



School of Computer Science and Engineering

Fall Semester-2018-19

Course Code : **CSE 2005**

Course Name : **Operating Systems- Lab (ELA)**

List of Experiments and Exercise Sheet

S.No	Exercises	
1	Basics of Unix commands, Environment Variables.	Optional
2	Simple C Programming Using GCC compiler	Optional
3	Shell Programming	Optional
4	Simple Process Management Programs – parent & child, zombie, orphan, sleep , background	Mandatory
6	Implementation of Scheduling algorithms a) FCFS b) SJF c) Priority d) Round Robin e) Preemptive Priority f) SRTF	Mandatory
7	Implement Bankers Algorithm for Dead Lock Avoidance	Mandatory
8	Implement an Algorithm for Dead Lock Detection	Optional
9	Implement Synchronization Applications - Dining Philosophers Problem	Mandatory
10	Implement Shared memory and IPC	Mandatory
11	Implementation of Semaphore – Binary Semaphore and Counting Semaphore	Optional
12	Implementation of semaphores. – Readers & Writers	Mandatory
13	Implement all page replacement algorithms a) FIFO b) LRU c) LFU d) Optimal	Mandatory
14	Disk Scheduling	Optional
15	Implement all file allocation strategies a) Sequential b) Indexed c) Linked	Mandatory

Desc	Labs
Introduction – Familiarity	01
Exercises Mandatory	08
Exercises – Optional	03
Closed Exam Assessment	01
Term End	01
Total Lab	14