SUBJECT OUTLINE
Computer science
1st Stage – 1st semester

1. Information on the Programme

1.1. Higher education institution	University of Sulaimani
1.2. College	Dentistry
1.3. Department	Basic Science
1.4. Field of study	Computer Science
1.5. Cycle of study[1]	First Cycle
1.6. Specialization/ Study programme	Dental Informatics
1.7. Form of education	Full time

2. Information on the Discipline

2.1. Discipline name	**Computer Science**							
2.2. Code	**COD-107 Computer Science**							
2.3. Language:								
2.4. (Theory) **Lecturer** **Email** **Tel** **Webpage**	**Miran Hikmat Mohammed** **miran.mohammed@univsul.edu.iq** **009647701547929** **https://sites.google.com/a/univsul.edu.iq/miran- hikmat/**							
2.5. Practical/Seminar/ laboratory/Project **Lecturer** **Email** **Tel** **Webpage**	**Miran Hikmat Mohammed** **miran.mohammed@univsul.edu.iq** **009647701547929** **https://sites.google.com/a/univsul.edu.iq/miran- hikmat**							
2.6. Year of study	**2023**	**2.7 Semester**	1	**2.8. Assessment type**[2]	**Theory: Exam** **Practical: Assignment activity oral**	**2.9. Discipline status**	**Content**[3] **Mandotary**[4]	**FD** **MD**

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3. **Total estimated time** (teaching hours per semester)

University of Sulaimani											
College of Dentistry											
Department:	Basic Science										
Decipline:	Computer										
Stage:	1										
Total Contact Hours:		52									
Total Self Study Hours:		56									
Total No. Hours:		108									
ECTS:		4.00									
No. of Weeks	Contact Hours					Self Study					
	Theoretical	Practical	Lab.	Project	Visit	Quiz	Reading	Assignment	Report	Midterm Exam.	Final Exam.
1st Week (Registration)	-	-	-	-	-	-	-	-	-	-	-
2nd Week	1	3					1			7	15
3rd Week	1	3					1				
4th Week	1	3				2	1				
5th Week	1	3					1				
6th Week	1	3					1	3			
7th Week	1	3					1				
8th Week	1	3					1			7	
9th Week	1	3					1				
10th Week	1	3					1	3			
11th Week	1	3				3	1				
12th Week	1	3					1				
13th Week	1	3					1				
14th Week	1	3					1	3			
15th Week (Final Exam.)		-	-	-	-	-	-	-	-	-	-
16th Week (Final Exam.)	-	-	-	-	-	-	-	-	-	-	-
TOTAL	13	39	0	0	0	5	13	9	0	14	15

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4. **Prerequisites** (if applicable)

- OD (optional discipline),
- ED (Elective (Facultative) discipline).

4.1 curriculum-related	Related to their academic life for future in their academic field, and they will get some knowledge related to Research methodology for conducting their final year project and data analysis and statistic lecture that they will study in 3rd stage.
4.2 skills-related	Basic computer usage and general idea about recent technologies.

5. **Conditions** (if applicable)

5.1. for the Theoretical	Lectures will be related to each other, if the student miss a lecture will not be able to understand the next week of theoretical and practical lectures.
5.2. for the Practical/ laboratory/ project	**Student should attend all the practical lecture as they get a homework to finish for next week.**

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6. Cumulated specific competences

Professional competencies	**There are many features come within this course:** **• Operating system: This course will use Windows 10; and students will learn how to use Window 10 components, by understanding its configuration, and how to deal with the operating system main option properties and operating system issues.** **• Networking component: This part of the lecture gives students the original ideas about networking concepts. Thus, students will get general information about the internet connection between local computers and the worldwide network.** **• Computer security: This section talks about different kind of security issues such as viruses, hacking techniques, and web page frauds. Also, students learn about the various steps and process to provide the secure environment for their computers devices.** **• Internet browsing: Students in this section are taught how to use the main components of Internet connection and web page properties. Also, there will be some useful points about how to access some web pages securely.** **• Webmail and web hosting: In this unit of the lecture, the most crucial point of webmail creation, managing and security are discussed.** **Furthermore, this course teaches students another aspect of computer fundamental, which is** **Using the three principal components of Microsoft Office (Word, Excel, and PowerPoint).** **• Microsoft Word: Students will study the main components of Word Document creation. For example, working with menus, setting text formatting, adding objects such as tables, images and shapes. Also, learning how to use macros for adding external objects. Thus, students will be able to prepare daily or weekly reports for their careers in different fields of study; for instance, lab reports, medical reports, and other writing purposes.** **• Microsoft PowerPoint: It is necessary for students to learn the mechanism of presentation preparation techniques by using PowerPoint. Therefore, it is important for students to learn how to use menus, formatting, animations, inserting images and shapes, adding macros, and inserting tables and charts. These options are an essential part of this course because students will use them to create slides either for presentation or uses in different fields of study.** **• Microsoft Excel: In this part of Microsoft office component, students will learn the main concepts of tables (cells and columns) and different types of table formatting. Also, they will study about the connection between sheets and how to transfer data between them. Then, they**

