



NATIONAL UNIVERSITY
of Computer & Emerging Sciences, Lahore

Department of Computer Science

Lab Course CL-205 – Operating Systems Lab FALL 2018

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Office Hours: TUES 11-1 PM, Fri 11-1 PM

Instructor Name: Shakeel, Zafar
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Office Hours: Mon, Wed 11:00 to 1:00 PM

Lab Information

Program: BS
Pre-requisites (if any): Data Structures
Course Website (if any):
Class Meeting Time: Section C: Friday, 2 – 5 PM

Credit Hours: 1 **Type:** Core

Class Venue: Lab 4

Lab Objectives/Goals?

Operating System Lab focuses to provide an introduction to the basic working of a Linux/Unix based Operating System. It also provides students with the basics of how Processes/Programs are scheduled, how they communicate, how they share the resources. How the System Calls work.

The goals of this lab shall be:

- To introduce students to the basics of Operating System with the help of C/C++ Language Programming.

Tentative Weekly Schedule

Week	Topics to be covered
1	Introduction To UBUNTU and C/C++
2	Make File, Command line arguments
3	System Calls, fork, exec, wait
4	Inter process communication through unmade pipes
5	Inter communication process through shared memory
6	Threads
7	Mid
8	Semaphores
9	Threads with semaphores
10	Implement Singleton Pattern
11	File System
12	MMAP
13	Final

(Tentative) Grading Criteria

1. 2 Quizzes (10%)
2. In labs (30%)
3. 1 Midterm Exam (20%)
4. Final Exam (40%)

Lab Policies

1. Quizzes may be un-announced.
2. No makeup for missed quiz or assignment.
3. 80% attendance.
4. Minimum requirement to pass this course is to obtain at least 50% marks.
5. All labs and post labs must be done individually.
6. Plagiarism in any work (Labs, Quiz, Assignment, Midterms, and Final Exam) from any source (Internet or a Student) will result in F grade.