ATME College of Engineering

Department of Computer Science & Design

Lesson Plan & Work-done Diary for AY: 2024, ODD Semester

Course with Code: Operating System –BCS303				**Faculty:**			**Semester & Section:** III	
Class No.	**Date planned (DD/MM)**	**Topics to be covered**	**TLP Planned**	**Class No.**	**Date of Conduction (DD/MM)**	**Topics Covered**	**TLP Executed**	**Remarks if any deviation**
MODULE-1								
1.		**Introduction**	PPT	1.				
2.		What operating systems do; Computer System organization	PPT	2.				
3.		Computer System architecture, Operating System structure;	PPT	3.				
4.		Operating System operations, Process management; Memory Management; Storage management	PPT	4.				
5.		Protection and Security; Distributed system; Special-purpose systems, Computing environments.	PPT	5.				
6.		**Operating System Services** :User - Operating System interface; System calls, Types of system calls	PPT	6.				
7.		System programs; Operating system design and implementation, Operating System structure	PPT	7.				
8.		Virtual machines; Operating System generation, Operating System debugging, System boot	PPT	8.				
9.		Revision, Module End Question discussion, Quiz	My Quiz App	9.				

Course with Code: Operating System –BCS303				**Faculty:**			**Semester & Section:** III	
Class No.	**Date planned (DD/MM)**	**Topics to be covered**	**TLP Planned**	**Class No.**	**Date of Conduction (DD/MM)**	**Topics Covered**	**TLP Executed**	**Remarks if any deviation**
MODULE-2								
1.		**Process Management:** Process concept; Process scheduling,	PPT	1.				
2.		Operations on processes; Inter process communication.	PPT	2.				
3.		**Multithreaded Programming:** Overview; Multithreading models,	PPT	3.				
4.		Thread Libraries, Threading issues.	PPT	4.				
5.		**Process Scheduling:** Basic concepts; Scheduling Criteria;	PPT	5.				
6.		Scheduling Algorithms;	PPT	6.				
7.		Thread scheduling ;	PPT	7.				
8.		Multiple-processor scheduling;	PPT	8.				
9.		Revision, Module End Question discussion, Quiz	my Quiz App	9.				

Course with Code: Operating System –BCS303				**Faculty:**			**Semester & Section:** III	
Class No.	**Date planned (DD/MM)**	**Topics to be covered**	**TLP Planned**	**Class No.**	**Date of Conduction (DD/MM)**	**Topics Covered**	**TLP Executed**	**Remarks if any deviation**
MODULE-3								
1.		**Process Synchronization:** Synchronization: The critical section problem	PPT	1.				
2.		Peterson's solution; Synchronization hardware; Semaphores;	PPT	2.				
3.		Classical problems of synchronization;	PPT	3.				
4.		**Deadlocks:** System model; Deadlock characterization;	PPT	4.				
5.		Methods for handling deadlocks;	PPT	5.				
6.		Deadlock prevention; Deadlock avoidance;	PPT	6.				
7.		Deadlock detection and recovery from deadlock.	PPT	7.				
8.		Revision, Module End Question discussion, Quiz	My Quiz App	8.				

Course with Code: Operating System –BCS303				**Faculty:**			**Semester & Section:** III	
Class No.	**Date planned (DD/MM)**	**Topics to be covered**	**TLP Planned**	**Class No.**	**Date of Conduction (DD/MM)**	**Topics Covered**	**TLP Executed**	**Remarks if any deviation**
MODULE-4								
1.		**Memory Management:** Memory management strategies:	PPT	1.				
2.		Background; Swapping;	PPT	2.				
3.		Contiguous memory allocation;	PPT	3.				
4.		Paging; Structure of page table; Segmentation.	PPT	4.				
5.		**Virtual Memory Management:** Background;	PPT	5.				
6.		Demand paging;	PPT	6.				
7.		Copy-on-write; Page replacement;	PPT	7.				
8.		Allocation of frames; Thrashing	PPT	8.				
9.		Revision, Module End Question discussion, Quiz	myQuiz App	9.				

Course with Code: Operating System –BCS303				**Faculty:**			**Semester & Section:** III	
Class No.	**Date planned (DD/MM)**	**Topics to be covered**	**TLP Planned**	**Class No.**	**Date of Conduction (DD/MM)**	**Topics Covered**	**TLP Executed**	**Remarks if any deviation**
MODULE-5								
1.		**File System, Implementation of File System:** File system: File concept; Access methods;	PPT	1.				
2.		Directory and Disk structure; File system mounting; File sharing; Implementing File system:	PPT	2.				
3.		File system structure; File system implementation; Directory implementation; Allocation methods; Free space management	PPT	3.				
4.		**Secondary Storage Structure, Protection:** Mass storage structures; Disk structure;	PPT	4.				
5.		Disk attachment; Disk scheduling; Disk management;	PPT	5.				
6.		Protection: Goals of protection,	PPT	6.				
7.		Principles of protection, Domain of protection, Access matrix.	PPT	7.				
8.		Revision, Module End Question discussion, Quiz	myQuiz App	8.				

	Activity	Planned	Actual	Remarks
1	Theory Classes	40		
2	Assignments/ Quizzes/ Self-study	-		
3	Tutorials/ Extra classes	-		
4	Internal Assessments	3		
5	ICT based Teaching (% of usage in Curriculum)	100		
Planning			**Execution**	
Faculty Signature:			**Faculty Signature:**	
HoD Signature:			**HoD Signature:**	