



SUJ-01-05-01A	رقم النموذج	نموذج مخطط مادة دراسية/ انجليزي Course Syllabus
27-10-2022	تاريخ الإصدار	
	رقم وتاريخ المراجعة أو التعديل	
	رقم قرار اعتماد مجلس العمداء	
	تاريخ قرار اعتماد مجلس العمداء	
07	عدد الصفحات	

1	Course title	Fundamentals of Information Technology	
2	Course number	1904101	
3	Credit hours	3	
	Contact hours (theory, practical)	Theory and Practical	
4	Prerequisites/corequisites	-----	
5	Program title	Business Information Technology program	
6	Program code	04	
7	Awarding institution	The University of Jordan	
8	School	King Abdullah II School for Information Technology	
9	Department	Information Technology	
10	Course level	1 st year	
11	Year of study and semester (s)	Fall 2022-2023	
١٢	Other department (s) involved in teaching the course		
١٣	Main teaching language	English	
١٤	Delivery method	<input checked="" type="checkbox"/> Face to face learning <input checked="" type="checkbox"/> Blended <input type="checkbox"/> Fully - partially online	
١٥	Online platforms(s)	<input checked="" type="checkbox"/> Moodle <input checked="" type="checkbox"/> Microsoft Teams <input type="checkbox"/> Skype <input type="checkbox"/> Zoom <input type="checkbox"/> Others.....	
١٦	Issuing/Revision Date	October 2022	

١٧ Course Coordinator:



Name: Dr. Dana Al Qudah

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١٨ Other instructors:

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١٩ Course Description:

This course will introduce the fundamental knowledge of information technologies and it works as an introductory course for computer-related courses. It is a combination between a theoretical and a practical course. In particular, the course provides students a grounding knowledge on several areas of information technologies including cutting edge technologies, careers in IT, basic concepts of cloud computing and web technologies, and a general perceptive of project management. Students are also going to be introduced practically to hardware maintenance, software diagnostics and technical support. In addition, critical thinking methodologies and techniques will be discussed, including numbering systems, flowcharts and related case studies. Operating systems such as LINUX/UNIX with, memory allocation, and an introduction to networks and security, and block chain concepts. The final part is concerned with technical applications needed such as excel, advanced excel, technical writing, report generating and type writing.



20. Course aims and outcomes:

Successful completion of this course should lead to the following learning outcomes:

A-Knowledge and understanding: students should

1. Understand the basic concepts of information technology, cutting edge technologies, careers in IT, concepts in cloud computing and project management.
2. Understand the concepts related to communications, the internet, the web, social web and technologies.
3. Understand numbering systems, flow charts and pseudo-codes.
4. Understanding the concepts related Operating systems, networking, and security
5. Define the concepts of Data, databases, and applications

B-Students' Outcome SO

1. Understand and distinguish between the basic concepts of information technology, cutting edge technologies, careers in IT, concepts in cloud computing and project management.
2. Understand the concepts related to communications, the internet, the web, social web and technologies.
3. Understand numbering systems, flow charts and pseudo-codes and distinguish between different numbering systems, apply, convert and usage of different numbering systems
4. Understanding the concepts related Operating systems, networking, and security. Distinguish between different operating systems, memory locations and network security.
5. Examine different hardware and software maintenance and support techniques.
6. Define the concepts of Data, databases, and applications
7. Analyze user requirements and design a program.
8. Enhance students' skills by performing basic and advanced solutions on Microsoft Excel, increase typing skills, reporting and, virtualization and exploring different OS.

