

## Learning and Teaching Strategies

### استراتيجيات التعلم والتعليم

<b>Strategies</b>	The primary approach for delivering this module will focus on fostering active student engagement in exercises, while simultaneously enhancing their critical thinking abilities. This will be accomplished through a combination of classroom and laboratory sessions, interactive tutorials, and the incorporation of captivating sampling activities to facilitate hands-on learning experiences for the students.
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## Student Workload (SWL)

### الحمل الدراسي للطالب محسوب لـ ١٥ أسبوعا

<b>Structured SWL (h/sem)</b> الحمل الدراسي المنتظم للطالب خلال الفصل	77	<b>Structured SWL (h/w)</b> الحمل الدراسي المنتظم للطالب أسبوعيا	4
<b>Unstructured SWL (h/sem)</b> الحمل الدراسي غير المنتظم للطالب خلال الفصل	98	<b>Unstructured SWL (h/w)</b> الحمل الدراسي غير المنتظم للطالب أسبوعيا	5
<b>Total SWL (h/sem)</b> الحمل الدراسي الكلي للطالب خلال الفصل	175		

## Module Evaluation

### تقييم المادة الدراسية

		Time/Number	Weight (Marks)	Week Due	Relevant Learning Outcome
<b>Formative assessment</b>	<b>Quizzes</b>	2	10% (10)	5 and 10	LO #1, #2 and #10, #11
	<b>Assignments</b>	2	10% (10)	2 and 12	LO #3, #4 and #6, #7
	<b>Projects / Lab.</b>	1	10% (10)	Continuous	All

	<b>Report</b>	1	10% (10)	13	LO #5, #8 and #10
<b>Summative assessment</b>	<b>Midterm Exam</b>	2hr	10% (10)	7	LO #1 - #7
	<b>Final Exam</b>	3hr	50% (50)	16	All
<b>Total assessment</b>			100% (100 Marks)		

## Delivery Plan (Weekly Syllabus)

### المنهاج الاسبوعي النظري

	<b>Material Covered</b>
<b>Week 1</b>	<ul style="list-style-type: none"> <li>✓</li> <li>• Identify the major components of personal computers.</li> <li>• Identify the major components of the system unit.</li> <li>• Identify the various types of storage devices used in personal computers.</li> <li>• Identify personal computer connection methods</li> <li>•</li> </ul>
<b>Week 2</b>	<ul style="list-style-type: none"> <li>• Identify the major personal computer operating systems.</li> <li>• Identify the primary components of the Windows user interface.</li> <li>• Identify the primary tools and functions used in Windows file system management.</li> <li>• Identify Windows system management tools.</li> </ul>
<b>Week 3</b>	<ul style="list-style-type: none"> <li>• Identify common hardware and software tools used by professional personal computer technicians.</li> <li>• Identify the best practices for PC technicians to follow to promote electrical safety.</li> <li>• Identify the best practices for PC technicians to follow to promote environmental safety and proper handling of materials.</li> <li>• Identify and apply the general preventative maintenance best practices that PC technicians should employ.</li> <li>• Identify the general diagnostics and troubleshooting best practices that PC technicians should employ.</li> <li>• Identify best practices for PC technicians to use to communicate appropriately with clients and colleagues and conduct business in a professional manner</li> </ul>
<b>Week 4</b>	<ul style="list-style-type: none"> <li>• Install and configure display devices.</li> <li>• Install and configure input devices.</li> <li>• Install and configure adapter cards.</li> </ul>

