Module (Computer Essentials) Catalogue

2022-2023

College/ Institute	Erbil Technology College	
Department	Survey and Road Construction	
Module Name	Computer Essentials/1	
Module Code	COE103	
Degree	Technical Diploma ■ Bachelor ☐ High Diploma ☐ Master ☐ PhD ☐	
Semester	1	
Qualification	MSc.	
Scientific Title	Assistant Lecturer	
ECTS (Credits)	4	
Module type	Prerequisite ☐ Core ■ Assist. ☐	
Weekly hours	3 Hrs.	
Weekly hours (Theory)	( )Hrs. Class	( )Total hrs. Workload
Weekly hours (Practical)	(3)Hrs. Class	(109)Total hrs. Workload
Number of Weeks	16	
Lecturer (Theory)	Shaida Jamal Fathullah	
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Lecturer (Practical)	Shaida Jamal Fathullah	
E-Mail & Mobile NO.	Shaida.fathullah@epu.edu.iq	
Websites		

Course Book

Course Description	This course is one of the main courses for 1st stage students in road construction Computers and computerized devices have become an integral part of society. In fact, many people use them in school, home, and the workplace. It has become imperative to know basic computer skills to survive in the world. In institute, many students acquire basic computer skills that equip them with the knowledge to operate a computer, such as sending emails, conducting Internet research, creating word processing documents and creating presentations. Word processing programs offer a variety of features that may be useful to students, depending on the course. Students also learn other programs, such as PowerPoint, to create slides that will accompany oral presentations and speeches. Students will learn how to create and manage Word documents, organize information in tables, perform calculations on data, create graphs and charts, organize email Inbox, and manage email automatically. Today, employers across most industries and fields expect candidates to have Microsoft Office skills, as it is the most universally utilized software in business. Having these skills, even at a basic level, will help with job prospects and increase the chance to be considered for most roles.
Course objectives	**The objective of this course is to introduce Technical Road Department students;** Give student's in-depth understanding of why computers are essential components in business, education and society. 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 mobile computing. Provide hands-on use of Microsoft Office applications Word, Excel, Access and PowerPoint. Completion of the assignments will result in MS Office applications knowledge and skills. Provide foundational or "computer literacy" curriculum that prepares students for life-long learning of computer concepts and skills Recognize when to use each of the Microsoft Office programs to create professional and academic documents.

	Use Microsoft Office programs to create personal, academic and business documents following current professional and/or industry standards.	
Student's obligation	Student should attend lectures (theory part) and practicing in computer laboratories. 1- Student should attend exams during the course. 2- Home works 3- Quizzes 4- Assignments 5- Teamwork group and projects.	
Required Learning Materials	1. Lecture notes will be handled to the students at the beginning of each part to facilitate easier understanding of books and also to read references. 2. Power point presentation for parts of the course as required. 3. White board will be used to explain program commands, draw sketches and solve problems in the lab.	

	Task		Weight (Marks)	Due Week	Relevant Learning Outcome
Evaluation	Paper Review				
	Assignments	Homework	10%		
		Class Activity	2%		
		Report	8%		
		Seminar	8%		
		Essay			
		Project			
	Quiz		8%		
	Lab.				
	Midterm Exam		24%		
	Final Exam		40%		
	Total		100%		

Specific learning outcome:	1- Identify hardware components of a personal computer system 2- List major input and output devices 3- Explain the functions of processing, memory, storage and communication devices. 4- Realize the significance of each hardware component in processing information 5- Identify general trends in the development of the different hardware

		components of a computer. 6- General student knowledge (typing ability, Excel, Power point, Data analysis, etc.
Course References:	1. **Joan Lambert and Curtis Frye, "Microsoft Office 2016 Step by Step" Microsoft Press,2015** 2. **Joan Lambert and Joyce Cox "Microsoft Word 2013 Step by Step"** 3. **Joyce Cox and Joan Lambert "Microsoft PowerPoint 2013 Step by Step"** 4. **Curtis D. Frye "Microsoft Excel 2013 Step by Step"America: Addison Wesly.**	

Course topics (Theory)	Week	Learning Outcome

Practical Topics	Week	Learning Outcome
Introduction to computers, Computer Hardware, input and output devices storage device	1	
Computer Software, Operating system, programs, Computer networks, Internet, Email, Viruses	2	
Microsoft office Word Opening Microsoft Word On a PC Home ribbon, Font group, Paragraph group, Clipboard group	3	

Microsoft office Word Creating A Table, Table Formatting Tables Border	4	
Microsoft office Word Page Border, Creating and modifying lists, Inserting Horizontal Line, Inserting Symbols	5	
Microsoft office Word Building equations, Page Margins, Saving a document, Printing a document	6	
Microsoft office Excel Working with data and Excel tables Performing calculations on data,	7	
Microsoft office Excel Writing formulas Applying functions (auto sum, average, count and more)	8	
Microsoft office Excel Applying filters Creating charts and graphics	9	
Microsoft office Excel Regression Curves and trend lines	10	
Microsoft office PowerPoint, Starting and saving presentations, Working with slides Changing and formatting the slide background	11	
Microsoft office PowerPoint Working with slide text Adding animations and transitions	12	
Final Exam	13	

Questions Example Design

1. Compositional:
In this type of exam, the questions usually start with Explain how, what are the reasons for…? Why…? How….?