Course Web Site: <https://elearning.ju.edu.jo>



٢١. Topic Outline and Schedule:

Week	Lecture	Topic	ILO	Learning Methods *	Platform **	Synchronous / Asynchronous Lecturing ***	Evaluation Methods	Resources
1	1.1	Part # 1 Introduction to IT Information Technology, the Internet and you <ul style="list-style-type: none"> • Information systems • Parts of Information systems (People, Procedures, Software, Hardware, Data). • Connectivity, Wireless revolution, Cloud computing and Internet of things • Careers in IT 	1	F	C M T	S	Exa m and Assi gnm ent	Lecture notes, book and external material
	1.2	Part # 1 Introduction to IT <ul style="list-style-type: none"> • Information Technology, the Internet and you • Information systems • Parts of Information systems (People, Procedures, Software, Hardware, Data). • Connectivity, Wireless revolution, Cloud computing and Internet of things • Careers in IT 	1	F	C M T	S	Exa m and Assi gnm ent	Lecture notes, book and external material
	1.3	Part # 1 Introduction to IT Description of Concepts of Amazon Turk, Azure, Connectivity, Wireless revolution, Internet of things, outlook, google drive and google	1	B	M	A	Exa m and Assi gnm ent	Lecture notes, book and external material



	2.1	Part # 1 Introduction to IT Information Technology, the Internet and you <ul style="list-style-type: none"> • Information systems • Parts of Information systems (People, Procedures, Software, Hardware, Data). • Connectivity, Wireless revolution, Cloud computing and Internet of things • Careers in IT 	1	F	C M T	S	Exam and Assignment	Lecture notes, book and external material
2	2.2	Part # 1 Introduction to IT Information Technology, the Internet and you <ul style="list-style-type: none"> • Information systems • Parts of Information systems (People, Procedures, Software, Hardware, Data). • Connectivity, Wireless revolution, Cloud computing and Internet of things • Careers in IT 	1	F	C M T	S	Exam and Assignment	Lecture notes, book and external material
	2.3	Part # 1 Introduction to IT Description of Concepts of Amazon Turk, Azure, Connectivity, Wireless revolution, Internet of things, outlook, google drive and google	1	B	M	A	Exam and Assignment	Lecture notes, book and external material
	3.1	Part # 1 Introduction to IT The internet, the Web, and electronic commerce <ul style="list-style-type: none"> • The internet and the Web • Internet access • Communications • Search Tools • E-commerce • Web utilities • Cloud computing 	2	F	C M T	S	Exam and Assignment	Lecture notes, book and external material



	<ul style="list-style-type: none"> Project management 						
3.2	Part # 1 Introduction to IT Detailed explanation of Cloud Computing services	2	F	C M T	S	Exam and Assignment	Lecture notes, book and external material
3.3	Part # 1 Introduction to IT The internet, the Web, and electronic commerce <ul style="list-style-type: none"> The internet and the Web Internet access Communications Search Tools E-commerce Web utilities Cloud computing Project management 	2	B	M	A	Exam and Assignment	Lecture notes, book and external material
4	Part #2 Critical thinking and problem solving Numbering Systems: <ul style="list-style-type: none"> Decimal, Binary, octal and hexadecimal Arithmetic operations in Binary Addition and subtraction in octal and hexadecimal Two's Complements Subtraction using two's complements 	3	F	C M T	S	Exam and Assignment	Lecture notes, book and external material
	Part #2 Critical thinking and problem solving Numbering Systems: <ul style="list-style-type: none"> Decimal, Binary, octal and hexadecimal Arithmetic operations in Binary Addition and subtraction in octal and hexadecimal Two's Complements Subtraction using two's complements 	3	F	C M T	S	Exam and Assignment	Lecture notes, book and external material



	4.3	Video--- Numbering system conversion. Practice Sheets	3	B	M	A	Exam and Assignment	Lecture notes, book and external material
5	5.1	Part #2 Critical thinking and problem solving Numbering Systems: <ul style="list-style-type: none"> Decimal, Binary, octal and hexadecimal Arithmetic operations in Binary Addition and subtraction in octal and hexadecimal Two's Complements Subtraction using two's complements 	3	F	C M T	S	Exam and Assignment	Lecture notes, book and external material
	5.2	Part #2 Critical thinking and problem solving Numbering Systems: <ul style="list-style-type: none"> Decimal, Binary, octal and hexadecimal Arithmetic operations in Binary Addition and subtraction in octal and hexadecimal Two's Complements Subtraction using two's complements 	3	F	C M T	S	Exam and Assignment	Lecture notes, book and external material
	5.3	Video--- Numbering system conversion. Practice Sheets	3	B	M	A	Exam and Assignment	Lecture notes, book and external material
6	6.1	Part #2 Critical thinking and problem solving Numbering Systems: <ul style="list-style-type: none"> Decimal, Binary, octal and hexadecimal Arithmetic operations in Binary 	3	F	C M T	S	Exam and Assignment	Lecture notes, book and external material



