Qurtuba University of Science and Information Technology

Program:	*For Non-CS(IT) Programs*
Course Name:	Intro. To Computers / Computer Basics / Fundamentals of Computers
Course Code:	_____
Credit Hours:	03
Semester:	
Total Weeks:	16 – 18
Total Hours:	48 – 54
Total Marks:	100

Week Wise Course Distribution *Reference*

Week 1: Introduction To Computers

- Introduction
- Types Of Computers
  - Analog Computers
  - Digital Computers
  - Hybrid Computers

Week 2: Types of Digital Computers

- Types of Digital Computers
  - Mainframe Computers
  - Mini Computers
  - Microcomputers
- Parts of a Computer
  - Hardware
  - Software
- Basic Organization of Computer
  - Input Unit
  - Output Unit
  - Storage Unit
  - Central Processing Unit

Week 3: Computer Software

- Types of Software
  - Application Software
  - System Software
- Types of System Software
  - Translators
  - Operating Systems
  - Device Driver Software
- Categories of Application Software
  - General Purpose Software
  - Special Purpose Software

Week 4: Lab – Windows ***Lab work***

- Start Menu
- Properties of Desktop
- Running Applications / Programs
- Working with Folders
    - Creation of Folders and Sub-folders
    - Rename Folders
    - Copy, Move Folders
    - Copying and Moving Files into Folders

Week 5: Computer Peripherals

- Input Devices
    - Modes Of Input
- Output Devices
- Types Of Output Devices
    - Soft Copy Output Devices
    - Hard Copy Output Devices

Week 6: Lab – MS Word (part I) ***Lab work***

- Working with Documents / Files:
    - Creating, Saving, Opening, Printing
- Text Formatting (Home Tab):
    - Applying Font
    - Applying Styles
- Editing Text:
    - Copy and Move
    - Find and Replace

Week 7: Memory Unit

- Memory
- Types Of Memory
    - ROM
    - RAM
    - Cache Memory
    - Registers
- Types Of RAM
    - Static RAM
    - Dynamic RAM
- Types Of ROM
    - PROM, EPROM, EEPROM

Week 8: Operating System ***Includes Lab***

- Functions of an Operating System
- Types of Operating Systems
    - Real Time Operating System
    - Single User / Single-Tasking
    - Single User / Multi-Tasking

- Multi User / Multi-Tasking
- User Interface of Operating System
  - Graphical User Interfaces
  - Command Line Interfaces
- Installation

Week 9: Secondary Storage

- Types Of Storage
  - Magnetic Storage
  - Optical Storage
- Magnetic Storage
  - Floppy Disk
  - Hard Disk
- Optical Storage
  - CD, CD-R, CD-RW
  - DVD, DVD-R, DVD-RW
- Solid State Disk (SSD)

Week 10: Lab – MS Word (part II) ***Lab work***

- Paragraph Formatting (Home Tab)
  - Paragraph Alignment, Line Spacing
  - Applying Shading and Border
  - Bullets and Numbering
- Page Formatting (Page Layout Tab)
  - Page Setup, Page Background
- Insert Objects in Document (Insert Tab)
  - Inset Picture, Shapes, Page Numbers
  - Header & Footer

Week 11: Application Software

- Word Processor
- Spreadsheets
- Database Management Systems
- Web Page Development Packages
- Presentation Packages
- Browsers

Week 12: Lab – MS Word (part III) ***Lab work***

- Working with Tables (Insert Tab + Table Tools Tab)
  - Table Design
  - Table Layout
- Adding Table of Contents to Document (References Tab)
- Changing Document Views (View Tab)

Week 13: Computer Internal Hardware

- Processors
- Main-board

- Slots
- Sockets
- Ports

Week 14: Data Communication and Computer Networks ***Includes Lab***

- Data communication
- Network
- Types of network
  - LAN, WAN
- Internet and Intranet
- Application of Internet
- **LAB:**
  - Working with Browser (internet explorer etc)
  - Email account creation
  - Composing, Sending, & Receiving E-mails
  - Text and Voice messages

Week 15: Lab – MS Excel(part I) ***Lab work***

- Arranging Data in Rows and Columns
- Cell Formatting
  - Applying Basic Formatting on Cell: Font, Text Color, Background Color, Cell Border, Alignment
- Applying Formula on Cells
  - Basic Arithmetic Operations (Addition, Subtraction, Multiplication, Division)

Week 16: Lab – MS Excel(part II) ***Lab work***

- Working with Functions
  - Sum, Product, Count, Max, Min, Average
- Printing of Sheet

Recommended Books:

1. Computer from Ground Up by M. Sajid Rehman & Hafeez ur Rahman, (Sajid & Hafeez)
2. Introduction to Computer by Peter Norton, (Norton)
3. Fundamental Concepts of Computer System by Asiya Sultan Ali and Amena Nudrat, (Asiya & Amena)

Reference Books:

- Computer Fundamentals, Concepts, Systems & Applications by P.K. Sinha, (Sinha)
- IT Concepts by Nain Kanwal, (Nain)

Recommended Softwares (for Lab work):

1. Microsoft Windows 7 / 8.1
2. Microsoft Word 2007 (or later version)
3. Microsoft Excel 2007 (or later version)
4. Browser (Mozila Firefox / Google Chrome / Internet Explorer)