University of Fallujah
College of Information Technology
Department of Cybersecurity

MODULE DESCRIPTION FORM

نموذج وصف المادة الدراسية

Module Information معلومات المادة الدراسية			
Module Title	**Computer Systems & Applications**	**Module Delivery**	
Module Type	**Core**	☒ **Theory** ☒ **Lecture** ☒ **Lab** ☐ **Tutorial** ☐ **Practical** ☐ **Seminar**	
Module Code	**CYS104**		
ECTS Credits	**4**		
SWL (hr/sem)	**100**		
Module Level	1	**Semester of Delivery**	1
Administering Department	Dept. of Cybersecurity	**College**	College of Information Technology
Module Leader	Asst. Prof. Dr. Ahmad AlSabhany	**e-mail**	Ahmad.alsabhany@uofallujah.edu.iq
Module Leader's Acad. Title	Asst. Prof.	**Module Leader's Qualification**	PhD
Module Tutor	Lect. Basem Mohd. Saleh	**e-mail**	bassim.m.s1977@uofallujah.edu.iq
Peer Reviewer Name	Asst. Prof. Dr. Omar Salah Shareef	**e-mail**	omar.alshareef@uofallujah.edu.iq
Scientific Committee Approval Date	25-5-2026	**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 Objectives **أهداف المادة الدراسية**	1. Understand the fundamental concepts of computer systems, including computer hardware, software, and operating system components. 2. Develop practical skills in managing files, folders, and system resources within modern operating systems. 3. Use common productivity applications to create professional documents, spreadsheets, presentations, and simple databases. 4. Apply Internet, email, and cloud-based communication tools effectively for academic and professional purposes. 5. Perform fundamental command-line operations using both Windows Command Prompt and the Linux terminal. 6. Develop the practical computing skills required for subsequent courses in programming, networking, databases, and cybersecurity.
Module Learning Outcomes **مخرجات التعلم للمادة الدراسية**	1. **Describe** the fundamental components of computer systems, including hardware, software, operating systems, and storage devices. 2. **Manage** files, folders, and system resources using Windows and Linux operating systems. 3. **Produce** professional documents, spreadsheets, presentations, and simple databases using standard office productivity software. 4. **Use** Internet services, email, and cloud-based applications for communication, collaboration, and information management. 5. **Execute** basic command-line operations using Windows Command Prompt and the Linux terminal. 6. **Demonstrate** practical computer skills that support further study in programming, networking, databases, and cybersecurity.
Indicative Contents **المحتويات الإرشادية**	• Introduction to Computer Systems and Information Technology • Computer Hardware Components and Peripheral Devices • Computer Software, Operating Systems, and System Utilities • Windows Operating System Fundamentals and File Management • Linux Operating System Fundamentals and Basic Terminal Commands • Internet Technologies, Web Browsers, and Search Techniques • Email Services and Cloud Computing Applications • Microsoft Word for Document Creation and Formatting • Microsoft Excel for Data Organization, Formulas, Charts, and Analysis • Microsoft PowerPoint for Professional Presentations • Microsoft Access Fundamentals and Database Applications • File Compression, Backup, and Data Storage Technologies

	• Introduction to Windows Command Prompt (CMD) • Basic Linux Shell Commands and File System Navigation • Practical Integration of Computer Applications for Academic and Professional Work

Learning and Teaching Strategies استراتيجيات التعلم والتعليم	
Strategies **الاستراتيجيات**	This module is delivered through a combination of interactive lectures and practical laboratory sessions to develop both theoretical understanding and hands-on computer skills. Students learn by performing guided exercises using Windows and Linux operating systems, Microsoft Office applications, and command-line tools. Practical activities, demonstrations, individual assignments, and problem-solving exercises are used to reinforce learning and encourage the effective use of computer systems and applications in academic and professional environments.

