



MODULE DESCRIPTION FORM

Module Information			
Module Title	Computer	Module Delivery	
Module Type	Basic	<input checked="" type="checkbox"/> Theory	
Module Code	Zu-Sc-URCOM	<input type="checkbox"/> Lecture	
ECTS Credits	3	<input checked="" type="checkbox"/> Lab	
SWL (hr/sem)	75	<input type="checkbox"/> Tutorial	
Module Level	one	<input type="checkbox"/> Practical	
Administering Department	Medical Physics	Semester of Delivery	1
Module Leader	Bahaa Turki Raji	College	Science
Module Leader's Acad. Title	Assistant Lecturer	e-mail	bahaa881212@gmail.com
Module Tutor		Module Leader's Qualification	M.Sc. Degree in Communication Engineering
Peer Reviewer Name		e-mail	
Scientific Committee Approval Date		Version Number	

Relation with other Modules			
Prerequisite module	NO	Semester	-
Co-requisites module	NO	Semester	-

Module Aims, Learning Outcomes and Indicative Contents

<p>Module Objectives</p>	<p>This course aims to:</p> <ol style="list-style-type: none"> 1- Provide a brief overview of the evolution of computers. 2- Explain computer components (hardware and software), and what constitutes a computer's physical and software components. 3- Learn the essentials of Windows: from personalizing your desktop to organizing files and managing system settings through the Control Panel. Finally, we will explore how to use key Windows applications effectively. 4- Introduce Microsoft Word: We will review Microsoft Office Word, and we will learn how to edit text, use the program's professional tools, and prepare texts for presentation to other users. 5- Introduce Microsoft Excel: Data entry, data analysis tools, and the most frequently used functions, with illustrative examples. 6- Introduction to Microsoft PowerPoint: We explore essential tools and creative techniques to empower students to design professional slides. This enables them to present information clearly and showcase their academic creativity.
<p>Module Learning Outcomes</p>	<p>The student would be able to:</p> <ol style="list-style-type: none"> 1- Use window operation system user interface 2- Gain a thorough understanding of the Windows operating system, its features, and functionality. 3- Develop the ability to navigate and manage the Windows interface, MS word, MS excel, and PowerPoint efficiently. 4- Acquire skills in configuring system settings, managing files and folders, and using built-in tools and utilities. 5- Learn to create and format documents, spreadsheets, presentations, and emails effectively. 6- Understand advanced features of Microsoft Office, such as formulas and functions in Excel, collaboration tools, 7- Develop problem-solving skills specific to Windows and Microsoft software, such as diagnosing and resolving common software issues. 8- Learn to troubleshoot and debug problems related to Windows configuration, software installations, and compatibility.



Indicative Contents	This section explains the stages of computer development, basic computer principles, input and output devices, processing and storage (types), communication, memory (types), motherboard, and peripheral connection. It also explains software, operating systems (types), application programs (such as Word, Excel, PowerPoint, browsers, and other programs), security programs, and programming software.
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Learning and Teaching Strategies	
Strategies	<ol style="list-style-type: none"> 1. Deliver lectures explaining fundamental computer skills and basics. 2. Collaborative projects and activities, along with assigned homework, to reinforce understanding of the material. 3. Tests to assess student comprehension and identify areas where they may need additional support. 4. Provide guidance on textbooks, online resources, and supplementary materials to help students study more effectively.

Student Workload (SWL)			
Structured SWL (h/sem)	49	Structured SWL (h/w)	3
Unstructured SWL (h/sem)	26	Unstructured SWL (h/w)	2
Total SWL (h/sem)	75		

Module Evaluation					
		Time/Number	Weight (Marks)	Week Due	Relevant Learning Outcome
Formative assessment	Quizzes	2	5% (5)	4,12	all
	Assignments	4	10% (10)	4,7,11, and13	all
	Projects / Lab.	1	15% (15)	continuous	all
	Tutorial	1	10% (10)	continuous	all
Summative assessment	Midterm Exam	2hr	10% (10)	8	all
	Final Exam	4hr	50% (50 Marks)	16	all
Total assessment			100% (100 Marks)		



Delivery Plan (Weekly Syllabus)

