
	Ministry of Higher Education and Scientific Research - Iraq Al-Mustaqbal University College of Engineering Department of Prosthetics and Orthotics Engineering	
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MODULE DESCRIPTOR FORM

نموذج وصف المادة الدراسية

Module Information			
معلومات المادة الدراسية			
Module Title	علم الحاسوب I		Module Delivery
Module Type	SUPPORTIVE		<input checked="" type="checkbox"/> Theory <input type="checkbox"/> Lecture <input checked="" type="checkbox"/> Lab <input type="checkbox"/> Tutorial <input type="checkbox"/> Practical <input type="checkbox"/> Seminar
Module Code			
ECTS Credits	3		
SWL (hr/sem)	75		
Module Level	1	Semester of Delivery	
Administering Department		College	
Module Leader	Hamzah Waleed Hamzah	e-mail	hamzah.waleed.hamzah@uomus.edu.iq
Module Leader's Acad. Title	Asst. Lect.	Module Leader's Qualification	MCs.
Module Tutor			
Peer Reviewer Name		e-mail	
Review Committee Approval		Version Number	1.0

Relation With Other Modules العلاقة مع المواد الدراسية الأخرى			
Prerequisite module	None	Semester	
Co-requisites module	None	Semester	
Module Aims, Learning Outcomes and Indicative Contents أهداف المادة الدراسية ونتائج التعلم والمحتويات الإرشادية			
Module Aims أهداف المادة الدراسية	<ol style="list-style-type: none"> 1. To gain the necessary understanding of the basics of computing and information technology required in personal and professional life. 2. To develop the necessary skills to solve problems using computers 3. To understand the computer hardware and software 4. To gain an understanding of the basic computer components 5. To understand the basics of networks and the internet. 		
Module Learning Outcomes مخرجات التعلم للمادة الدراسية	<ol style="list-style-type: none"> 1. To recognize the basic computer components and how they work together. 2. To recognize various input and output devices in a computer. 3. To understand different storage types in the computer. 4. To recognize various application software 5. To understand the role of the operating system in the computer. 6. To be able to use the internet for web browsing, email, etc. 7. To be able to use the Windows operating system for everyday needs. 8. To be able to use word processing and spreadsheet software. <p>To understand cloud based software such as Google Sheets, Docs, and Gmail</p>		
Indicative Contents المحتويات الإرشادية	<p>Introduction to Computers [1hrs]: In this lecture we talk about the definition of the computer, data, and information, the components of a computer and the advantages and disadvantages of using computers.</p> <p>The Components of the System Unit [2hrs]: In this lecture we introduce the system unit. We introduce the microchip. We describe the control unit and arithmetic and logic unit parts of the processor and explain the four machine cycles. Define bit and byte. and describe the various types of memory, RAM, and cache.</p> <p>Storage [2hrs]: In this lecture we introduce storage medium and devices such as hard disks, flash memories, Solid State Disks. We also introduce cloud storage.</p>		

	<p>Input and Output [2hrs]: In this lecture we describe various input and output devices in a computer system.</p> <p>The Motherboard The ports and cables [1hr]: In this lecture we introduce the motherboard function, the ports of the computer and various cables used to connect to the computer.</p> <p>Operating System and Utility Programs [2hrs]: In this lecture we describe various operating system functions. We also introduce utility programs.</p> <p>Application Software [2hrs]: In this lecture, we identify the categories of application software, and describe the characteristics of the user interface. We also identify the key features of some business programs. Finally, we discuss web applications.</p> <p>Networks [1hrs]: In this lecture we discuss the components of a communication system, we differentiate among types of networks: LANs, MANs, WANs, network architectures and network topologies.</p> <p>The Internet and the World Wide Web [2hrs]: In this lecture, we introduce the various concepts related to the Internet and the world wide web. We will describe various broadband Internet connections. We will also explain the purpose of the web browser and how to use a search provider. Finally, we describe the website types and introduce e-mail.</p>
<p style="text-align: center;">Learning and Teaching Strategies استراتيجيات التعلم والتعليم</p>	
<p>Strategies</p>	<p>The main strategy that will be adopted in delivering this module is to encourage students' participation in the exercises, while at the same time refining and expanding their critical thinking skills. This will be achieved through classes, interactive tutorials and by considering type of simple experiments involving some sampling activities that are interesting to the students. The labs are essential to teach the students how to use the Windows operating system, applications such as word and excel, and web based applications such as Google Sheets and Docs.</p>

Student Workload (SWL)

الحمل الدراسي للطالب

Structured SWL (h/sem) الحمل الدراسي المنتظم للطالب خلال الفصل	48	Structured SWL (h/w) الحمل الدراسي المنتظم للطالب أسبوعيا	3
Unstructured SWL (h/sem) الحمل الدراسي غير المنتظم للطالب خلال الفصل	27	Unstructured SWL (h/w) الحمل الدراسي غير المنتظم للطالب أسبوعيا	1
Total SWL (h/sem) الحمل الدراسي الكلي للطالب خلال الفصل	75		

Module Evaluation

تقييم المادة الدراسية

		Time/Number	Weight (Marks)	Week Due	Relevant Learning Outcome
Formative assessment	Quizzes	2	10% (5)	3, 10	All
	Assignments	2	10% (5)	Continuous	All
	Projects / Lab.	10	20% (10)	Continuous	All
	Report	0	0% (0)	-	-
Summative assessment	Midterm Exam	2hrs	60% (30)	5,12	All
	Final Exam	3hrs	50% (50)	16	All
Total assessment			100% (100 Marks)		

Delivery Plan (Weekly Syllabus)

المنهاج الأسبوعي النظري

	Material Covered
Week 1	Introduction to Computers
Week 2	The Components of the System Unit – The microchips
Week 3	The Components of the System Unit – The processor
Week 4	The Components of the System Unit – The memory and the buses
Week 5	Storage devices – Hard disk
Week 6	Storage devices – Flash memory and cloud storage
Week 7	Input and Output – Keyboard, mouse, and touch input
Week 8	Input and Output – Display (LCD, OLED), printers
Week 9	The Motherboard
Week 10	The ports and cables

Week 11	The Operating System
Week 12	The Utility Programs
Week 13	The Application Software
Week 14	Networks (LAN, MAN, WAN)
Week 15	The Internet and the World Wide Web

Delivery Plan (Weekly Lab. Syllabus) المنهاج الاسبوعي للمختبر	
	Material Covered
Week 1	Computer Hardware
Week 2	Using web browsers and email (Gmail)
Week 3	Windows operating system
Week 4	
Week 5	
Week 6	Google Sheets and Docs tutorial
Week 7	
Week 8	Microsoft Word and Excel tutorial
Week 9	
Week 10	
Week 11	Microsoft PowerPoint tutorial
Week 12	
Week 13	How to write an academic report using Microsoft Word
Week 14	
Week 15	Summary and Exercises

Learning and Teaching Resources

مصادر التعلم والتدريس

	Text	Available in the Library?
Required Texts	<p>➤ How Computers Work (Ron White)</p> <p>Discovering Computers Fundamentals, Your Interactive Guide to the Digital World (Gary B. Shelly, Misty E. Vermaat)</p>	No
Recommended Texts	<p>➤ Information Technology, An Introduction for Today's Digital World.</p> <p>Complete A+ Guide to IT Hardware and Software</p>	No
Websites		

APPENDIX:

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	مقبول بقرار	(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.				



ملاحظة: هذا النموذج تم وضعه وتقديمه من قبل مديرية ضمان الجودة في وزارة التعليم العالي والبحث العلمي