QUAID-E-AWAM UNIVERSITY OF ENGINEERING, SCIENCE & TECHNOLOGY, NAWABSHAH

Department of Computer Systems Engineering

TENTATIVE TEACHING PLAN

Subject Teacher: Zuhaib Ahmed Shaikh — Subject: Operating System

Batch: 14CSE — Year: 2nd — Term: 2nd

Term Starting Date: 03-08-2015 — Term Suspension Date: ---

S. No.	Topic	No. of Lectures required
Introduction		
1.	Introduction, Popular OS & their comparison, Kernel & OS Views	02
2.	OS structure, objectives services & components	02
3.	Evolution of O.S	01
Process & Threads		
4.	Introduction to processes & threads	01
5.	Process states, 3-stage model, 5-stage model & queuing model	04
6.	Uni-processor scheduling, scheduling algorithms & Gantt chart	04
7.	Linking & loading, Process control block & Inter process communication	03
Memory Management techniques & Virtual Memory		
8.	Introduction	01
9.	Memory management techniques & its problems	04
10.	Virtual Memory, its management techniques & its problems	03
Mutual Exclusion & Deadlock		
11.	Introduction, Mutual Exclusion & semaphore	04
12.	Deadlock & its conditions	01
13.	Deadlock prevention, detection, avoidance, recovery & banker's algorithm	04
File Management		
14.	Introduction, File organization & Access Methods	02
15.	File Directories, Sharing & Record Blocking	02
16.	Secondary Storage Management & File System Security	01
Virtual Machines		
17.	Introduction, benefits, types & implementation techniques	02
18.	Virtualization concerns & OS components	02
Operating System Security		
19.	Introduction	01
20.	Cryptography, protection mechanism, authentication & Defenses	04
Operating System Kernel		
21.	Introduction, kernel & shell scripting	02
22.	Monolithic, Layered systems & microkernels	02
	Total	**52**

Signature of Teacher: Dated: 05-08-2015

Remarks of DMRC:

Signature of Chairman/Director: Dated: