



B.Ed(4 Years) Elementary Education

Code	Subject Title	Cr. Hrs	Semester
EDE- 183	Computer Science I (Introduction to Computer Science)	3	
Year	Discipline		
	Elementary Education		

Aims

This course acts as a foundation for the following semesters. The course aims to help the students increase their proficiency in Computer by enhancing their knowledge in the subject.

Objectives

- Upon the successful completion of this course the students will be able to:
- Understand and explain the foundations of Computer
- Explain the Information Technology
- Describe the Windows 2000
- Apply their knowledge in different situations
- Develop a sense of understanding the trends and issues of Computer

Syllabus

Introduction to Information Technology

Theory:

Overview of computer system: uses, importance, future need; types of computer: super, mainframe, mini, micro desktop, notebook, personnel and workstation. Process of data, data and information, text codes. Part of computer: CPU, control unit, arithmetic unit memory, ROM, RAM, flash technology, flash memory, cache memory, computer clock, control bus, data bus, address bus, co-processor, types of microprocessor. Interacting with computer: input devices, e.g keyboard, keys, arrangement of keyboard, mouse, touch pad, touch screen, barcode readers, etc; output devices: monitor, types of monitor, resolution refresh rate dot pitch etc printer: types of printer, plotter, storage devices: floppy disk, hard CD, tape disk, magnetic and optical storage, types of software: system software, and application software. Operating system: operating system and user interface running programs, managing files, managing hardware, utility programs. Network and data communication; uses of network: types of network (LAN, MAN, WAN) file server, server, peer to peer. Network topologies: bus, star ring. network media and hardware, network software, data communication over telephone lines: modem, ISDM, T1, T2, and ATM. Internet: how does internet work, backbone, gateway, addressing schemes. Features of internet: email news, telnet, FTP, gopher, chat, world wide web, online server. Accessing the internet application: connection through LAN, connection through media, connection through modem, connection through high speed line.

Windows 2000

- i. Exploring windows 2000 work place: desktop component and customization then exploring parts of window, menu, and dialog boxes, multitasking, and shutting down windows.
- ii. Working with the accessories: calculator, notepad, work pad, paint program, media player, etc.
- iii. Organizing files and folders using window explorer.
- iv. Using window system tools, working with control panel' installing new software and hardware.
- v. Using internet: working with internet explorer. Surfing with internet explorer, working with e-mail.

Text Books

- Norton, P. (2004). *Peter Norton's Intro to Computers 6/e*: McGraw-Hill Education.
- Shelly, G., &Vermaat, M. (2011). *Discovering computers fundamentals: your interactive guide to the digital world*: Nelson Education.
- Reed, D. (2011). *A Balanced Introduction to Computer Science*: Prentice Hall.
- Grauer, R. T., Poatsy, M. A., Hulett, M., Krebs, C., Mast, K., Mulbery, K., & Hogan, L. (2012). *Exploring Microsoft Office 2010*: Pearson Education.

Reference Material

- Langer, M. (1999). *Excel 2000 for Windows*: Peachpit.
- Underdahl, B. (2000). *Teach Yourself Microsoft Windows Me*: Wiley.
- Tauber, D. A., Kienan, B., &Holzschlag, M. E. (1999). *Mastering Microsoft FrontPage 2000*: SYBEX.
- Buyens, J. (1999). *Running Microsoft FrontPage 2000*: Microsoft Press.