

Lesson Plan

Name of Faculty : Dr. Sanjay Dahiya, Associate Professor of CSE
Discipline : Computer Science and Engineering
Semester : VIth (Even)
Subject : Operating Systems / PCC-CSE-305-T
Lesson Plan Duration : 15 weeks (from January/ February-2024 to June/July-2024)
Work Load (Lecture/Practical) per week (in hours): (3-L) / hours

Week	Theory		Topic Covered Date and Remarks		
	Lecture-Day	Topic (Including Assignment/Test)	Date	HOD	Director- Principal
1 st	1	Introductory Concepts			
	2	Operating systems functions and characteristics			
	3	Operating system services and systems call			
	4	Operating system services and systems call			
2 nd	5	System programs			
	6	Operating system structure			
	7	Operating systems generation			
	8	Types of Operating systems: Batch operating system			
3 rd	9	Time-sharing OS			
	10	Realtime systems Distributed operating system			
	11	File Systems: Types of Files and their access methods			
	12	File allocation methods			
4 th	13	Directory Systems: Structured Organizations,			
	14	Directory and file protection mechanisms,			
	15	Disk scheduling and its associated algorithms.			
	16	Disk scheduling and its associated algorithms.			
5 th	17	Processes: Process concept, Process Control Block			
	18	Operations on processes, cooperating processes			
	19	CPU scheduling: Levels of Scheduling			
	20	Scheduling criteria			
6 th	21	Comparative study of scheduling algorithms			
	22	Algorithm evaluation			
	23	Multiple processor scheduling.			
	24	Critical-section problem, Semaphores.			
7 th		1st Minor Test			
8 th	25	Storage Management: Storage allocation methods			
	26	Single contiguous allocation			
	27	Non-contiguous memory allocation			
	28	Paging and Segmentation techniques			
9 th	29	Segmentation with paging,			
	30	Virtual memory concepts			
	31	Demand Paging			
	32	Page replacement Algorithms			
10 th	33	Page replacement Algorithms			
	34	Thrashing			
	35	Revision and Problem Solving			
	36	Revision and Quiz			
11 th	37	Deadlock: System model			
	38	Deadlock characterization			
	39	Methods for handling deadlocks			
	40	Revision and Problem Solving			
12 th	41	Deadlock prevention			
	42	Deadlock avoidance			
	43	Deadlock detection			
	44	Recovery from deadlock			
13 th	45	Case Studies:			
	46	Comparative study of WINDOW			
	47	UNIX & LINUX system			
	48	UNIX & LINUX system			
14 th		2nd Minor Test			
15 th	49	Revision and Problem Solving			
	50	Revision and Quiz			
	51	Revision and Problem Solving			
	52	Revision and Quiz			