Course Description Form

Description of the location

This course description provides a concise summary of the main course features and the learning outcomes expected of the student, demonstrating whether the student has made the most of the available learning opportunities. It must be linked to the program description.

.1 Educational institution	Shatt al-Arab University
.2 Scientific Department/Center	Faculty of Science - Department of Computer Science
.3 Course Name/Code	Information Technology Principles
4. Available forms of attendance	Official working hours
.5 Semester/Year	Second semester - First year
6. Number of study hours (total)	30 theoretical
.7 Date this description was prepared	08/2025 10/

8. Course Objectives

• Teaching students how to use various computer applications to improve academic performance

• Increasing future productivity in the work environment •

Enhancing the student's level of critical thinking.

• Use networks and computer applications to search, evaluate, and use information.

• Preparing written reports and oral presentations.

• Providing opportunities for practical, project-based learning.

• Enabling the student to become Independent user of technology and digital resources.

9. Course outcomes, teaching, learning and assessment methods.

By the end of this course the student will be able to:

• Acquire basic computer skills applicable to data processing and presentations.

• Manage files and documents using productivity tools.

• Develop practical skills in hardware and software maintenance.

• Prepare to pass the CompTIA A+ certification

A- Cognitive objectives

• The student will be able to identify the basic components of a computer (processor, memory, storage units, input and output units).

• To explain to the student the concepts of operating systems (especially Windows) and the mechanisms for their management and maintenance.

• The student will be able to distinguish between different network technologies and communication methods.

• To explain to the student the basics of information security and personal device protection.

• The student should realize the importance of preventive maintenance and diagnosis in the continuity of computer operation.

• The student should describe the processes related to installing and maintaining peripheral devices (printers, scanners, computers, etc.).

Mobile(.

B-Skill objectives of the course

•The student should be able to install and maintain Windows operating systems and perform the necessary updates.

•The student will apply the steps for installing and maintaining basic computer components such as the processor, memory, storage units, and system board.

•The student will develop the ability to diagnose faults and solve problems related to hardware and software.

•The student will use specialized tools and software to manage files and documents effectively.

•The student will perform the installation and setup of peripheral devices (printers, scanners, input and output devices).

•The student will apply the skills of setting up and maintaining computer networks and adjusting communication settings.

•The student implements protection and security methods to maintain the integrity of data and devices.

Teaching and learning methods

•Theoretical lectures.

•Practical laboratories.

• Interactive activities.

•Project-based learning.

Evaluation methods
• Short tests 10% : • Homework 10% : •Projects/Laboratory 10% : • Report 10% : •Midterm Exam 10% : •Final Exam 50% : •**Total: 100%**
C- Emotional and value goals •The student appreciates the importance of information technology in improving academic and professional performance. Positively towards using computers and modern technologies in his daily life. •The student shows an attitude •The student must adhere to the principles of digital security and data protection when using systems and networks. •The student must be responsible and accurate when maintaining devices or dealing with software. •The student must adhere to the values of teamwork and cooperation while implementing projects or practical activities. •The student must demonstrate professional ethics in using technical and software resources legally and ethically.
Teaching and learning methods
Evaluation methods

D - General and transferable skills (other skills related to employability and personal development). -1 -2 -3 -4
10. Course structure

	road learning	Learning outcomes Unit name/topic	Required	Week hours	
		Learn about the main components of personal computers. Learn about the main components of a system unit. Learn about the different types of storage devices used in personal computers. Learn how to connect personal computers. Character.		2	1
		Identify the major PC operating systems. Identify the basic components of the Windows user interface. Identify the basic tools and functions used to manage the Windows file system. Identify Windows system		2	2
		administration tools. Identify common hardware and software tools used by professional PC technicians. Identify best practices for computer technicians Follow them to enhance electrical safety. Identify best practices that computer technicians should follow to promote environmental safety and proper material handling. Identify and implement general preventive maintenance best practices that computer technicians should follow. Identify general diagnostic and troubleshooting best practices that computer technicians should follow.		2	3

		Identify best practices that computer technicians should follow to communicate appropriately with customers and colleagues, and conduct business in a professional manner.			
		Identify common hardware and software tools used by professional PC technicians. Identify best practices that computer technicians should follow to promote electrical safety. Identify best practices that computer technicians should follow to promote environmental safety and proper material handling. Identify and implement general preventive maintenance best practices that computer technicians should follow. Identify general diagnostic and troubleshooting best practices that computer technicians should follow. Identify best practices that computer technicians should follow to communicate appropriately with customers and colleagues and conduct business in a professional manner.		2	4
		Install and configure display devices. Install and configure input devices. Installing and configuring adapter cards. Installing multimedia devices.		2	5
		Selecting, installing, and configuring storage devices. Install and configure power supplies. Install and configure memory. Install and configure CPUs. Install and configure system		2	6
		boards. Test and troubleshoot display devices. Maintain and troubleshoot input devices. Test and troubleshoot adapter cards. Troubleshoot multimedia devices. Troubleshoot storage devices.		2	7
		Testing and troubleshooting power supplies. Testing and troubleshooting memory. Testing and troubleshooting CPUs. Testing and troubleshooting system boards.		2	8
		Install Microsoft Windows. • The issuance of the license is subject to change. The issuance of the license is subject to change. Add devices to a Microsoft Windows installation.		2	9

		Improve Microsoft Windows installation.			
		Identify Windows operating system tools to use for maintenance and troubleshooting. Perform backups. Troubleshoot Windows errors. Recover a damaged Windows		2	10
		installation. Define basic computer networking concepts. Define network communication technologies. Identify networking technologies. Identify Internet technologies.		2	11
		Create network connections. Install and configure web browsers. Maintain and troubleshoot network connections. Identify components specific to laptops and mobile computing devices.		2	12
		Installing and configuring laptops and computing devices Portable. Maintain, troubleshoot, and repair laptops and portable computing devices. Identify the major types of printer and scanner technologies. Identify the technical components		2	13
		of printers and scanners. Define printing and scanning operations. Install and configure printers and scanners. Maintain and troubleshoot printers and scanners. And fix it.		2	14

11. Infrastructure	
	-1 Required Textbooks
CompTIA A+ Certification: A Comprehensive Approach for all 2009 Exam Objectives	Main References (Sources) 2
	A(Recommended books and references) scientific journals, reports, etc.

b) Electronic references, websites....., https://www.microsoft.com/	

12. Curriculum Development Plan

Dean of the College

Head of Department

Subject teacher