Course Description Form

1. Course Name
Computer Science
2. Course Code
226 MH
3. Semester / Year
First Semester / Second Stage / Academic Year 2025-2026
4. Date this description was prepared
25/9/2025
5. Available Forms of Attendance
Morning – Evening
6. Number of Hours (Total) / Number of Credits (Total)
30/2 (or) 45/3 (as determined by the department)
7. Course administrator name (if more than one name mentioned)
Name: Hassanein Sahib Muhammad Emai hasanen.alsafar1997@gmail.com
8. Course Objectives

Cognitive Goals The student will be able to: 1. Define basic concepts and terms in computer science. 2. Explains the principles of algorithms, data structures, and databases. 3- Distinguishes between operating systems, networks and their basic components. 4- Analyzes simple problems and proposes solutic to them using programming. Skill Objectives The student will be able to: 1- It is considered systematic scientific research ir one of the topics of computer science. 2- Presents oral and written scientific presentation using computer tools. 3. Applies programming principles and algorithms solve practical problems. 4. Actively participate in scientific discussions an workshops.	**Course Objectives**

Value Goals The student will be able to: 1- It embodies the ethical values derived from Islamic teachings in dealing with technology. 2. Respect the plurality and difference in scientific opinions within the class. 3- Contributes to community and awareness activi related to technology. 4. Practice self-criticism and reflection in the light scientific developments.	

9. Teaching and Learning Strategies

	Strategy
Teaching and Learning Strategies 1. Interactive lectures to present theoretical concepts. 2. Read and analyze approved sources. 3. Presentations from students. 4. Discussions based on ethical values in the use of technology. **Note:** The following strategies can be mentioned according to the article: • Using **interactive lectures** to present theoretical concepts in ..... Engaging students with discussion and motivational questions. • **Employ blended learning** by combining classroom lectures with online activities or content, including recorded recitations, digital lectures, virtual discussions, and online quizzes. • Guide students **to read essential sources** from ..... books, and analyze them within study assignments to enhance deep understanding. • Assign students **presentations** on selected topics from ....., which develops summarizing, explaining, and communication skills. • Conducting **practical workshops** in ....., which allows the practice of research and applied skills. • Promote **collaborative learning** through group projects or structured interpretive discussions, to develop dialogue and teamwork skills. • Assign students to **individual or group research projects** in ..... topics, using scientific methodology and academic documentation.	

- Training students in **analytical and writing exercises** that require deriving concepts and meanings and linking them to reality.
- **Conduct discussions** based on Quranic values.
- Engaging students in **community service activities** related to the Holy Quran such as education or awareness, to enhance the practical impact of science in society.
- Encourage **self-reflection** by writing personal reflections that link what the student has learned to their behavior or attitudes in life.

10. Course Structure

Evaluation Method	Learning method	Unit Name or Subject	Required Learning Outcomes	Hours	The week
Prepare	Lecture + Discussion	Introduction to Compu Science	Learn about the course and its objectives	2-3	1
Prepare	Lecture + Exercise	Networking Basics	Understanding the principles of networki	2-3	2
Prepare	Lectur e	Computer Networks	Recognize networks	2-3	3
duty	Lecture + Exercise	Digital Security	Ways to protect agains digital intrusions	2-3	4
test	Lecture + Practical Exercise	Excel Program	Practicality	2-3	5
Prepare	Lecture + Exercise	Excel Program	Practicality	2-3	6

duty	Lecture + Discussion	Excel Program	Practicality	2-3	7
Prepare	Lecture + Exercise	E-commerce	Online Banking	2-3	8
Short test	Lecture	E-commerce	Online Banking	2-3	9
Prepare	Lecture	Computer troubleshooting	Common issues with devices and solutions	2-3	10
Student Presentati	Discussion + Presentation s	Troubleshooting your computer	Common issues with devices and solutions	2-3	11
Prepare	Lecture	Artificial Intelligence	Understanding the principles of artificial intelligence	2-3	12
report	Lecture	Artificial Intelligence	Examples of Artificial Intelligence	2-3	13
Pre-test	discussio	Course General Review	Review	2-3	14
examination	edit	final exam	Final Evaluation	2-3	15

11. Course Evaluation

Πρεπαρατιον and Classroom Participation: 5 Grades
Ασσιγνμεντσ and Reports: 5 marks
- Σηορτ and practical tests: 5 marks
- Σεμεστερ Εξαμ: 25 marks
- Final Exam: 60 marks

12. Learning and Teaching Resources

1- Graham Brown, David Watson, "Cambridge IGCSE Information and Communication Technology", 3rd Editio (2020)2- FunAlan Evans, Kendall Martin, Mary Anne Poa "Technology In Action Complete", 16th Edition (2020).3- Ahmed Banafa, "Introduction to Artificial Intelligence (A Ist Edition (2024)4- Microsoft Office 2019 Step by Step 1 Edition by Curtis Frye & Joan Lambert5- COMMITTEE "Greens on Greens Researchers" 2016 5 6. Dr. Adel Abdel Nour. "Introduction to the World of Artificial Intelligence" 2005	Required Textbooks (Methodology, if any)

1- Modern Operating Systems – Tanenbaum.2- Database System Concepts – Silberschatz.3- Computer Science: An Overview – Brookshear.	Main References (Sources)
1- Computer Fundamentals – P.K. Sinha 2- Introduction to Computers – Peter Norton	Recommended books and references (scientific journals, reports…)
1- GeeksforGeeks Data Algorithms and Structures 2- IEEE Xplore Academic Articles 3- SpringerLink Scientific Books and References	Electronic References, Websites