Student Workload (SWL) الحمل الدراسي للطالب محسوب لـ ١٥ اسبوعا			
Structured SWL (h/sem) **الحمل الدراسي المنتظم للطالب خلال الفصل**	62	**Structured SWL (h/w)** **الحمل الدراسي المنتظم للطالب أسبوعيا**	4
Unstructured SWL (h/sem) **الحمل الدراسي غير المنتظم للطالب خلال الفصل**	38	**Unstructured SWL (h/w)** **الحمل الدراسي غير المنتظم للطالب أسبوعيا**	2
Total SWL (h/sem) **الحمل الدراسي الكلي للطالب خلال الفصل**	**50**		

Module Evaluation تقييم المادة الدراسية					
		Time/Number	**Weight (Marks)**	**Week Due**	**Relevant Learning Outcome**
Formative assessment	**Quiz**	1	10% (10)	5	LO #1, #2, #3
	Assignments	2	10% (10)	2 and 12	LO #3, #4 and #6, #7
	Quiz	1	10% (10)	12	LO #8, #9, #10
	Report	1	10% (10)	13	LO #5, #11 and #12
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 Systems, Information Technology, and Computer Applications
Week 2	Computer Hardware Components, Peripheral Devices, and Storage Technologies
Week 3	Computer Software, Operating Systems, and System Utilities
Week 4	Windows Operating System Architecture, File Systems, and Resource Management
Week 5	Linux Operating System Fundamentals, File Systems, and Open-Source Software
Week 6	Internet Technologies, Web Browsers, Search Techniques, Email, and Cloud Services
Week 7	Microsoft Office Applications: Features, Uses, and Best Practices
Week 8	Midterm Exam
Week 9	Microsoft Word: Document Design, Formatting Principles, and Professional Documentation
Week 10	Microsoft Excel: Spreadsheets, Data Organization, Formulas, and Charts
Week 11	Microsoft PowerPoint: Presentation Design and Communication Principles
Week 12	Microsoft Access: Database Concepts, Tables, Queries, Forms, and Reports
Week 13	Windows Command Prompt (CMD): Command-Line Interface Concepts and Administration
Week 14	Linux Shell Fundamentals, Basic Commands, and Terminal Environment
Week 15	**Integration of Computer Systems and Applications, Review, and Course Summary**

Delivery Plan (Weekly Lab. Syllabus) المنهاج الاسبوعي للمختبر	
	Material Covered
Week 1	Introduction to the Computer Laboratory, Windows Environment, User Accounts, and Basic Computer Operations
Week 2	Exploring Computer Hardware, Peripheral Devices, Storage Media, and System Information
Week 3	Windows File Management: Creating, Organizing, Searching, Compressing, and Managing Files and Folders
Week 4	Microsoft Word I: Creating, Editing, Formatting, and Printing Documents
Week 5	Microsoft Word II: Tables, Images, Headers, Footers, Styles, and Page Layout
Week 6	Microsoft Excel I: Worksheets, Cell Formatting, Basic Formulas, and Functions
Week 7	Microsoft Excel II: Charts, Sorting, Filtering, Conditional Formatting, and Data Analysis
Week 8	Midterm Practical Exam
Week 9	Microsoft PowerPoint: Creating Professional Presentations, Themes, Multimedia, and Slide Transitions
Week 10	Microsoft Access: Creating Databases, Tables, Relationships, Queries, Forms, and Reports
Week 11	Internet and Cloud Applications: Web Browsing, Search Techniques, Email, OneDrive/Google Drive, and Online Collaboration
Week 12	Windows Command Prompt (CMD): File System Navigation, File Management, Network Utilities, and Batch Commands
Week 13	Linux I: Installation/Virtual Machine, Terminal Navigation, Files, Directories, and Permissions
Week 14	Linux II: Shell Commands, Text Editors, File Management, Package Management, and Basic Bash Commands
Week 15	Practical Integration Exercise: Using Windows, Linux, Office Applications, and Command-Line Tools in a Comprehensive Lab Project

Learning and Teaching Resources مصادر التعلم والتدريس		
	Text	**Available in the Library?**
Required Texts	1. Peter Norton, *Introduction to Computers*, 8th Edition, McGraw-Hill Education. 2. Joan Lambert, *Microsoft Office 365 & Office 2021 Step by Step*, Microsoft Press, 2022.	Yes
Recommended Texts	3. Andrew S. Tanenbaum and Herbert Bos, *Modern Operating Systems*, 5th Edition, Pearson, 2022. 4. William E. Shotts Jr., *The Linux Command Line: A Complete Introduction*, 2nd Edition, No Starch Press, 2019.	No
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.