



**B. P. Poddar Institute of Management and Technology**  
**Department of Information Technology**  
**Lesson Plan**

**Course : Operating System**

**Course Code : PCC CS502**

Lecture No.	Description	Reference	Teaching Methods	Execution
L1	Introduction to OS	1,GL	Lecture, Concept Mapping	As planned
L2	OS services and Kernel	1,GL	Interactive Discussion	As planned
L3	Programming and Time Sharing	TB	Case Study	As planned
L4	Process Scheduling: preemptive and	GL	Diagram-Based Explanation	As planned
L5	FCFS,SJF,RR,priority scheduling	GL	Problem solving	As planned
L6	Critical Section Problem	TB	Lecture/Discussion	As planned
L7	Critical Section Problem cont	TB	Lecture/Discussion	As planned
L8	Semaphores, monitors	TB	Code Demo	As planned
L9	Semaphores, monitors cont	TB	Code Demo	As planned
L10	Paging,Segmentation Details	GL	Lecture/Discussion	No classes, shift to next day
L11	Demand Paging,Swapping ,	GL	Lecture/Discussion	As planned
L12	Virtual Memory,	GL	Case Study	As planned
L13	Introduction to Deadlocks	GL	Lecture/Discussion	As planned
L14	Concurrent Processes	GL	Lecture/Discussion	No classes, shift to next day
L15	Deadlocks graph , Different condition of	GL	Lecture	As planned
L16	Bankers Algorithm.	GL	Flowchart discussion	As planned
L15	Page replacement Algorithm	Re1,GL	Exercises	As planned
L16	Introduction to File system and details	Re2	Hands-On Demo	As planned
L17	Introduction to directory structure	Re2	Hands-On Demo	No classes, shift to next day
L18	Directory structure details continued	GL	Hands-On Demo	As planned
L19	I/O hardware,Interrupts	TB	Lecture/Discussion	As planned
L20	DMA	TB	Lecture/Discussion	As planned
L21	Spooling and Device reservation	TB	Lecture/Discussion	No classes, shift to next day
L22	One pass and Two pass	TB	Lecture/Discussion	As planned
L23	Macro processors	TB	Lecture/Discussion	As planned
L24	Loaders	TB	Lecture/Discussion	As planned
L25	Function ,Editors	Re4	Lecture/Discussion	As planned
L26	Disk Structures	Re4	Lecture/Discussion	As planned
L27	Disk scheduling(FCFS,SSTF,SCAN)	Re4	Problem Solving	As planned
L28	Disk scheduling continued	Re4	Problem Solving	As planned
L29	Introduction to Distributed OS	Re4	Lecture/Discussion	No classes, shift to next day
L30	Introduction to Protection and Security	GL	Lecture/Discussion	No classes, Lecture notes given
L31	Protection and Security continued	GL	Lecture/Discussion	No classes, Lecture notes given

Lecture No.	Description	Reference	Teaching Methods	Execution
L32	Protection and Security	GL	Lecture/Discussion	As planned
L33	Contiguous Memory allocation	GB,TB	Lecture/Discussion	As planned
L34	Cache Memory	TB	Lecture/Discussion	As planned
L35	System call Details	TB	Lecture/Discussion	As planned
L36	I/O hardware, polling, interrupts, DMA	GB	Lecture/Discussion	As planned
L37	Application I/O interface	TB	Lecture/Discussion	No classes, Lecture notes given
L38	Goals of protection, domain of protection	TB	Lecture/Discussion	No classes, Lecture notes given

Text Book: (TB)

[1] Silberschatz A. & Galvin, "Operating System Concept", Addison Wesley/Pearson Education [GB]

[2] Tanenbaum "Modern OS" Prentice Hall of India/Pearson Education [TB]

Reference: (Re)

1. Milenkovic M., "Operating System : Concept & Design", McGraw Hill.
2. Tanenbaum A.S., "Operating System Design & Implementation", Prentice Hall NJ.
3. Silberschatz A. And Peterson J. L., "Operating System Concepts", Wiley.
4. Dhamdhere: Operating System TMH
5. Stalling, William, "Operating Systems", Maxwell McMillan International Editions, 1992.

Course coordinator

Signature of HOD