	Material Covered
Week 1	Computer Fundamentals: Computer characteristics, Block Diagram (Input, Storage, Memory, Output, ALU, Control Unit, CPU), and Data Representation (Binary System).
Week 2	Memory: Types, units of measurement, RAM, ROM. Secondary Storage: HDD, Flash, Optical Disks (DVD). I/O Devices: Keyboard, Mouse, Screens, Scanner, Plotter, Printer, and latest market devices.
Week 3	Windows OS: Desktop, My Computer, managing files and folders via Windows Explorer, Control Panel, and searching for files.
Week 4	MS Word: Introduction, environment, help, creating and editing documents, saving, and text operations (formatting, alignment, and indentation).
Week 5	MS Word (Continued): Find and Replace, Bullets and Numbering, Header and Footer, and working with tables.
Week 6	MS Word (Continued): Spelling and grammar check, AutoCorrect, and Synonyms.
Week 7	MS Word (Graphics): Inserting pictures, Clipart, Shapes, Word Art, page settings and margins, printing, and Mail Merge practical application.
Week 8	Midterm Exam
Week 9	MS Excel: Environment, creating/opening/saving workbooks, cell ranges, formatting, and functions (Math, Logical, Date, Time, AutoSum).
Week 10	MS Excel (Continued): Formulas, charts and types, Chart Toolbar, and printing (Page Layout, Header and Footer tab).
Week 11	MS Excel (Continued): Data formatting and exporting from Excel.
Week 12	MS PowerPoint: Interface overview, creating new presentations, saving and opening presentations.
Week 13	MS PowerPoint: Adding/removing slides, changing Slide Layouts, choosing ready-made Templates, and arranging slides.
Week 14	MS PowerPoint (Continued): Inserting text/titles, font settings (type, size, color), alignment and paragraph formatting, principles of good presentation writing, inserting images and Shapes.
Week 15	Introduction to Digital Imaging and Computing in Medical Physics: How Computers Perceive Medical Images (Pixels and Voxels), Analog-to-Digital Conversion (ADC), Sensors in Medical Devices, DICOM Standard: The Language of Medical Communication, Medical Image Processing
Week 16	Final Exam

Delivery Plan (Weekly Lab. SyUabus)

	Material Covered
Week 1	Hardware Components: Computer characteristics, Block Diagram (Input, Storage, Memory, Output, ALU, Control Unit, CPU).
Week 2	Windows Interface: Desktop, Start, Taskbar, Icons. Differentiating between drives, folders, and files. [cite_start]Organizing desktop icons and the Taskbar.
Week 3	Start Menu & Notifications: Creating folders and files, file operations (Copy, Cut, Paste, Move, Delete), Renaming, and Search.
Week 4	File Explorer: Navigation, window controls (maximize, minimize, move), split-screen multitasking, and basic shortcuts (Alt+Tab, Ctrl+C, Ctrl+V, etc.).
Week 5	Word Processing (Word): Interface and essential functions, creating and saving documents, and page formatting (Headers, Footers, and Styles).
Week 6	Word (Continued): Text formatting (font, size, color), paragraph formatting (alignment and spacing), and Page Layout setup.
Week 7	Midterm Exam
Week 8	Word (Advanced): Creating and formatting tables, inserting images and shapes, hyperlinks, Mail Merge, and saving as PDF.
Week 9	MS Excel: Interface overview (Ribbon, Tabs, Worksheet, Status Bar), Workbook vs. Worksheet, cells/rows/columns, and data entry (text, numbers, dates).
Week10	MS Excel (Continued): Selecting cells/ranges, editing cells, Copy/Cut/Paste, AutoFill, cell formatting (font, color, borders, alignment), basic functions (SUM, AVERAGE, COUNT), and references.
Week 11	Excel (Advanced): Advanced functions (IF, VLOOKUP, HLOOKUP), creating and formatting charts, Excel tables, and saving as PDF.
Week 12	MS PowerPoint: Interface, creating presentations (choosing templates, adding slides, typing content), and modifying slide layouts.
Week 13	PowerPoint (Continued): Adjusting pictures/graphics (crop, size, effects), navigation and slideshow modes, and saving as PDF.
Week 14	PowerPoint (Advanced): Inserting text/titles, font settings, alignment, presentation writing principles, inserting images from device, and Shapes.
Week 15	Final Exam

Learning and Teaching Resources

	Text	Available in the Library?
Required Texts		
Recommended Texts	<p>Wallace Wang, Absolute Beginners Guide to Computing, Apress, 2016.</p> <p>Michael Miller, Absolute Beginner's Guide to Computer Basics, Que, 2022.</p> <p>Chris Ewin, Carrie Ewin, Cheryl Ewin, Computers for Seniors: Email, Internet, Photos, and More in 14 Easy Lessons, William Pollock, 2017.</p>	Available online
Websites	https://www.geeksforgeeks.org/computer-science-fundamentals/computer-fundamentals-tutorial//	

Grading Scheme

Group	Grade	Marks %	Definition
Success Group (50 - 100)	A - Excellent	90 - 100	Outstanding Performance
	B - Very Good	80 - 89	Above average with some errors
	C - Good	70 - 79	Sound work with notable errors
	D - Satisfactory	60 - 69	Fair but with major shortcomings
	E - Sufficient	50 - 59	Work meets minimum criteria
Fail Group (0 - 49)	FX – Fail	(45-49)	More work required but credit awarded
	F – Fail	(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.

Name of the Instructor:

Bahaa Turki Raji

