Institute of Business and Information Technology
Faculty of Business, Economics and Administrative Sciences
University of the Punjab, Lahore

Course Outline

Program	BBIT	Course Code	ICT-101	Credit Hours	3
Course Title	**ICT (Intro to Computing Technology)**				

Course Introduction

Information Technology has reshaped the modern lifestyle in this digital world; it plays the key role in modern education of any discipline. It has become the backbone of the Business world, from retail to corporate world. This has resulted in essential learning of Information Technology to cope with the modern challenges. Introduction to Information Technology is specially designed for the students of Business Studies with a very clear objective in mind i.e. equip the students to face the emerging world challenges.

Learning Outcomes

On the completion of the course, the students will:

CLO No.	Course Learning Outcomes	Bloom Taxonomy
CLO-1	Understand basics of computing technology	C1 (Knowledge)
CLO-2	Do number systems conversions and arithmetic	C2 (Understand)
CLO-3	Have knowledge of types of software	C2 (Understand)
CLO-4	Have knowledge of computing related technologies	C3 (Apply)

Course Content		Assignments/Readings
Week 01	**Introduction to Course & Digital World** *Course Overview, Characteristics of Computer, The Component of Computers, Categories of Computers Hardware vs Software Computer Application in Society*	
Week 02	**Component of System Unit** *The System Unit, CPU; ALU, CU, Registers, Cache IO Devices; Keyboard, Mouse, Scanner, Printer, Speaker, Joystick, Light Pen, etc. Storage; RAM, HDD, Flash Drives, Cloud Drives etc. Communication Devices; Expansion Slots and Adapter Card Ports and Connectors, Buses, Power Supply*	
Week 03	**Number Systems** *Numerical Representations Decimal System, Binary System, Octal System Hexadecimal System Inter-Conversion of Number Systems*	
Week 04	**Operating system and Utility Programs** *System Software Operating System, Device Drivers etc. OS Components and theirs Responsibilities OS Functions, OS Utility Programs Types of Operating Systems; Batch System, Time Sharing, Multiprogramming System, Multiprocessor System, Distributed Operating System, Clustered System, Real Time Operating System, embedded OS, Mobile OS etc*	
Week 05	**Application Software**	

	Business Software, Graphics and Multimedia Software Software for Homes, Personal and Educational Use Application Software for Communication and Web	
Week 06	**The Internet and World Wide Web** History of the Internet, How the internet works? The World Wide Web, Internet services	
Week 07	Communication and Networks Communication Systems; Types of Communication Serial vs. Parallel Simplex vs Duplex. Networks and Computer Networks Communication Devices, Protocols Physical and Wireless Transmission Media, Types of Networks; LAN, MAN and WAN	
Week 08	Microsoft Office Fundamentals Using Office Help Create, Open, Close, Save and „Save As" a File. Select, Edit, Copy and Paste Text Find, Replace, Undo and Redo. Commands Use Language Tools and Format Painter	
Week 09	**Mid Term Examination**	
Week 10	Microsoft PowerPoint PowerPoint Basics Creating PPT through Template Creating PPT in Outline View Slide Master, Slide Notes, Slide Printing Modification, Printing and Importing Outline Drawings, Smart Shapes and Multimedia Objects Animation; Standard and Customized Transition and Slide Show	
Week 11	Microsoft Word Word Basics, Page Setup, Printing Documents Font Handling, Paragraph Settings Bullets & Numbering, Borders & Shading etc. Columns, Tables, Language & Thesaurus Mail Merge, OLE, Tracking Changes Header & Footer, Sections, References etc.	
Week 12	Microsoft Excel Worksheets and Workbooks Workbook Design, Managing Worksheet Cell References, Relative and Absolute Formula; Creating, Editing and Auditing Commonly Used Formulae Charts; Creating, Modifying and Printing Window Handling, Freezing, Row Column Handling Data Management; Filters, Import & Export of Data Conditional Formatting, Data Analysis, Pivot Charts	
Week 13	Microsoft Access Design Database, Designing Tables & Relationships, Designing Queries; Single and Multiple Tables Designing Forms; Single Entry and Multi-Entries Expression Building; Data Export to Excel Creating, Designing Reports and Modification	
Week 14	Programming (Without Programming Language) Sequential Programs with examples Conditional Statements; IF..Then..Else, Switch- Examples Loop; While..do, do..while…, for - Examples FlowChart for Programming examples	
Week 15	Information System (IS) & IS Development Transaction Processing Systems Management Information Systems Decision Support Systems Expert Systems. System Development, Programming Languages, The Program Development Cycle	
Week 16	Database Management Data vs. Information Characteristics of Data, Databases; Operations on Data Database Management Systems	
Week 17	Computers Security	

Week 18	Security Risk, Viruses, Worms, Unauthorized Access, Information Privacy Internet Security Risk, Ethics & Society,	
	Final Term Examination	

Textbooks and Reading Material*

Textbooks.

- **A.** Discovering Computers 2023: Digital Technical Data Devices (17th Edition) Jennifer T. Campbell ISBN: 978-035767537

- **B.** Discovering Computers 2017 Shelly Cashman ISBN: 978-1439079263

- **C.** Information Systems Today: Managing in the Digital World (9th Edition) ISBN: 978-0136524427

Suggested Readings

- Exploring Microsoft Office - 2023 Edition: The Illustrated, Practical Guide to Using Office and Microsoft 365 (Exploring Tec) ISBN: 978-1913151843

- Charles S. Parker, Understanding Computers: Today and Tomorrow, Course Technology, 25 Thomson Place, Boston, Massachusetts 02210, USA 2. Livesley, Robert Kenneth

- An introduction to automatic digital computers. Cambridge University Press, 2017

- Zawacki-Richter, Olaf, and Colin Latchem. "Exploring four decades of research in Computers & Education." Computers & Education 122 (2018): 136-152

Teaching Learning Strategies

1. The students are expected to have studied the assigned reading, before coming to the class
2. Discussion is generated on key concepts, issues, problems, and solutions on assigned readings
3. Critical discussion on apparent solutions regarding issues pertaining to self, history, knowledge, economy, society, and the state are addressed through questions and arguments

Assignments: Types and Number with Calendar

1. Session assigned readings for 26 sessions - evaluation of class participation
2. Presentation, one from each student as part of a group
3. Group assignment - one per student per group
    - It is further divided into five sub assignments, all culminating into final report