Course Specification
(Bachelor)

Course Title:	Introduction to Computer
Course Code:	101CSC-3
Program:	Bachelor
Department:	Computer Science
College:	Computer Science and Information Technology
Institution:	Jazan University, Jazan
Version:	V2
Last Revision Date:	7-1-2023

Table of Contents

A. General information about the course:

1. Course Identification

1. Credit hours: (03)					
2. Course type					
A.	☒ University	☐College	☐Department	☐Track	☐Others
B.	☒ Required		☐Elective		
3. Level/year at which this course is offered: (Level -01 / Year 01)					
4. Course general Description:					
This course introduces the fundamental concepts and features of Computer. It includes the basics of computer hardware, software, types, peripherals, input/output devices, computer network, computer user/client, computer architecture, storage devices, internet, operating system, programming, data representation, advantages and applications. E-learning and E-commerce concepts.					
5. Pre-requirements for this course (if any)**: None**					
6. Co-requisites for this course (if any)**: None**					
7. Course Main Objective(s):					
1. **Discuss the basic hardware and software components of a personal computers and their application.** 2. **Describe how to use the text editor programs, spreadsheets, presentation and databases application programs.** 3. **Illustrate the methods of communication and information gathering using internet.** 4. **Explain the basic fundamentals of data representation, algorithms, flowcharts and computer programming languages.** 5. Outline the various practical applications of computer skills.					

2. Teaching mode (mark all that apply)

No	Mode of Instruction	Contact Hours	Percentage
1	Traditional classroom		
2	E-learning		
3	Hybrid • Traditional classroom • E-learning		
4	Distance learning	Self-Learning	100%

3. Contact Hours (based on the academic semester)

No	Activity	Contact Hours
1.	**Lectures**	0
2.	**Laboratory/Studio**	0
3.	**Field**	0
4.	**Tutorial**	0
5.	**Others (specify) Self-Learning**	Self-Learning
Total		Self-Learning

B. Course Learning Outcomes (CLOs), Teaching Strategies and Assessment Methods

Code	Course Learning Outcomes	Code of CLOs aligned with program	Teaching Strategies	Assessment Methods
1.0	**Knowledge and understanding**			
1.1	Describe the major components of a personal computer and describe their functionalities.	K1	• Tutorials • Media Lectures • On line discussion	• Mid-Exam • Assignment • Final Theory
1.2	Define the different types of system software, programming languages, application software and their functionalities.	K1	• Tutorials • Media Lectures • On line discussion	• Quiz • Assignment • Final Theory
2.0	**Skills**			
2.1	Compare various types of network topologies and network .	S1	• Tutorials • Media Lectures • On line discussion	• Quiz • Assignment

Code	Course Learning Outcomes	Code of CLOs aligned with program	Teaching Strategies	Assessment Methods
				• Final Practical • Final Theory
2.2	Demonstrate the working of M.S. office application software for text editing, spreadsheet, presentation and database.	S1	• Tutorials • Media Lectures • On line discussion	• Lab Exam
2.3	Apply various data representations, number system and solve given problems.	S1	• Tutorials • Media Lectures • On line discussion	• Mid-Exam • Assignment • Final Theory
2.4	Design algorithms and flowchart for a basic given problem	S2	• Tutorials • Media Lectures • On line discussion	• Quiz • Assignment • Final Theory
3.0	**Values, autonomy, and responsibility**			
3.1				
3.2				
...				

C. Course Content

No	List of Topics	Contact Hours
1.	**Introduction to the world of computers** What is a Computer? Hardware Data vs. Information, Software, Computer Users, End users, Programmers, Computer categories	Self-Learning
2.	**Hardware** **The System Unit** Processing and Memory: Data and Program Representation, Digital Data Representation, Byte, Bit, Bit pattern, Data Types **Data representation** Coding Systems for Text-Based Data, Image representation methods, Audio representation, and Video representation **The Binary Numbering System** Binary Number, Decimal Number, Hexadecimal Number, Octal Number, Binary to Decimal Conversion, Decimal to Binary Conversion, Inside the System Unit, The Motherboard, The CPU, Memory	Self-Learning
3	**Storage**	Self-Learning

	Storage System Characteristics, Magnetic Disks vs. Optical Discs, Magnetic Disk Systems, Floppy Disks and Drives, Hard Disk Drives (HDDs), Optical Disc Systems, Flash Memory Systems	
4	**Input and Output** Keyboard, Pointing device, Electric Pen, Scanners, Readers, Touch, Screen, Output Devices, Monitor, Display Screen, Printers	Self-Learning
5	**Software** Application software Commercial, Shareware, Freeware, Installed software and Cloud software. General purpose, Specialized and Apps Software. System Software Operating systems, Utilities, Device drivers and Language translators Stand alone, desktop, Network and mobile operating systems Utility Programs.	Self-Learning
6	**Networks and the Internet** Computer network, Wired vs. Wireless Networks Network Topologies, Architectures, Networking Media, Network Size and Coverage Area. Communications Protocols. Networking Hardware. The Internet, ARPANET, World Wide Web and Internet service provider Searching and Accessing the Internet the Internet Computer Security Computer sabotage (Malware, virus, worm, Trojan Horse) Protecting Against Computer Sabotage Communication E mail, Messaging, Social networking	Self-Learning
7	**E-Learning & E-Commerce** E-Learning Content, Types, Components. Learning Management System (LMS) Advantages and Disadvantages of E learning E Commerce and M Commerce E commerce Business Models Online Auction Site Security Issues Computer Privacy Intellectual Property Rights Computer Ethics	Self-Learning
Total		**Self-Learning**

D. Students Assessment Activities

No	Assessment Activities *	Assessment timing (in week no)	Percentage of Total Assessment Score
1.	Mid-Exam	7th	20%
2.	Assignment	9th	10%

No	Assessment Activities *	Assessment timing (in week no)	Percentage of Total Assessment Score
3.	Quiz 1	4th	5%
٤	Quiz 2	8th	5%
5	Final Practical	11th	20%
6	Final Theory	12th	40%

*Assessment Activities (i.e., Written test, oral test, oral presentation, group project, essay, etc.).

E. Learning Resources and Facilities

1. References and Learning Resources

Essential References	• Understanding Computers Today and Tomorrow, Deborah Morley, Charles S. Parker, Course Technology, Cengage Learning, 15th Edition, 2015, ISBN: 9781285767277.
Supportive References	• Absolute beginner's guide to computer basics, Michael Miller, Que Publishing, 5th edition 2009, ISBN-13:978-0789742537 • Step by Step Microsoft Office professional 2010, Joan Lambert and Curtis Frye, Microsoft Press, 1st edition, 2010, ISBN-13:978-0735626966 • Foundations of Computer from Data Manipulation to Theory of Computation,Behrouz . A. Forouzan, Thomson Learning 2003, ISBN 0534379680
Electronic Materials	a. URL:http://www.tutorialspoint.com/computer_fundamentals/ b. URL:https://support.office.com/en-us/office-training-center c. URL:https://www.gcflearnfree.org/subjects/office/ d. URL:http://www.comptechdoc.org/basic/index.html e. URL:http://www.baycongroup.com/el0.htm- Description: Microsoft Excel 2007Tutorial f.URL:http://deitel.com/books/iw3HTP3/iw3htp3_powerpoint.zip-Description:Download helping Power Point slides related tocourse g. URL:http://computer.howstuffworks.com/-Description:Averygoodknowledgerepository h.URL:http://www.thocp.net/hardware/embedded_computers.htm-Description: Embedded computers i. URL:https://en.wikipedia.org
Other Learning Materials	

2. Required Facilities and equipment

Items	Resources
facilities (Classrooms, laboratories, exhibition rooms, simulation rooms, etc.)	LMS (Blackboard)
Technology equipment (projector, smart board, software)	LMS (Blackboard)
Other equipment (depending on the nature of the specialty)	

F. Assessment of Course Quality

Assessment Areas/Issues	Assessor	Assessment Methods
Effectiveness of teaching	Students	Indirect (Course evaluation survey form)
Effectiveness of Students assessment	CRC / QAU / HoD	Direct (Course reports / result analysis)
Quality of learning resources	Track leaders / CRC	Indirect (Review, meetings and star rating with suggestions for further modification and improvements)
The extent to which CLOs have been achieved	CRC / QAU	Direct (CLO assessment template further verified at course coordinator, Track leader and QAU level)
Other		

Assessors (Students, Faculty, Program Leaders, Peer Reviewer, Others (specify)

Assessment Methods (Direct, Indirect)

G. Specification Approval

COUNCIL /COMMITTEE	**DEPARTMENT COUNCIL**
REFERENCE NO.	
DATE	**SATURUDAY 7-1-2023**