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	will come to the most critical aspect, which is sketching different types of the statistical chart (Such as bar, pie, line, and dot charts).
Transversal competences	**Through this course, students should learn the following points related to the given material:** • **Computer devices history and their usages.** • **Learn how to use principle options in the Windows operating system.** • **How to use computer hardware and software.** • **Learn about the concepts of Information and Communication Technology (ICT) and (IT)** • **Be able to use and access internet services and surf websites.** • **Using Microsoft Office components (Word, PowerPoint, and Excel).** • **Be able to interact with emails and Web Links securely.**

7. **Discipline objectives** (based on the cumulated specific competences)

7.1. General objective	**• Introduce the students to computer components (hardware, software).** **• Students will be able to understand the general ideas behind internet connection and networking concepts.** **• Introduce them to some of the fundamental ideas of using Microsoft Office and relate it to their fields of work and study.** **• They should be able to use the Internet for different purposes such as email, searching via search engines.** **• Learn about computer viruses and different kinds of anti-virus software.**
7.2. Specific objectives	**The main point of this course is to teach students the fundamentals and some of the vital characteristics of computer usages. Correspondingly, it is crucial for them to know how to use a computer in both classifications (software and hardware) for their daily tasks.** **For instance, learning about different types of computer components, dealing with computer hardware and software failure issues, Internet technology and search engines, documentation and writing criteria, seminar preparation, and ability to draw charts and analysing data tables.**

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8. Content

8.1. Theoretical- Number of hours	Teaching methods	Observation
Introduction to computer science course	(lecture)	(1 lecture = 1 hours)
General concept of computer technologies and terminologies	(lecture)	(1 lecture = 1 hours)
Computer Components Part (1)	(lecture)	(1 lecture = 1 hours)
Computer Components Part (2)	(lecture)	(1 lecture = 1 hours)
Operating system concepts and functionalities	(lecture)	(1 lecture = 1 hours)
Computer software types Part (1)	(lecture)	(1 lecture = 1 hours)
Computer software types Part (2)	(lecture)	(1 lecture = 1 hours)
Different types of computer users	(lecture)	(1 lecture = 1 hours)
Networking concepts and different network communication	(lecture)	(1 lecture = 1 hours)
Concept of internet connection and their usages	(lecture)	(1 lecture = 1 hours)
Computer security and how to protect computers from viruses	(lecture)	(1 lecture = 1 hours)
Different types of Email addresses, and their functionalities	(lecture)	(1 lecture = 1 hours)
Website and web page creation methodologies	(lecture)	(1 lecture = 1 hours)

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8.2. Practical Works– Number of hours	Teaching methods	Observation
Introduction to practical lectures and their contents	**Lecture**	**1 lab work (3 hours/work)**
Computer components parts and their functionality (part1)	**Lecture/Practical**	**1 lab work (3 hours/work)**
Computer components parts and their functionality (part2)	**Lecture/Practical**	**1 lab work (3 hours/work)**
Operating system functionalities (Part 1)	**Lecture/Practical**	**1 lab work (3 hours/work)**
Operating system functionalities (Part 1)	**Lecture/Practical**	**1 lab work (3 hours/work)**
Microsoft office – MS Word (Part 1)	**Lecture/Practical**	**1 lab work (3 hours/work)**
Microsoft office – MS Word (Part 2)	**Lecture/Practical**	**1 lab work (3 hours/work)**
Microsoft office – MS PowerPoint	**Lecture/Practical**	**1 lab work (3 hours/work)**
Microsoft office – MS Excel	**Lecture/Practical**	**1 lab work (3 hours/work)**
Microsoft office – MS Excel	Personal web page creation	**Lecture/PracticalLecture/Practical**
Internet functionalities and computer security		**Lecture/Practical**

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1 lab work (3 hours/work)	**1 lab work (3 hours/work)**	**1 lab work (3 hours/work)**
General Revision and MOC Test	**Lecture/Practical**	**1 lab work (3 hours/work)**

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Compulsory bibliography:
Optional bibliography:

Lambert, J. and Frye, C. (n.d.). Microsoft Office 2016.
Information technology BYEric H.Glendinning and John McEwan

9. Corroborating the discipline content with the expectations of the epistemic community representatives, of the professional associations and of the relevant employers in the corresponding field

Students will learn many computer general aspects and some knowledge that they will need to use in their academic life in their area of study. For example, doctors in their clinic many need to use computers and Microsoft office to manage patients visits and writing medical reports.

Also, some others may need to use MS-Excel to do some data analysis on some topics related to dentistry fields of study, such as analysing patient data and their medical history to investigate and discover new information.

10. Assessment

Type of activity	10.1. Assessment criteria[2]	10.2. Assessment type	10.3. Percentage of the final grade
Theoretical	Final Exam	Written	**40**
Practical	Final Exam	Practical	**20**
Test	Mid Term Test	Written	**20**
Seminar and Activities	Writing assignment and presentations	Written and oral	**10**
Quiz	Written and Practical	Written/Practical	**10**

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Minimum performance standards:

Minimum performance standards, it is required that students must use English language for all their required assessments, it needs that student have ability to read, write, speak in English, with basic background of computer technology worlds.

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Theoretical Lecturer	**Miran Hikmat Mohammed**
Practice Lecturer	**Miran Hikmat Mohammed**

Approved by the Curriculum development Committee:	
1	Asst.prof Dr Trefa M.Ali Mahmood
2	Dr Mohammed Abdulla
3	Dr Rukoh Hassan
Head of the Department/ Dean	Asst. Prof Dr. Ranjdar Mahmood Talabani

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