	<ul style="list-style-type: none"> Addition and subtraction in octal and hexadecimal Two's Complements Subtraction using two's complements 						
6.2	<p>Part #2 Critical thinking and problem solving</p> <p>Numbering Systems:</p> <ul style="list-style-type: none"> Decimal, Binary, octal and hexadecimal Arithmetic operations in Binary Addition and subtraction in octal and hexadecimal Two's Complements Subtraction using two's complements 	3	F	C M T	S	Exam and Assignment	Lecture notes, book and external material
6.3	<p>Video---</p> <p>Numbering system conversion.</p> <p>Practice Sheets</p>	3	B	M	A	Exam and Assignment	Lecture notes, book and external material
7	<p>Part #3 Maintenance and support</p> <p>Hardware: the course should mirror the A+ maintenance style Software: formatting OS, troubleshooting, dealing with task manger, drivers fragmentation and segmentation, control panel management</p>	3	F	C M T	S	Exam and Assignment	Lecture notes, book and external material
	<p>Part #3 Maintenance and support</p> <p>Hardware: the course should mirror the A+ maintenance style Software: formatting OS, troubleshooting, dealing with task manger, drivers fragmentation and segmentation, control panel management</p>	3	F	C M T	S	Exam and Assignment	Lecture notes, book and external material
	<p>Part #3 Maintenance and support</p>	3	B	M	A	Exam and	Lecture notes, book



		Lab Visit + Video Online				Assi gnm ent	and external material	
8	8.1	Part #4 Operating systems, networking and security <ul style="list-style-type: none"> operating systems such as Linux and Unix – calling for functions over Linux and the usage of functions over Unix memory locations and conversions to different storage allocation networking between two or more devices networking server calling and connection blockchain 	4,5	F	C M T	S	Exa m and Assi gnm ent	Lecture notes, book and external material
	8.2	Part #4 Operating systems, networking and security <ul style="list-style-type: none"> operating systems such as Linux and Unix – calling for functions over Linux and the usage of functions over Unix memory locations and conversions to different storage allocation networking between two or more devices networking server calling and connection blockchain 	4,5	F	C M T	S	Exa m and Assi gnm ent	Lecture notes, book and external material
	8.3	Part #4 Operating systems, networking and security VM setup & configuration	4,5	B	M	A	Exa m and Assi gnm ent	Lecture notes, book and external material
9	9.1	Part #4 Operating systems, networking and security <ul style="list-style-type: none"> operating systems such as Linux and Unix – calling for functions over Linux and the usage of functions over Unix memory locations and conversions to different storage allocation 	4,5	F	C M T	S	Exa m and Assi gnm ent	Lecture notes, book and external material



	<ul style="list-style-type: none"> networking between two or more devices networking server calling and connection blockchain						
9.2	Part #4 Operating systems, networking and security <ul style="list-style-type: none"> operating systems such as Linux and Unix – calling for functions over Linux and the usage of functions over Unix memory locations and conversions to different storage allocation networking between two or more devices networking server calling and connection blockchain	4,5	F	C M T	S	Exa m and Assi gnm ent	Lecture notes, book and external material
9.3	Part #4 Operating systems, networking and security Network experiments	4,5	B	M	A	Exa m and Assi gnm ent	Lecture notes, book and external material
10	Part #4 Operating systems, networking and security <ul style="list-style-type: none"> operating systems such as Linux and Unix – calling for functions over Linux and the usage of functions over Unix memory locations and conversions to different storage allocation networking between two or more devices networking server calling and connection blockchain	4,5	F	C M T	S	Exa m and Assi gnm ent	Lecture notes, book and external material
	Part #4 Operating systems, networking and security <ul style="list-style-type: none"> operating systems such as Linux and Unix – calling for functions over Linux and the usage of functions over Unix memory locations and conversions to different storage allocation 	4,5	F	C M T	S	Exa m and Assi gnm ent	Lecture notes, book and external material



