

Module (Course Syllabus) Catalogue

2022-2023

College/ Institute	Mergasor technical institute	
Department	Business administration department	
Module Name	Computer advanced	
Module Code	COA304	
Degree	Technical Diploma <input checked="" type="checkbox"/> Bachler <input type="checkbox"/> High Diploma <input type="checkbox"/> Master <input type="checkbox"/> PhD <input type="checkbox"/>	
Semester	Third semester	
Qualification	Software engineering	
Scientific Title	Assist lecturer	
ECTS (Credits)	4	
Module type	Prerequisite <input type="checkbox"/> Core <input type="checkbox"/> Assist. <input checked="" type="checkbox"/>	
Weekly hours	3 Hours	
Weekly hours (Theory)	(0)hr Class	()Total hrs Workload
Weekly hours (Practical)	(3)hr Class	(100)Total hrs Workload
Number of Weeks	16	
Lecturer (Theory)	Karez Abdulwahhab Hamad	
E-Mail & Mobile NO.	karez.hamad@epu.edu.iq & 0750 4837381	
Lecturer (Practical)	Karez Abdulwahhab Hamad	
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Websites	https://epu.edu.iq/	

Course Book

<p>Course Description</p>	<p>The primary purpose of Advanced Computer Skills is to train individuals who have completed basic computer literacy to an advanced level. Learners can then transfer data between applications and apply various functions and formulas.</p> <p>Advanced computer skills include full use of the Internet, word processing, spreadsheets, databases and websites. It may also include advanced knowledge of programming and website design.</p>
<p>Course objectives</p>	<ul style="list-style-type: none"> • Understand the computer architecture. • Functions of the hardware components commonly found inside the system unit. • Describe how new peripheral devices or other hardware can be added to a PC. • Describe the technical configuration of a computer. • Describing how to search for a specific software and installing software. • Describing the differences between hardware & software in details. • Explaining main types of computer software such as system software, application software, open source & proprietary software. • Learning students to understand the common issues related to the computer and mobile operating systems. • Learning students what is data communication and networking (techniques, channels and devices)? • Introduce the fundamentals of computing devices and reinforce computer vocabulary, particularly with respect to personal use of computer hardware and software, the Internet, networking and security issues. • Provide hands-on use of internet (Searching, emailing, etc.) and Microsoft Office Excel. • Understand the term computer virus, virus types, and signs of an infected computer by viruses. • Ways for being away from viruses and worms.
<p>Student's obligation</p>	<ul style="list-style-type: none"> • Student attendance in the class and exams. Attendance is required and will be taken at the beginning of each class. If a student miss a class, it is his/her responsibility to contact me to get his/her assignments. • Students are required to attend class activities.

	<ul style="list-style-type: none"> • Students should take their homework properly and submit home works to the course module. • Preparing a report and Present it. • Students are required to do a project after learning MS office Excel. • Students should be prepare for taking quizzes for the previous lecture. 																																	
Required Learning Materials	<p>Required texts</p> <ul style="list-style-type: none"> • P.K Sinha &Priti Sinha, Computer Fundamentals, 6th edition, BPB Publications. • ECDL MS Excel. 																																	
Evaluation	<table border="1"> <thead> <tr> <th>Task</th> <th>Weight (Marks)</th> <th>Due Week</th> <th>Relevant Learning Outcome</th> </tr> </thead> <tbody> <tr> <td>Paper Review</td> <td></td> <td></td> <td></td> </tr> <tr> <td rowspan="5">A s s i g n m e n t s</td> <td>Homework</td> <td>4</td> <td>4 to 12</td> <td>Help students to get in deeper understand what has been discussed in the previous lecture</td> </tr> <tr> <td>Class Activity</td> <td>4</td> <td>1 to 15</td> <td>This leads students to carefully focus on the lectures provides by instructor</td> </tr> <tr> <td>Report</td> <td>6</td> <td>3</td> <td>Helps students for searching and collecting worth information on internet.</td> </tr> <tr> <td>Seminar</td> <td>6</td> <td>4 to 14</td> <td>Help Students becoming good public speakers.</td> </tr> <tr> <td>Essay</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Project</td> <td>10</td> <td>10 to 15</td> <td>This assessment helps students to keep in touch with the teacher for what has been discussed in the previous lectures and helps students search and learn</td> </tr> </tbody> </table>	Task	Weight (Marks)	Due Week	Relevant Learning Outcome	Paper Review				A s s i g n m e n t s	Homework	4	4 to 12	Help students to get in deeper understand what has been discussed in the previous lecture	Class Activity	4	1 to 15	This leads students to carefully focus on the lectures provides by instructor	Report	6	3	Helps students for searching and collecting worth information on internet.	Seminar	6	4 to 14	Help Students becoming good public speakers.	Essay				Project	10	10 to 15	This assessment helps students to keep in touch with the teacher for what has been discussed in the previous lectures and helps students search and learn
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				themselves for the new applications and new options or features within any application
	Quiz	5	1 to 15	Became familiar with final and mid-term exam questions.
	Lab.			
	Midterm Exam (Theory and Practical)	25	7	
	Final Exam Practical	15		
	Final Exam Theory	25		
	Total	100		
Specific learning outcome:	<p>Upon completion of this course:</p> <p>Upon completion of this course, the student will be able to apply technical knowledge and perform specific technical skills, including:</p> <p>Describe the usage of computer components and fixing common problem related to the computer hardware and understand why computers are very important in most fields.</p> <p>Student will develop a vocabulary of key terms related to the computer network, computer virus and to software program menus and Microsoft office Excel.</p>			
Course References:	ECDL/ICDL (European/International Certificate of Digital Literacy) MS Office Excel			
Course topics (Theory) and (Practical)	Week	Learning Outcome		
<ul style="list-style-type: none"> Course module description Introduction to E-mail Lecture revision (What discussed) 	W1	<p>What is E-mail?</p> <p>Choosing an email provider.</p> <p>Setting up your account.</p>		

		<p>Sign up to Gmail.</p> <p>Writing emails.</p> <p>Parts of an email.</p> <p>Drafts, Inbox and deleted messages.</p> <p>Privacy, viruses and spam.</p> <p>Chatting.</p>
<ul style="list-style-type: none"> • Previous lecture revision. • Microsoft office Excel • Lecture revision 	W2	<ul style="list-style-type: none"> • Open, close a spreadsheet application. Open, close spreadsheet(s). • Create a new spreadsheet based on default template, other available template locally or online. • Save a spreadsheet to a location on a local, online drive. Save a spreadsheet under another name to a location on a local, online drive. • Save a spreadsheet as another file type like: text file, pdf, csv, software specific file extension. • Switch between open spreadsheets.
<ul style="list-style-type: none"> • Previous lecture revision. • Microsoft office Excel (Cont...) • Lecture revision 	W3	<ul style="list-style-type: none"> • Understand that a cell in a worksheet should contain only one element of data, for example, quantity in one cell, description in adjacent cell. • Recognise good practice in creating lists: avoid blank rows and columns in the main body of list, ensure cells bordering list are blank. • Enter a number, date, text in a cell. • Select a cell, range of adjacent cells, range of non-adjacent cells, entire worksheet.
<ul style="list-style-type: none"> • Previous lecture revision. • Students' presentations+ feedback. • Microsoft office Excel (Cont...) • Lecture revision 	W4	<p>File & Home Menu</p> <p>(Excel Options, Save As options, Fonts, Alignment, Number, styles, Cells and Editing).</p>

<ul style="list-style-type: none"> • Previous lecture revision. • Students' presentations+ feedback. • Computer Software • Lecture revision 	W5	<p>What are main differences between software & hardware?</p> <p>What is computer software?</p> <p>Types of software (System, application, Open source & Proprietary)</p>
<ul style="list-style-type: none"> • Previous lecture revision. • Students' presentations+ feedback • Computer Software (Cont...) • Lecture revision 	W6	<p>Examples of system software</p> <p>Such as (operating systems, compiler, loader and interpreter)</p> <p>How a computer starts working?</p> <p>Examples of Application software (Word processors, Spreadsheets, Presentation, Database systems).</p> <p>Relationship among OS, applications and data files.</p>
Mid-term exam	W7	-
<ul style="list-style-type: none"> • Previous lecture revision. • Students' presentations+ feedback • Microsoft office Excel • Lecture revision 	W8	<p>Create formulas using cell references and arithmetic operators (addition, subtraction, multiplication, division).</p>
<ul style="list-style-type: none"> • Previous lecture revision. • Students' presentations+ feedback • Microsoft office Excel (Count...) • Lecture revision 	W9	<p>Insert & Page layout</p> <p>(Tables, Illustrations, Charts, Links, Text, Themes, Page setup, Sheet options)</p>
<ul style="list-style-type: none"> • Previous lecture revision. • Students' presentations+ feedback • Computer Viruses & Anti-Virus Software • Lecture revision 	W10	<p>What is Computer Virus?</p> <p>Types of Computer Virus.</p> <p>Signs of an infected computer by viruses.</p> <p>What is Anti-virus software?</p> <p>Well known Anti-virus software.</p>

