

# School of Professional Advancement

## Course Outline

Course Title            Management Application of ICT

Course Type            Foundational

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### Course Description

Even though computers are all around us, we only see the tip of the computer-application iceberg. We are entering the computer era in its infancy. Each class will present a learning experience to help students advance one step closer to an understanding of how computers are making the world a better place in which to live and work.

The course will cover topics which illustrate how computers are being used in different fields. Course will cover some common applications such as word processing, spreadsheets, presentations as well as a look at the hardware that makes up a computing machine.

### Course Instructional Objectives

- Be familiar with Computer systems concepts and its building blocks
- Understand the role of hardware and software in information Technology;
- Learn Computer structure and various types of IO devices
- Be familiar with different types of software;
- Be familiar with different features of Productivity Software like MS Word, PowerPoint and MS Excel.

### Course Student Objectives

Upon completion of the course, students will be able to:

- Understand the importance of Computer Systems in the business domain
- Understand various features of a computer system (both hardware and software).
- Use various features of MS word, MS Excel and PowerPoint to enhance efficiency and capability to perform various business related tasks.
- The ability to use computers to enhance productivity, regardless of the type of discipline in which they are being used.

### Course Contents

#### Session 1

- Introduction of Students
- Course Overview and Expectations.
- Introducing Today's Technologies
- Computers
- Data and Information
- The Web
- Evolution of the Internet
- The World Wide Web
- Types of Websites
- Other Internet Services

#### Learning outcome

The main learning outcome of this session is to make students understand what constitutes the computing environment. It will also introduce all other services provided by internet and their uses will be discussed along with some of the basic concepts regarding internet and World Wide Web.

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### Activities

Groups Formation

### Session 2: Input/output Devices

- Introduction to Input Devices
- Types of Input Devices
- Introduction to Output Devices
- Types of Output Devices
- Application Software
- Programs and Apps
- Productivity Applications
- Graphics and Media Applications
- Security Tools

#### Learning outcome

Students will have an opportunity to learn about various methods for input and output. They will learn and get familiar with different devices and their characteristics. Also identify the key features of productivity applications, graphics and media application and security tools.

### Session 3: Operating System and Network

- Introduction to Operating System
- Types of Operating System
- Uses of Computer Communication
- Network Standards
- Communication Devices And Software

#### Learning outcome

In this session students will learn about operating system, types of operating system. It will also discuss types of software communication terminology and application of network will also be discussed in class.

#### Activities

- Quiz 1

### Session 4: Word Processing

- Introduction to MS Word Environment
- Creating, Saving and formatting a Document
- Entering and Formatting Documents
- Bullets, Sections, Creating Hyperlinks and some other features.

#### Learning outcome

In this session students will learn how to use word processor to produce more attractive documents. Students will learn some basic and intermediate features of Microsoft Word.

#### Activities

- Lab Exercise
- Assignment1

### Session 5: Word Processing

Working with header & footer

- Indents & Tabs
- Line & Paragraph Spacing
- Working With List
- Adding Breaks
- Working With Shapes
- Text Boxes & Word Art

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### **Learning outcome**

In this session students will learn how to use shapes, spacing and other useful features of MS Word.

### **Activities**

- Lab Exercise

### **Session 6: Word Processing**

- Formatting Pictures
- Mail Merge
- Integrating Tables and Graphs
- Designing Professional Documents
- Print Documents.

### **Learning outcome**

In this session the students will learn some advance features of MSWord such as how to merge various files from excel or access. How to use mail merge? Students will also learn how to integrate different objects such as graphs in word documents.

### **Activities**

- Lab Exercise
- Quiz 2

### **Session 7: Word Processing**

- Project Research Paper
- Changing Document Setting
- Creating a Header
- Creating an Alphabetical Works Cited Page
- Proofreading and Revising the Research Paper

### **Learning outcome**

In this session students will learn about creating a research paper with references and sources.

### **Activities**

- Lab Exercise
- Assignment 2

### **Session 8: Power Point**

- Introduction to MS PowerPoint Environment
- Importance Of Presentation Graphics
- Adding Art & Special Effect To The Presentation,
- Organizational Chart
- Data Integration between Word, Excel and PowerPoint.

### **Learning outcome**

In this session students will learn how use MS PowerPoint software for making an effective presentation. Using various features of the software to make presentations more attractive and eye catching by adding sounds and movies.