Example
Q\ What are the benefits of using online storage? Name four Internet services that provide online storage?
Answer\ One of the biggest benefits of online storage is the ability to access data from anywhere. online data storage also provides the ability to share files among different users. Examples: Sky drive Drop box Google drive iCloud

2. True or false type of exams:
In this type of exam, a short sentence about a specific subject will be provided, and then students will comment on the trueness or falseness of this particular sentence.

Example
Q\ State whether the following statements are true or false:
1. Texts, Pixels and Sounds are represented by Bits in computer memory.
2. Secondary memory stores data temporary
Answer\
1. True
2. False

3. Multiple choices:
In this type of exam there will be a number of phrases next or below a statement, students will match the correct phrase.

Example:
Q\ Choose the correct answer:
1) Cam allows the user to input:
A. Audios
B. Audios and videos
C. videos
D. None

2) One Megabyte equals to:

A. 1000 Kbyte
B. 1024 Kbyte
C. 1000 Kbit
D. 1024 Kbit

3) Software is stored on storage devices in a special container called.
A. Icon
B. File
C. DVD
D. CD

4) Which extension is used for PowerPoint presentations?
A. doc
B. dwg
C. wav
D. ppt

Q1// Answer as required below?

Draw the table and write the content as below, use Microsoft **(Word)?**

TABLE 460-3 MINIMUM REQUIRED DENSITY[1]

| LOCATION | LAYER | PERCENT OF TARGET MAXIMUM DENSITY | | |
| | | MIXTURE TYPE | | |
		LT and MT	HT	SMA[5]
TRAFFIC LANES[2]	LOWER	93.0[3]	93.0[4]	—
	UPPER	93.0	93.0	—
SIDE ROADS, CROSSOVERS, TURN LANES, & RAMPS	LOWER	93.0[3]	93.0[4]	—
	UPPER	93.0	93.0	—
SHOULDERS & APPURTENANCES	LOWER	91.0	91.0	—
	UPPER	92.0	92.0	—

Q2// Answer as required below?

Write this text in Microsoft (Power point) page, use font type **(Times New Roman)** and font size **(12)?**

> The **Computer Essentials** module sets out *essential* concepts and skills relating to the use of devices file creation and management, networks, and data security. These skills and knowledge will allow yo to manage **computers**, devices, and data securely and effectively. ...
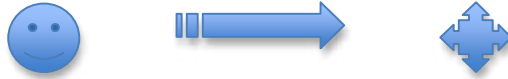
## Q2// Answer the question below; depend on your lectures?

A/

1. Write the steps of shut down the computer?
2. Two ways of "Print a file"?

B/

1. Ctrl + Z =
2. Press 3 + F4 =

Q4// For the following table, plot the Area % of total earth land on a pie chart? Use (Microsoft Excel sheet)

Continent	Area 10^6 mile^2	Area% of total earth land
Asia	17.1	30
Africa	11.7	21
North America	9.4	16
South America	6.9	12
Antarctica	5.1	9
Europe	3.8	7
Australia	3	5

Area % of total earth land
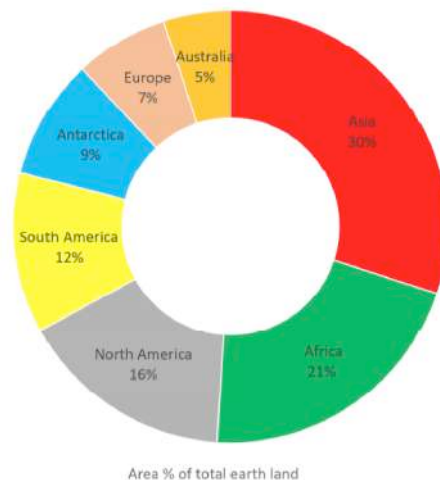
Extra notes:

1- Mobile phones should be turned off during the lecture time.

2- Students should come to the lecture on time, if you are late, ask for permission and come in quietly.

3- Class attending without lecture notes is not allowed.

4- Try not to leave the class without a good reason, if you need it, leave quietly after permission.

5- The Final Exam will include all topics of the lecture.

6- Students should come in the lab on time. Late students will not be admitted to the lab without an acceptable reason, and they will get a zero grade for the missing lab.

7- Leaving the group and wandering is not allowed.

8- Using memory devices (USB, CD, DVD, etc.) with the lab computers is not allowed.

9- Students are responsible for any loss or damage of devices.

10- Damage to devices must be reported immediately

External Evaluator