		How to protect your computer?
<ul style="list-style-type: none"> • Previous lecture revision. • Students' presentations+ feedback • Microsoft office Excel (Count...) • Lecture revision 	W11	<p>Formulas Menu</p> <p>Functions such as (SUM, AVERAGE, COUNT, COUNT NUMBERS, MAX, MIN, IF AND SUMIF).</p>
<ul style="list-style-type: none"> • Previous lecture revision. • Students' presentations+ feedback • Microsoft office Excel (Count...) • Lecture revision 	W12	<p>Formulas Menu</p> <p>Math functions, Logical Functions, Text Functions, Date & time Functions, Lookup & Reference Functions and much more as possible.</p>
<ul style="list-style-type: none"> • Previous lecture revision. • Students' presentations+ feedback • Computer Network and Internet Services • Lecture revision 	W13	<p>Network and Typical types of network.</p> <p>Web Basics.</p> <p>Web address and its parts.</p> <p>Web Browsers.</p> <p>Cookies.</p> <p>Internet Services.</p> <p>Internet Protocols.</p>
<ul style="list-style-type: none"> • Previous lecture revision. • Number Systems & Computer Arithmetic • Lecture revision 	W14	Decimal & Binary & Octal & Hexadecimal Number systems with Conversions and Arithmetic operations.
Preparation	W15	
Final Exam	W16	

Questions Example Design

1. *Compositional:*

What are differences between Website Vs Web browser?

Answer:

A Web site contains a collection of related information organized and formatted so it can be accessed using software called a browser. Example of a website (www.amazon.com).

Web browser is client software that displays Web page elements and handles links between pages. An example of web browser like Google chrome.

2. True or false type of exams:

Trojan Horse virus is designed to cause slowness in a network?

The answer is false, Worms are designed to cause slowness in a network.

3. Multiple choices:

Which of the following file extension is a sound file?

- a. wav
- b. rm
- c. mov
- d. ppt
- e. rtf

3. Practical Questions:

Create the following table in MS Excel with the same format and consider the following demands:

- 1- Enter the following excel data as a table.
- 2- Use the \$ sign where needs as appears in the table.
- 3- Use icon sets for total columns.
- 4- Using Conditional formatting highlight product Qty where greater than 29.
- 5- Amt column is the multiplication of Qty with Cost.
- 6- Total column is the summation of (Amt & Tax) columns.
- 7- Find minimum product cost.
- 8- Find Maximum product cost.
- 9- Find Average products cost.
- 10- Counting number of costs that greater than the average product cost using countif formula.
- 11- Find tax for Stapler product using Vlookup function.

A sample of School Product Sales

No	Product Name	Qty	Cost	Amt	Tax	Total
1	Brushes	26	\$ 2.50	\$ 65.00	\$ 0.23	▼ \$ 65.23
2	Calclater	25	\$ 6.00	\$ 150.00	\$ 1.20	▬ \$ 151.20
3	Glue	29	\$ 5.00	\$ 145.00	\$ 3.50	▬ \$ 148.50
4	Notebooks	27	\$ 8.00	\$ 216.00	\$ 4.00	▲ \$ 220.00
5	Paper	30	\$ 1.00	\$ 30.00	\$ 0.20	▼ \$ 30.20
6	Pen	23	\$ 1.30	\$ 29.90	\$ 0.45	▼ \$ 30.35
7	Pencile	32	\$ 1.20	\$ 38.40	\$ 0.78	▼ \$ 39.18
8	Ruler	28	\$ 1.75	\$ 49.00	\$ 0.65	▼ \$ 49.65
9	Scotch tape	21	\$ 2.00	\$ 42.00	\$ 0.10	▼ \$ 42.10
10	Staplar	35	\$ 3.50	\$ 122.50	\$ 2.30	▬ \$ 124.80
Minimum Cost			\$ 1			
Maximum Cost			\$ 8			
Average Cost			\$ 3.23			
Counting Cost greater than average cost			4			
Tax for staplar			\$ 2.30			

Extra notes: