

GOVERNMENT GIRLS POLYTECHNIC BILASPUR
DEPARTMENT OF COMPUTER SCIENCE

LESSON PLAN

Session : Jul-Dec 2025

Session start date - 06/10/2025

Course Name : OPERATING SYSTEM WITH LINUX

Course Code : 2022371(033)

Name of Subject teacher : MANISHA CHAWLA

Lecture plus Tutorial/Week : 3

LESSON PLAN			
SESSION : Jul-Dec 2025			
Discipline : CSE		Semester : 3rd	
Course Outcomes.	Topics/Subtopics to be covered under this unit	No. of periods planned	
CO-1 Identify different types of operating System for various business and industrial applications.	1.1 Need of Operating System	1	
	1.2 Structure of Operating System 1.2.1 System Components		
	1.2.2 System Calls 1.2.3 System Structure	1	
	1.3 Operating System types 1.3.1 Batch 1.3.2 Multiprogramming	1	
	1.3.3 Multitasking 1.3.4 Multiuser	1	
	1.3.5 Time Sharing 1.3.6 Real Time	1	
	1.4 Operating System Services	1	
	Assignment Given Date-		
CO-2 Analyze various process and CPU management concepts of an OS.	2.1 Process Concept 2.1.1 Programmers view of Process 2.1.2 Process State	1	
	2.1.3 Process Control Block 2.1.4 Process Scheduling	1	
	2.2 CPU Scheduling 2.2.1 Schedulers 2.2.2 Scheduling Criteria 2.2.3 Scheduling Algorithms	1	
		3	
	2.3 Deadlock 2.3.1 Basic Concepts	1	
	2.3.2 Deadlock Detection	1	
	2.3.3 Deadlock Prevention	1	
	2.3.4 Deadlock Avoidance	1	
	Assignment Given Date-		
	CO-3 Compare memory management concepts including logical memory, virtual memory and Physical memory.	3.1 Need of Memory Management	1
3.2 Contiguous Allocation 3.2.1 Partitioned Memory Allocation			
3.2.2 Fixed & Variable Partitioning 3.2.3 Swapping		1	
3.2.4 Relocation 3.2.5 Protection and Sharing		1	
3.3 Noncontiguous Allocation 3.3.1 Paging		1	
3.3.2 Segmentation		1	
3.4 Virtual Memory		1	

	3.4.1 Demand Paging	1
	3.4.2 Page Replacement Algorithms	1
	3.4.3 Thrashing	1
Assignment Given Date-		
CO-4 Use files management and directory structure concepts to organize a disk.	4.1 File Management	1
	4.1.1 File Concept and Access Methods	
	4.1.2 User view of File System	1
	4.1.3 Attributes and Operations	
	4.1.4 File System Design	1
	4.1.5 Disk Space	
	4.2 Directory Structure	1
	4.3 Disk Organization	
	4.3.1 Physical Structure	1
	4.3.2 Logical Structure	
	4.3.3 Addressing	2
	4.3.4 Disk Scheduling	
	4.4 Security and Protection Mechanism	1
Assignment Given Date-		
CO-5 Install and use Linux operating System.	5.1 Overview of Linux	1
	5.2 Installation and Upgrade	
	5.3 System Administration	1
	5.4 Introduction to Shell and Commands: who, who am i, tty, pwd, cd, mkdir, rmdir, ls, cat, cp, rm, mv, wc, split, cmp, comm, diff, head, tail, grep, sort, ln, chmod, chown, chgrp, pr, lp, expr, man, help, pipes and I/O redirectors, tee, ps.	5
	5.5 Edit files with “vi” editor	1
	5.6 Linux	
	5.6.1 Shell Concept	2
	5.6.2 Basic Shell Scripts	
Assignment Given Date-		
Total Class		42

Class room Instruction End date:-

Subject Teacher : Manisha Chawla