	<ul style="list-style-type: none"> <li>• Install multimedia devices</li> </ul>
<b>Week 5</b>	<ul style="list-style-type: none"> <li>• Select, install, and configure storage devices.</li> <li>• Install and configure power supplies.</li> <li>• Install and configure memory.</li> <li>• Install and configure CPUs.</li> <li>• Install and configure system boards.</li> </ul>
<b>Week 6</b>	<ul style="list-style-type: none"> <li>• Test and troubleshoot display devices.</li> <li>• Maintain and troubleshoot input devices.</li> <li>• Test and troubleshoot adapter cards.</li> <li>• Troubleshoot multimedia devices.</li> <li>• Troubleshoot storage devices</li> </ul>
<b>Week 7</b>	<ul style="list-style-type: none"> <li>• Test and troubleshoot power supplies.</li> <li>• Test and troubleshoot memory.</li> <li>• Test and troubleshoot CPUs.</li> <li>• Test and troubleshoot system boards</li> </ul>
<b>Week 8</b>	Mid-term Exam
<b>Week 9</b>	<ul style="list-style-type: none"> <li>• Install Microsoft Windows.</li> <li>• Upgrade Windows from a given version to a later version.</li> <li>• Add devices to an installation of Microsoft Windows.</li> <li>• Optimize an installation of Microsoft Windows</li> </ul>
<b>Week 10</b>	<ul style="list-style-type: none"> <li>• Identify Windows operating system utilities to use in maintenance and troubleshooting.</li> <li>• Perform backups.</li> <li>• Troubleshoot Windows.</li> <li>• Recover a damaged installation of Windows</li> </ul>
<b>Week 11</b>	<ul style="list-style-type: none"> <li>• Identify fundamental concepts of computer networks.</li> <li>• Identify network communications technologies.</li> <li>• Identify network connectivity technologies.</li> <li>• Identify Internet technologies</li> </ul>
<b>Week 12</b>	<ul style="list-style-type: none"> <li>• Create network connections.</li> <li>• Install and configure web browsers.</li> <li>• Maintain and troubleshoot network connections.</li> <li>• Identify components that are specialized for laptops and portable computing devices.</li> </ul>
<b>Week 13</b>	<ul style="list-style-type: none"> <li>• Install and configure laptops and portable computing devices.</li> <li>• Maintain and troubleshoot laptops and portable computing devices.</li> <li>• Identify major types of printer and scanner technologies</li> </ul>
<b>Week 14</b>	<ul style="list-style-type: none"> <li>• Install and configure laptops and portable computing devices.</li> <li>• Maintain and troubleshoot laptops and portable computing devices.</li> <li>• Identify major types of printer and scanner technologies</li> </ul>

<b>Week 15</b>	<ul style="list-style-type: none"> <li>• Identify the technical components of printers and scanners.</li> <li>• Identify printing and scanning processes.</li> <li>• Install and configure printers and scanners.</li> <li>• Maintain and troubleshoot printers and scanners</li> </ul>
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<p><b>Delivery Plan (Weekly Lab. Syllabus)</b></p> <p>المنهاج الاسبوعي للمختبر</p>
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	<b>Material Covered</b>
<b>Week 1</b>	<ol style="list-style-type: none"> <li>1. Operating System: <ul style="list-style-type: none"> <li>• Familiarization with the chosen operating system</li> <li>• Navigating through the desktop, taskbar, and start menu</li> </ul> </li> <li>2. File Management: <ul style="list-style-type: none"> <li>• Creating, renaming, copying, moving, and deleting files and folders</li> <li>• Sorting and organizing files based on different criteria</li> </ul> </li> <li>3. Utilities: <ul style="list-style-type: none"> <li>• Exploring system utilities for maintenance tasks</li> <li>• Performing basic optimization tasks for computer performance</li> </ul> </li> <li>4. Print Management: <ul style="list-style-type: none"> <li>• Setting up and configuring printers</li> <li>• Printing documents and adjusting print settings</li> </ul> </li> </ol>
<b>Week 2</b>	<ol style="list-style-type: none"> <li>1. Using the Application: <ul style="list-style-type: none"> <li>• Opening the word processing application</li> <li>• Exploring the user interface and menus</li> </ul> </li> <li>2. Document Creation: <ul style="list-style-type: none"> <li>• Creating and saving a new document</li> <li>• Opening an existing document</li> </ul> </li> <li>3. Formatting: <ul style="list-style-type: none"> <li>• Applying font styles, sizes, and colors</li> <li>• Adjusting paragraph alignment</li> <li>• Adding bullet points or numbering</li> <li>• Applying basic text formatting (bold, italic, underline)</li> </ul> </li> </ol>
<b>Week 3</b>	<ol style="list-style-type: none"> <li>1. Objects: <ul style="list-style-type: none"> <li>• Inserting and formatting images and shapes</li> <li>• Adjusting object size and position</li> <li>• Applying borders and shading</li> </ul> </li> <li>2. Mail Merge: <ul style="list-style-type: none"> <li>• Creating a data source with recipient information</li> <li>• Designing a template with placeholders</li> <li>• Performing a mail merge to generate personalized documents</li> <li>• Previewing and editing merged documents</li> </ul> </li> <li>3. Prepare Outputs: <ul style="list-style-type: none"> <li>• Formatting documents for printing</li> <li>• Setting up headers, footers, and page numbers</li> <li>• Adding tables of contents or indexes</li> <li>• Creating PDF or electronic document formats</li> </ul> </li> </ol>
<b>Week 4</b>	<ol style="list-style-type: none"> <li>1. Referencing: <ul style="list-style-type: none"> <li>• Adding citations and creating a bibliography</li> <li>• Inserting footnotes or endnotes</li> </ul> </li> <li>2. Enhancing Productivity: <ul style="list-style-type: none"> <li>• Using shortcuts and keyboard commands for faster editing</li> <li>• Customizing the user interface and toolbar</li> </ul> </li> </ol>

	<ol style="list-style-type: none"> <li>3. Collaborative Editing: <ul style="list-style-type: none"> <li>• Enabling track changes and reviewing document revisions</li> <li>• Inserting comments and resolving conflicts</li> </ul> </li> </ol>
<b>Week 5</b>	<ol style="list-style-type: none"> <li>1. Using the Application: <ul style="list-style-type: none"> <li>• Navigating the spreadsheet application</li> <li>• Exploring different toolbars and options</li> </ul> </li> <li>2. Cells: <ul style="list-style-type: none"> <li>• Entering and formatting data in cells</li> <li>• Adjusting cell alignment and text wrapping</li> </ul> </li> <li>3. Managing Worksheets: <ul style="list-style-type: none"> <li>• Creating, renaming, and deleting worksheets</li> <li>• Moving and copying worksheets</li> </ul> </li> <li>4. Formulas and Functions: <ul style="list-style-type: none"> <li>• Writing basic formulas for calculations</li> <li>• Using common functions (e.g., sum, average, count)</li> <li>• Referencing cells in formulas</li> </ul> </li> </ol>
<b>Week 6</b>	<ol style="list-style-type: none"> <li>1. Formatting: <ul style="list-style-type: none"> <li>• Formatting cell content</li> <li>• Applying conditional formatting</li> </ul> </li> <li>2. Charts: <ul style="list-style-type: none"> <li>• Creating charts</li> <li>• Customizing chart elements</li> </ul> </li> <li>3. Prepare Outputs: <ul style="list-style-type: none"> <li>• Setting up print areas</li> <li>• Saving and sharing spreadsheets</li> </ul> </li> <li>4. Analysis: <ul style="list-style-type: none"> <li>• Using functions for data analysis</li> <li>• Sorting and filtering data</li> </ul> </li> </ol>
<b>Week 7</b>	<ol style="list-style-type: none"> <li>1. Validating and Auditing: <ul style="list-style-type: none"> <li>• Setting data validation rules</li> <li>• Auditing formulas for errors</li> </ul> </li> <li>2. Enhancing Productivity: <ul style="list-style-type: none"> <li>• Using shortcuts for efficient navigation</li> <li>• Utilizing autofill and templates</li> </ul> </li> <li>3. Collaborative Editing: <ul style="list-style-type: none"> <li>• Tracking changes by multiple users</li> <li>• Inserting comments</li> </ul> </li> </ol>
<b>Week8</b>	Lab Exam
<b>Week9</b>	<ol style="list-style-type: none"> <li>1. Using the Application: <ul style="list-style-type: none"> <li>• Navigating the presentation application</li> <li>• Exploring different toolbars and options</li> </ul> </li> <li>2. Developing a Presentation: <ul style="list-style-type: none"> <li>• Creating slides and selecting layouts</li> <li>• Adding and arranging content (text, images, shapes)</li> <li>• Applying themes and customizing backgrounds</li> </ul> </li> <li>3. Text: <ul style="list-style-type: none"> <li>• Formatting text (font, size, color)</li> <li>• Aligning and spacing text on slides</li> </ul> </li> <li>4. Charts: <ul style="list-style-type: none"> <li>• Inserting and formatting charts</li> <li>• Adding labels and titles to charts</li> </ul> </li> </ol>
<b>Week10</b>	<ol style="list-style-type: none"> <li>1. Graphical Objects: <ul style="list-style-type: none"> <li>• Inserting and manipulating graphical objects</li> <li>• Applying effects and styles to graphics</li> <li>• Arranging and aligning graphical objects on slides</li> </ul> </li> </ol>

	<ol style="list-style-type: none"> <li>2. Prepare Outputs: <ul style="list-style-type: none"> <li>• Setting up slide layouts and design elements</li> <li>• Configuring slide transitions and animations</li> </ul> </li> <li>3. Presentation Planning: <ul style="list-style-type: none"> <li>• Outlining the structure and content of the presentation</li> <li>• Determining key messages and visuals for each slide</li> </ul> </li> <li>4. Slide Masters and Templates: <ul style="list-style-type: none"> <li>• Modifying slide masters for consistent design</li> <li>• Creating and applying slide templates</li> </ul> </li> </ol>
<b>Week11</b>	<ol style="list-style-type: none"> <li>1. Multimedia: <ul style="list-style-type: none"> <li>• Inserting and managing multimedia elements (videos, audio, animations)</li> <li>• Configuring playback settings for multimedia</li> <li>• Syncing multimedia with slide transitions</li> </ul> </li> <li>2. Enhancing Productivity: <ul style="list-style-type: none"> <li>• Utilizing shortcuts and productivity features</li> <li>• Using slide layouts and templates</li> <li>• Applying design themes for visual appeal</li> </ul> </li> <li>3. Managing Presentations: <ul style="list-style-type: none"> <li>• Organizing and managing slides</li> <li>• Rearranging slide order</li> <li>• Configuring slide show settings</li> </ul> </li> </ol>
<b>Week12</b>	<ol style="list-style-type: none"> <li>1. Web Browsing Concepts: <ul style="list-style-type: none"> <li>• Understanding the basics of web browsing</li> <li>• Exploring different web browsers and their features</li> <li>• Learning about search engines and their functionalities</li> </ul> </li> <li>2. Web Browsing: <ul style="list-style-type: none"> <li>• Opening a web browser and navigating to websites</li> <li>• Using bookmarks and favourites to save and access web pages</li> <li>• Exploring tabs and managing multiple web pages</li> </ul> </li> </ol>
<b>Week13</b>	<ol style="list-style-type: none"> <li>1. Web-Based Information: <ul style="list-style-type: none"> <li>• Searching and accessing information from websites</li> <li>• Evaluating online source reliability</li> <li>• Bookmarking useful websites</li> </ul> </li> <li>2. Communication Concepts: <ul style="list-style-type: none"> <li>• Understanding online communication forms</li> <li>• Practicing netiquette and online etiquette</li> <li>• Recognizing online communication risks</li> </ul> </li> <li>3. Using E-mail: <ul style="list-style-type: none"> <li>• Composing and sending emails</li> <li>• Managing email folders</li> <li>• Attaching files and formatting emails</li> </ul> </li> </ol>
<b>Week14</b>	<ol style="list-style-type: none"> <li>1. Using the Application: <ul style="list-style-type: none"> <li>• Opening and navigating the Visio application</li> <li>• Exploring the user interface and toolbars</li> <li>• Familiarizing with various Visio features and options</li> </ul> </li> <li>2. Creating Technical Layouts: <ul style="list-style-type: none"> <li>• Creating and arranging shapes on a drawing canvas</li> <li>• Adding connectors and lines to create flowcharts or diagrams</li> </ul> </li> </ol> <p>Applying formatting and styles to enhance the visual appearance</p>
<b>Week15</b>	<ol style="list-style-type: none"> <li>1. Exploring Advanced Diagrams: <ul style="list-style-type: none"> <li>• Creating complex diagrams with advanced shapes and connectors</li> <li>• Using templates and stencils for specific diagram types</li> <li>• Incorporating advanced features like layers and callouts</li> </ul> </li> <li>2. Diagramming and Data: <ul style="list-style-type: none"> <li>• Importing and linking external data to create data-driven diagrams</li> </ul> </li> </ol>

	<ul style="list-style-type: none"> <li>• Customizing data visuals and applying data graphics</li> <li>• Creating organizational charts or network diagrams with data connectivity</li> </ul> <p>3. Advanced Custom Shape Design:</p> <ul style="list-style-type: none"> <li>• Creating and modifying custom shapes using shape creation tools</li> <li>• Enhancing existing shapes to meet specific requirements</li> <li>• Utilizing shape behaviours and metadata for enhanced functionality</li> </ul>
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## Learning and Teaching Resources

### مصادر التعلم والتدريس

	Text	Available in the Library?
Required Texts	<b>CompTIA A+ Certification: A Comprehensive Approach</b> <b>for all 2009 Exam Objectives</b>	
Recommended Texts		
Websites	<a href="https://www.microsoft.com">https://www.microsoft.com</a>	

## Grading Scheme

### مخطط الدرجات

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