		<ul style="list-style-type: none"> networking between two or more devices networking server calling and connection blockchain						
	10.3	Part #4 Operating systems, networking and security Blockchain concepts & network security	4,5	B	M	A	Exam and Assignment	Lecture notes, book and external material
11	11.1	Part #5 Data, databases and applications <ul style="list-style-type: none"> types of data and their representations databases as a concept and related applications Introduction to Excel Advanced Excel Type writing 	6,8	F	C M T	S	Exam and Assignment	Lecture notes, book and external material
	11.2	Part #5 Data, databases and applications <ul style="list-style-type: none"> types of data and their representations databases as a concept and related applications Introduction to Excel Advanced Excel Type writing 	6,8	F	C M T	S	Exam and Assignment	Lecture notes, book and external material
	11.3	Part #5 Data, databases and applications Data & Database concepts	6,8	B	M	A	Exam and Assignment	Lecture notes, book and external material
12	12.1	Part #5 Data, databases and applications <ul style="list-style-type: none"> types of data and their representations databases as a concept and related applications 	6,8	F	C M T	S	Exam and Assi	Lecture notes, book and



	<ul style="list-style-type: none"> • Introduction to Excel • Advanced Excel Type writing					gnment	external material
12.2	Part #5 Data, databases and applications <ul style="list-style-type: none"> • types of data and their representations • databases as a concept and related applications • Introduction to Excel • Advanced Excel Type writing	6,8	F	C M T	S	Exam and Assignment	Lecture notes, book and external material
12.3	Part #5 Data, databases and applications Excel concepts	6,8	B	M	A	Exam and Assignment	Lecture notes, book and external material
13.1	Part #5 Data, databases and applications <ul style="list-style-type: none"> • types of data and their representations • databases as a concept and related applications • Introduction to Excel • Advanced Excel Type writing	6,8	F	C M T	S	Exam and Assignment	Lecture notes, book and external material
13.2	Part #5 Data, databases and applications <ul style="list-style-type: none"> • types of data and their representations • databases as a concept and related applications • Introduction to Excel • Advanced Excel Type writing	6,8	F	C M T	S	Exam and Assignment	Lecture notes, book and external material
13.3	Part #5 Data, databases and applications	6,8	B	M	A	Exam and Assignment	Lecture notes, book and



		Typewriting tools				gnment	external material
14	14.1	Part #6 Technical Documentation <ul style="list-style-type: none"> • System Analysis & Design • Programming & Languages • Technical Forms • Technical Documentations (Systems, Devices, Networks, etc.) 	7	F	C M T	S	Exam and Assignment Lecture notes, book and external material
	14.2	Part #6 Technical Documentation <ul style="list-style-type: none"> • System Analysis & Design • Programming & Languages • Technical Forms • Technical Documentations (Systems, Devices, Networks, etc.) 	7	F	C M T	S	Exam and Assignment Lecture notes, book and external material
	14.3	Part #6 Technical Documentation Technical forms templates, technical documentation templates	7	B	M	A	Exam and Assignment Lecture notes, book and external material
15	15.1	Part #6 Technical Documentation <ul style="list-style-type: none"> • System Analysis & Design • Programming & Languages • Technical Forms • Technical Documentations (Systems, Devices, Networks, etc.) 	7	F	C M T	S	Exam and Assignment Lecture notes, book and external material
	15.2	Part #6 Technical Documentation <ul style="list-style-type: none"> • System Analysis & Design • Programming & Languages • Technical Forms 	7	F	C M T	S	Exam and Assignment Lecture notes, book and external material