### **Activities**

- Lab Exercise

### **Session 9**

- Midterm

### **Session 10: Microsoft Excel**

- Introduction to MS Excel
- Formatting Data, Paste Special, Format Painter
- Working With Charts.
- Revision of Previous Content

### **Learning outcome**

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In this session some of the features of excel will be discussed that makes worksheet more readable and attractive. Numeric data sometimes difficult to understand or undesirable to present, using Chart features; such data will be represented into graphs. Students will understand how to use this feature and represent numeric data in the form of graphs.

### **Activities**

- Lab Exercise

### **Session 11: Microsoft Excel**

- Working With Formulas & Functions
- Applying Custom Formulas

### **Learning outcome**

In this session students will learn how to use user defined and built in formulas. There are varieties of formulas for various objectives. Students will understand and learn how to use these formulas for calculation and solve various business related problems.

### **Activities**

- Lab Exercise
- Assignment 3

### **Session 12: Microsoft Excel**

- Sorting And Filtering Data
- Working With Multiple Sheets And Workbooks Simultaneously
- Protect Workbook, Share workbook
- Track Changes, Insert Comments.

### **Learning outcome**

In this session students will learn how to organize and view data in different ways. They will also learn how to work with multiple worksheets or workbook. At times it is required to protect worksheet, workbook or the part of worksheet. In this session it is shown that how it is accomplished. Sharing workbook will be discussed and how changes are tracked made by different user and the data is combined in one workbook.

### **Activities**

- Lab Exercise
- Quiz 3

### **Session 13: Microsoft Excel**

- What if Analysis
- Goal Seek, Scenario Manager
- Data Tables
- Data Validation

### **Learning outcome**

In this session students will learn how to analyze data by changing some variables for making a particular decision, learn how to model business problems and to solve problems using these features of excel. Students will also learn to ensure correct data entry to the worksheet.

### **Activities**

- Lab Exercise
- Assignment 4

### **Session 14: Microsoft Excel**

- Making Forms,
- Web Integration& Linking Objects
- Drop Down List
- Error Checking,
- Pivot Tables and Pivot Charts

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### Learning outcome

In this session students will learn some of the advance features of excel that will help them to be more productive in dealing business related issues and use pivot table to extract data from a particular worksheet from different perspective and to show that data using graphs. They will also learn how to record and use macro to be more productive by using these MACROS and to perform their routine task efficiently.

### Activities

- Lab Exercise
- Quiz 4

### Session 15

- Presentations

### Recommended Book (s) & Text:

- Discovering Computer 2016. Shelly Cashman Series
- Discovering Computers & Microsoft Office 365 & Office 2016\_ A Fundamental Combined Approach
- Other books, book chapters, and papers will be made available during the semester.

### ASSESSMENT METHODOLOGY

Attendance	5
Lab Exercises	10
Mid Term	15
Assignments	10
Quiz	15
Team Project/Presentations	10
Final Term Exam	35
Total	100

- Assignments can be either take-home or in class lab activities
- Quizzes mentioned in the outline are not definite, there can be surprise quizzes as well, be prepared.
- Semester project groups will have 2-3 members.

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### CALENDAR OF ACTIVITIES

Session	Sub-Topic	Readings	Activities
1	Course Overview and Introducing Today's Technologies: Computer, Devices and the web, The Internet, Websites and Media	Chapter 1,2	Group Formation
2	Input/output Devices and Programs and Apps: Productivity, Graphics, Security and other Tools	Chapter 7,4	
3	Operating System, Computer Network	Chapter 9, 10	Quiz 1
4	Word Processing	Lab Manual	MS. Word Lab Exercise Assignment 1
5	Word Processing	Lab Manual	MS. Word Lab Exercise
6	Word Processing	Lab Manual	MS. Word Lab Exercise Quiz 2
7	Word Processing	Lab Manual	MS. Word Lab Exercise Assignment 2
8	MS. PowerPoint	Lab Manual	MS. PowerPoint Lab Exercise,
9	<b>Midterm</b>		
10	MS Excel	Lab Manual	MS. Excel Lab Exercise,
11	MS Excel	Lab Manual	MS. Excel Lab Exercise, Quiz 3 Assignment 3
12	MS Excel	Lab Manual	MS. Excel Lab Exercise,
13	MS Excel	Lab Manual	MS. Excel Lab Exercise, Assignment 4
14	MS Excel	Lab Manual	MS. Excel Lab Exercise,
15	Presentations		