CBIS), the importance of CBIS, the nature of information system in different organizations.	6		X		X					x			x	x	x	x	x	x
7. Types of CBIS, relationships among CBISs, the evolutionary view, the hierarchical view and the contingency view	7		X		X					x	x		x	x	x	x	x	x
8. Management concepts in CBIS, data management and the organization of data	8				X					x			X	x	x	x	x	x
9. application oriented files, database approach	9				X								X	x	x	x	x	x
10. decision-making concepts and tools	10		x					X			x		x	x	x	x	x	x
11. decision support system (DSS), building a DSS, application of DSS, Examples for information systems	11		x					X					X	x	x	x	x	x
12. A brief history of computer hardware, types of	12		x					x			x		x	x	x	x	x	x

computers systems, computer peripherals																	
13. Computer Software, Computer system management, Software, Internet fundamentals and technologies including HTML,XML and Web service	13		x		x		x		x	x		x	X	x	X	x	x
14. E-Commerce fundamentals, ethics, types and method of payment, E-Learning, fundamentals, computers and delivery method	14		x			x	x		x	x	x		x	x	x	x	x

Course coordinator: Dr. Haytham Al-feel

Head of Department: Dr. Amira Edress