	Technical Documentations (Systems, Devices, Networks, etc.)						
15.3	Part #6 Technical Documentation Technical forms templates, technical documentation templates	7	B	M	A	Exam and Assignment	Lecture notes, book and external material

* Learning Platform: Classroom (C) , Moodle (M), MS Teams (T)

** Learning Method: (Face to Face (F) /Blended (B) / Fully Online (O))

۲۲ Evaluation Methods:

Opportunities to demonstrate achievement of the SLOs are provided through the following assessment methods and requirements:

Evaluation Activity	Mark	Topic(s)	SLOs	Period (Week)	Platform
Midterm	30	Part 1&2	1-3	8	University
Assignments and Quizez	30	All	All	All term	Moodle
Final Exam	40	Part 2,3,4&5	1-8	15	University

۲۳ Course Requirements

(e.g: students should have a computer, internet connection, webcam, account on Moodle and Teams):

۲۴ Course Policies:

A- Attendance policies:

Students are responsible for class attendance and for all material covered in class. It is the students' responsibility to turn in their homework assignments to their instructors by the announced due date/time.

The students are allowed to have no more than 15% absence of the whole number of lectures in the semester



B- Absences from exams and handing in assignments on time:

Any absence for the exams is not acceptable unless a strong excuse is given and accepted by the lecturer then a makeup exam will be held

C- Health and safety procedures:

D- Honesty policy regarding cheating, plagiarism, misbehavior:

E- Grading policy + Weighting (i.e. weight assigned to exams as well as other student work)

F- Available university services that support achievement in the course:

G- Statement on Students with disabilities

Students with Disabilities: Students with disabilities who need special accommodations for this class are encouraged to meet with the instructor and/or their academic advisor as soon as possible. In order to receive accommodations for academic work in this course, students must inform the course instructor and/or their academic advisor, preferably in a written format, about their needs no later than the 4th week of classes.

٢٠ References:

A- Required book(s), assigned reading and audio-visuals:

Computing Essentials 2021, complete edition

Timothy J. O'leary

Linda I. O'Leary

ISBN 0-07-226110-2

Publisher: McGraw-Hill

B- Recommended books, materials, and media:

Extra material will be uploaded on e-learning.



٢٦ Additional information:

1. Every student is expected to completely adhere to the exams dates and projects strict deadlines, absolutely no exceptions will be given.
2. Maximum allowable absence 15% of number of Lectures/Semester

- الامتناع المدبر عن حضور المحاضرات أو الدروس أو عن الأعمال الأخرى التي تقضي الأنظمة بالمواطبة عليها ، وكل تحريض على هذا الامتناع سوف يؤدي الى حرمان الطالب من المادة المعنية.
- في حالة التغيب عن امتحان ال Mid Term لن يكون هناك امتحان تعويضي الا في حالة وجود عذر وحالة طارئة من المستشفى. على الطالب ابراز العذر لمدرس المادة في فتره لا تتجاوز الثلاثة ايام من تاريخ الامتحان, وللمدرس الحق في قبول او رفض العذر , وحسب التعليمات.
- **Concerns or complaints should be expressed in the first instance to the module lecturer; if no resolution is forthcoming then the issue should be brought to the attention of the module coordinator (for multiple sections) who will take the concerns to the module representative meeting. Thereafter problems are dealt with by the Department Chair and if still unresolved the Dean and then ultimately the Vice President. For the final complaints, there will be a committee to review grading the final exam.**
- For more details on University regulations please visit <http://www.ju.edu.jo/rules/index.htm>

Name of Course Coordinator : Dr. Dana Al Qudah Signature: Dr. Dana Al Qudah Date: October 2021

Head of Curriculum Committee/Department: Prof. Rizik Al Sayyad- Signature: Prof. Rizik Al Sayyad-

Head of Department: Prof. Rizik Al Sayyad- - Signature: Prof. Rizik Al Sayyad-

Head of Curriculum Committee/Faculty: Prof. Saleh Al Shraiah Signature: Prof. Saleh Al Shraiah

Dean: Prof. Saleh Al Shraiah Signature: Prof. Saleh Al Shraiah