

Course Syllabus

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	
12	Other department (s) involved in teaching the course		
13	Main teaching language	English	
14	Delivery method	<input checked="" type="checkbox"/> Face to face learning <input checked="" type="checkbox"/> Blended <input type="checkbox"/> Fully - partially online	
15	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.....	
16	Issuing/Revision Date	October 2022	

17 Course Coordinator:

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18 Other instructors:

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19 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

A1) Understand the basic concepts of information technology, cutting edge technologies, careers in IT, concepts in cloud computing and project management.

A2) Understand the concepts related to communications, the internet, the web, social web and technologies.

A3) Understand numbering systems, flow charts and pseudo-codes.

A4) Understanding the concepts related Operating systems, networking, and security

A5) Define the concepts of Data, databases, and applications

B-Intellectual Skills: with ability to

B1) Distinguish between different concepts of IT technologies, cloud computing and project management.

B2) Distinguish between different numbering systems, apply, convert and usage of different numbering systems.

B3) Examine different hardware and software maintenance and support techniques.

B4) Distinguish between different operating systems, memory locations and network security.

B5) Analyze user requirements and design a program.

C-Subject Specific Skills: With ability to

C1) Deal with numbering systems (conversion, operations)

C2) Design a program using flowchart, pseudo code

C3) Use the cloud in different domains and applications.

C4) Perform basic hardware and software maintenance.

C5) Perform basic networking such as server calling and device connection.

C6) Perform basic and advanced solutions on Microsoft Excel

C7) Increase typing skills

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

21. Topic Outline and Schedule:

	Week	Topic title	Resources
Part # 1 Introduction to IT	9/10/2022- 13/10/2022	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 	Textbook – Chapter 1: Information Technology, the internet, and you
	Blended	Video---- Description of Concepts of Amazon Turk, Azure, Connectivity, Wireless revolution, Internet of things, outlook, google drive and google	Quiz #1
	16/10/2022- 20/10/2022	3. 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 	Textbook Chapter 2: The Internet, the Web, and Electronic Commerce + external material for project management
	Blended	Video---- Detailed explanation of Cloud Computing services	Assignment #1 Quiz #2
Part #2 Critical thinking and problem solving	23/10/2022 – 3/11/2022	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. 	Supplementary Materials available online.
	Blended	Video--- Numbering system conversion.	Practice Sheet

Part #3 Maintenance and support	6/11/2022 – 10/11/2022	<ul style="list-style-type: none"> • Hardware: the course should mirror the A+ maintenance style • Software: formatting OS, troubleshooting, dealing with task manger, drivers fragmentation and segmentation, control panel management 	External Materials
	Blended	Lab Visit	Practical Work Assessment
Part #4 Operating systems, networking and security	13/11/2022 – 24/11/2022	<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 	Textbook: Chapters 4, 8, & 9
	Blended #1	Lab Visit: VM setup & configuration	Worksheet
	Blended #2	Lab Visit: Network experiments	Worksheet
	Blended #3	Video--- Blockchain concepts & network security	Quiz #3
Part #5 Data, databases and applications	27/11/2022 – 15/12/2022	<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 	Textbook: Chapter 11 + External Materials
	Blended #1	Video--- Data & Database concepts	Quiz #4
	Blended #2	Video--- Excel concepts	Assignment #2
	Blended #3	Typewriting Tool	Speed Test
Part #6 Technical Documentati on	18/12/2022 – 5/1/2023	<ul style="list-style-type: none"> • System Analysis & Design • Programming & Languages • Technical Forms • Technical Documentations (Systems, Devices, Networks, etc.) 	Textbook: Chapters 12 and 13 + External Materials
	Blended	Technical forms templates, technical documentation templates	Assignment #3

22 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	1-6	15	University

23 Course Requirements

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

24 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.

25 References:

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

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.

26 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