

# Institute of Business & Information Technology University of the Punjab

Quaid-e-Azam Campus, Lahore



### **Basic Information:**

Title:	Introduction to Information Technology	Code	IT 160
Program:	BBIT	Credit Hours:	Three (03)
Sessions:	30 Classes + Mid Term + Final Term	Pre-Requisite:	None

## **Course Description:**

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 backbone of the Business world, from retail to corporate world. This has resulted in essential learning of Information Technology to coop 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:**

After the completion of this course, it is expected that students who will involve themselves in the knowledge base working of the course will be capable to

- 1. Fully recognize the user-level computing and current digital world.
- 2. *Use computers to enhance productivity independent of the discipline.*
- 3. Comprehend different dimensions of Information Technology like Hardware, Software, Digital Design, Operating Systems, Algorithms, Networks, Internet, World Wide Web, and Databases etc
- 4. Acknowledge the need of System Security, Privacy, Ethics, Etiquettes and Ergonomics.
- 5. Proficiently use Microsoft Office (MS Word, MS Excel, MS Power Point, MS Access(Optional))

## **Teaching Learning Methodology:**

The formal teaching components of this course consist of: active student participation in and contribution to all forms of teaching and learning i.e. lectures (90min twice a week), discussions, research assignments and projects.

## **Group Configurations:**

One of the objectives of this course is to encourage and facilitate teamwork. Class will have to make a group of four for project. It is recommended that student will form their own groups. As a general guideline, your group should have members with diverse skillsets.

All Groups are required to submit their team rosters in the form of a memo to me by the end of 8th week. The memo should include Student Names, and ID numbers of all members and it should also identify a designated group leader who will serve as the primary point of contact for me to communicate with the group.

## Weekly Term Plan

Week	Topic			
1.	Introduction to Course & Digital World			
2.	Basics of Number Systems			
3.	Components of Computer Systems			
4.	Introduction to Google etc., www			
5.	Operating Systems			
6.	Microsoft Words			
7.	Microsoft Word			
8.	Microsoft Excel			
9.	Mid Term Examination			
10.	Microsoft Excel			
11.	Presentation Skills and Microsoft PowerPoint			
12.	Mail Merge and OLE			
13.	Telecommunication and Computer Networks			
14.	Internet and Worldwide Web			
15.	Information System; Introduction & Types			
16.	Information System Development Methods			
17.	Database Systems			
18.	Final Examination			



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## **Topics in Detail**

## Introduction to Information Technology

Course Overview,

Characteristics of Computer,

The Component of Computers,

Categories of Computers

Hardware vs Software

Computer Application in Society

#### **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

#### **Number Systems**

Numerical Representations

Decimal System, Binary System, Octal System

Hexadecimal System

Inter-Conversion of Number Systems

#### **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, Realtime Operating System,

embedded OS, Mobile OS etc

#### **Application Software's**

Business Software,

Graphics and Multimedia Software

 $Software\ for\ Homes,\ Personal\ and\ Educational\ Use$ 

Application Software for Communication and Web

#### The Internet and World Wide Web

History of Internet, How internet works?

The World Wide Web, Internet services

#### **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

## **Microsoft Office Fundamentals**

**Identify Interface Components** 

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

#### 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

#### 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.

#### **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

## **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

#### **Programming (Without Programming Language)**

Sequential Programs with examples

Conditional Statements; IF..Then..Else, Switch- Examples

Loop; While..do, do..while..., for - Examples

Flow Chart for Programming examples

#### **Information System**

Transaction Processing Systems

Management Information Systems

**Decision Support Systems** 

Expert Systems

#### **Information System Development**

System Development

Programming Languages

The Program Development Cycle

## **Database Management**

Data vs. Information

Characteristics of Data,

Databases; Operations on Data

Database Management Systems

#### **Computers Security**

Security Risk, Viruses, Worms,

Unauthorized Access, Information Privacy Internet Security Risk, Ethics & Society,



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Text & Recommended Readings			Tools		
<i>A</i> .	Discovering Computers 2017	1.	1. MS Word for Documentation		
	Shelly Cashman ISBN: 978-1439079263		Headings	Arial 11pt Bold	
B.	Information Systems Today		Normal Text	Times New Roman 10pt	
	Leonard Jessup, Joseph Valacich		Header Footer	Times New Roman 8pt	
	3 <sup>rd</sup> Edition 2009 ISBN: 9788120338951		Paragraph	Single Line Spacing	
C.	Exploring Microsoft Office 2017			First Line Indent 1.0 cm	
	Robert T. Grauer		Page Margins	2 cm from each side	
	Vol. 1, 3/E by	2.	MS PowerPoint, MS Excel, MS Access		

## **Grading Policy:**

Final Grade for this course will be the cumulated result of the following term work with relevant participation according to the quoted percentage.

Sessional	25%	Mid Term	35%	Final Term	40%
Assignments	10 %	Mid Term Exam	25%	Final Exam	30%
Quizzes	10%	Major Report/Work	10%	Case Study/ Project/	10%
Presentations	05%			Term Paper	

Remember subdivision of Mid Term and Final Term Examination should be done only in case of very essential and major Grading Instruments.

## **Dishonest Practices & Plagiarism**

Any student found responsible for dishonest practice/cheating (e.g. copying the work of others, use of unauthorized material in Grading Instruments) in relation to any piece of Grading Instrument will face penalties like deduction of marks, grade 'F' in the course, or in extreme cases, suspension and rustication from IBIT.

For details consult Plagiarism Policy of PU at <a href="http://pu.edu.pk/dpcc/downloads/Plagiarism-Policy.pdf">http://pu.edu.pk/dpcc/downloads/Plagiarism-Policy.pdf</a>

## **Grading System:**

Letter Grade	Grade Point	Num Equivalence
A	4.00	85 – 100 %
A-	3.70	80 – 84 %
B+	3.30	75 – 79%
В	3.00	70 – 74 %
B-	2.70	65 – 69 %
C+	2.30	61 – 64 %
C	2.00	58 – 60 %
C-	1.70	55 – 57 %
D	1.00	50 – 54 %
F	0.00	Below 50 %
I	Incomplete	*
W	Withdraw	*

#### **Norms to Course:**

- ✓ Submission Date and Time for the term instruments is always Un-Extendable
- ✓ 7 Absentees in class will be result in forced withdrawal. (**PU Policy**)
- ✓ Re-sit in Mid and Final Term will cause you a loss of 2 and 3 grade marks respectively. (PU Policy)
- ✓ This is your responsibility to keep track of your position in class evaluation units.
- ✓ After the submission date, NO excuse will be entertained.
- ✓ Keep a copy of all submitted Grading Instruments.
- ✓ Assignment is acceptable only in its Entirety.
- ✓ No make up for any assignment and quiz.
- ✓ Copied & Shared work will score Zero.
- ✓ Assignments are Individual.

## **Good Luck**