Course: Computer (Introduction and Application)

Credit Hours: 2

Introduction

This course is designed in view of the application of computer in wide range of areas. Operating systems is very interesting subject the student will know about operating system its types how it works ,all important functions which it performs about computer systems and also how it manages computer memory.

Course Content

Introduction to Operating systems

Introduction to Operating Systems, what is an operating system.
Types of Operating System. Operating Systems modes
Hardware, Software, Firmware
Introduction, Hardware, Software, Firmware.

Process Management

Introduction, Definitions of Process, process states, Process states transitions, the process control block, Operations on process, suspend and resume, interrupt processing.

Dead lock and Indefinite Postponement

Introduction, Examples of Deadlock. A related problem: Indefinite Postponement, Resource concepts, Four necessary conditions for Deadlock, Deadlock Prevention , Deadlock Avoidance and the Banker's Algorithm. Dead lock Detection, Dead lock Recovery

Memory Management (Real Storage)

Introduction, storage organizations, storage management, storage hierarchy, storage management strategies, Contiguous vs Noncontiguous storage allocation

Virtual Memory

Introduction Evolution of Storage organizations, virtual storage basic concepts, multilevel storage organizations, Block mapping, Segmentations

File System Management

Directories and names, types of file systems objects, file systems functions, information types, file system architecture,

Computer Lab / Practical

1. Installation of Windows 2000 professional : Installation from CD, installation from network.
2. Configuring the Windows 2000 Environment: Control Panel, Management console, Installing New Hardware
3. Managing the Desktop: Desktop setting, Accessibility Features, Local Setting
4. Managing Users: Creating Users, Disabling User Account, Deleting User Account, Renaming User, Changing Password, Managing User Properties
5. Managing Groups: Creating Groups, Group membership, renaming Group , Deleting group, Local Group Properties.
6. User Profiles and hardware profiles: Local user profiles, Roaming Profiles, Mandatory Profiles, Managing hardware profiles.
7. Managing Disks: File systems File System conversion, Disk storage, Disk Management Utilities
8. Files and Printing Management: File and Folder Basic Management, Creating Shares, Share Permissions, Managing Printer Properties, Sharing Printer, Printer Permission
9. Evaluation Criteria

Examination	Type	Marks
Internal Examination	Sessional Work	15%
	Mid-Semester	25%
External Examination	Final Semester	60%

Recommended Books

Operating Systems by H.M. Deitel

1. Operating Systems Concepts by Silberschatz Galvin & Gagne