

MODULE DESCRIPTION FORM

نموذج وصف المادة الدراسية

Module Information			
معلومات المادة الدراسية			
Module Title	Computer Principles (1)		Module Delivery
Module Type	Basic		☒ Theory ☐ Lecture ☒ Lab ☐ Tutorial ☐ Practical ☒ Seminar
Module Code	NTU102		
ECTS Credits	3		
SWL (hr/sem)	75		
Module Level	1	Semester of Delivery	
Administering Department	Accounting tech	College	TCMM
Module Leader	Inas Younis Mustafa	e-mail	ienastranslation2020@ntu.edu.iq
Module Leader's Acad. Title	Assist lecturer	Module Leader's Qualification	MSc
Module Tutor	Inas Younis Mustafa	e-mail	ienastranslation2020@ntu.edu.iq
Peer Reviewer Name	Waleed Khalid	e-mail	Waleed_khalid@ntu.edu.iq
Scientific Committee Approval Date	1/10/2024	Version Number	1.0

Relation with other Modules			
العلاقة مع المواد الدراسية الأخرى			
Prerequisite module	Nil	Semester	-
Co-requisites module		Semester	-

Module Aims, Learning Outcomes and Indicative Contents

أهداف المادة الدراسية ونتائج التعلم والمحتويات الإرشادية

Module Objectives أهداف المادة الدراسية	1 The aim of this module is to provide students with a fundamental understanding of computer principles, including the architecture, operation, and underlying technologies of computer systems. 2. The module will focus on the essential concepts of hardware and software, enabling students to comprehend the integral role of computers in IT management. 3. Students will learn about the latest advancements in computer technologies and their applications in business environments.
Module Learning Outcomes مخرجات التعلم للمادة الدراسية	1. Understand the basic concepts and terminology used in Computer Principles 2. Comprehend the fundamental principles of computer's applications, including hardware, software and network and software engineering 3. Analyze using Central processing unit (CPU) architecture and function. 4. Understand the concept of Storage devices (HDDs, SSDs, optical storage) 5. Write Individual assignments analyzing specific computer systems and technologies. 6. Write group projects involving the design and implementation of a basic computer network.

Learning and Teaching Strategies

استراتيجيات التعلم والتعليم

Strategies	7. Understanding the problem: Begin by reading and understanding the problem statement carefully and identifying key information, variables, and what is required. 8. Define the problem in Computer Principles terms: Determine how the problem can be translated into a Computer Principles framework. 9. Use appropriate computer's applications: Determine the appropriate computer's model or process that best represents the problem at hand. 10. Break down complex problems: If a problem seems complex, it should be broken down into smaller, easier-to-handle parts.
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Student Workload (SWL)

الحمل الدراسي للطالب محسوب لـ 15 أسبوعاً

Structured SWL (h/sem) الحمل الدراسي المنتظم للطالب خلال الفصل	47	Structured SWL (h/w) الحمل الدراسي المنتظم للطالب أسبوعياً	3.1
Unstructured SWL (h/sem) الحمل الدراسي غير المنتظم للطالب خلال الفصل	28	Unstructured SWL (h/w) الحمل الدراسي غير المنتظم للطالب أسبوعياً	1.8
Total SWL (h/sem)	75		

الحمل الدراسي الكلي للطالب خلال الفصل					
Module Evaluation					
تقييم المادة الدراسية					
		Time/Number	Weight (Marks)	Week Due	Relevant Learning Outcome
Formative assessment	Quizzes	3	10% (10)	5 ,8 and 10	LO #1, #2 and #10, #11
	Assignments	5	10% (10)	2,4,8,9,10	LO #3, #4 and #6, #7
	Projects / Lab.	15	10% (10)	Continuous	All
	Report	1	5% (5)	13	LO #5, #8 and #10
	Seminar	1	5% (5)	10	LO #7, #9 and #13
Summative assessment	Midterm Exam	2hr	10% (10)	7	LO #1 - #7
	Final Exam	3hr	50% (50)	16	All
Total assessment			100% (100 Marks)		

Delivery Plan (Weekly Syllabus) المنهاج الاسبوعي النظري	
	Material Covered
Week 1	Introduction to Computer Principles - Overview of the course - History of computers - Basic computer terminology - development of computer generations
Week 2	Introduction to Computer Principles - data and information - features and areas of computer use - types of computers and their classifications
Week 3	Computer Hardware The physical entity of the computer: input devices, output devices.
Week 4	Computer Hardware - Computer case: external and internal parts - types of memory - Ports - bits and bytes - Bios

Week 5	Computer software • Software entity: An overview of operating systems • application programs
Week 6	Computer software • programming languages • numbers systems • computer platform
Week 7	Your personal computer • The Factors to consider when purchasing a personal computer and its main features.
Week 8	Computer security and software licenses • Introduction to computer security • ethics of the electronic world • computer software licenses • types of licenses • intellectual property
Week 9	Electronic hacking • Types of electronic hacking and its sources • Malware
Week 10	Electronic hacking • steps to protect against hacking • computer harm to health
Week 11	Operating Systems • What are operating systems • classification of operating systems • examples of operating systems
Week 12	Windows operating system • Installation requirements • new features • desktop components and Start menu
Week 13	using the computer • task manager • Folders, files, and icons • Control Panel: Accessing the Control Panel and the categories it contains
Week 14	using the computer • Manage the printer • set the time and date

	• customize the mouse • install and remove programs
Week 15	Review • Review of key concepts covered in the course • Discussion and Q&A session • Final project presentations • Course feedback and evaluation
Week 16	Final Exam

Delivery Plan (Weekly Lab. Syllabus) المنهاج الاسبوعي للمختبر	
	Material Covered
Week 1	Lab 1: Lab Introduction and Basic Computer Operations
Week 2	Lab 2: Binary Numbers and Data Representation
Week 3	Lab 3: Exploring Computer Hardware
Week 4	Lab 4: CPU and Memory
Week 5	Lab 5: Operating Systems
Week 6	Lab 6: Introduction to C++
Week 7	Lab 7: buy the right computer: Compare and analyze
Week 8	Lab 8: Cyber security
Week 9	Lab 9: Cyber security
Week 10	Lab 10: Cyber security & Health care
Week 11	Lab 11: Installing and configuring Windows system
Week 12	Lab 12: Format the hard disk
Week 13	Lab 13: Windows cleaning and computer care
Week 14	Lab 14: Installing and configuring the printer
Week 15	Lab 15: Review and presentation
Week 16	Final Exam

Learning and Teaching Resources مصادر التعلم والتدريس		
	Text	Available in the Library?
Required Texts	Computer basics and applications, Ziad Muhammad Aboud and others, 2014.	Yes

Recommended Texts	Kevin Hare . (2022). Computer Science Principles The Foundational Concepts of Computer Science	Yes
Websites		

Grading Scheme مخطط الدرجات				
Group	Grade	التقدير	Marks %	Definition
Success Group (50 - 100)	A - Excellent	امتياز	90 - 100	Outstanding Performance
	B - Very Good	جيد جدا	80 - 89	Above average with some errors
	C - Good	جيد	70 - 79	Sound work with notable errors
	D - Satisfactory	متوسط	60 - 69	Fair but with major shortcomings
	E - Sufficient	مقبول	50 - 59	Work meets minimum criteria
Fail Group (0 – 49)	FX – Fail	راسب (قيد المعالجة)	(45-49)	More work required but credit awarded
	F – Fail	راسب	(0-44)	Considerable amount of work required
Note: Marks Decimal places above or below 0.5 will be rounded to the higher or lower full mark (for example a mark of 54.5 will be rounded to 55, whereas a mark of 54.4 will be rounded to 54. The University has a policy NOT to condone "near-pass fails" so the only adjustment to marks awarded by the original marker(s) will be the automatic rounding outlined above.				