



NATIONAL UNIVERSITY
of Computer & Emerging Sciences, Lahore

Department of Computer Science

CL118– Programming Fundamentals Lab **FALL 2021**

Instructor Name: Muhammad Naveed/Mr.Faraz

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Office Location: M-109

Office Hours: Mon/Tues 8:30-11:00am

Course Information

Program: BS Computer Science

Credit Hours: 1

Type: Core

Class Meeting Time: Section BCS-1A 10:00-1:00pm Friday

Class Venue: CS-Lab04

Course Description/Objectives/Goals?

The intent of this lab is to equip students with the concepts that build strong familiarization related to basic concepts of programming in C++, including basic data types, expressions, iterations, functions, arrays and pointers.

(Tentative) Grading Criteria

1. Lab Work (25%)
2. Quizzes (15%)
3. Midterm Exam (20%)
4. Final Exam (40%)

Course Policies

1. Minimum of 50 is required to clear the lab
2. No makeup for missed quiz or Lab session
3. 80% attendance
4. F grade for every Plagiarism case!

Tentative Weekly Schedule

Week	Topics to be covered	Readings	Quiz?
2 (Lab1)	Introduction, problem solving and writing algorithms in simple english		
3 (Lab 2)	Computational Problems, Algorithms and Problem Solving using pseudo-code		
4 (Lab 3)	Starting up with Visual Studio IDE and Basic C++ programming and expression evaluation		
5 (Lab 4)	If-Else, Type Casting and Basic arithmetic operations		
6 (Lab 5)	Switch statement, nested if else		Quiz1
7 (Lab 6)	Loops (while) with nested if-else		
8 (Lab 7)	Loops (for-loop, do-while) with nested if-else		
9 (Lab 8)	Lab Mid Term Exam		
10 (Lab 9)	Parameter Passing (Pass by ref, pass by value), Function Overloading		
11 (Lab 10)	Function Overloading &Intro to File Handling		Quiz2
12 (Lab 11)	1D Array, Operations on 1D array and File Handling		
13 (Lab 12)	Character Arrays, Operations on char arrays, multidimensional array and array sorting		Quiz3
14 (Lab 13)	2D matrix operations and Functions with 2D array parameters		
15 (Lab 14)	Lab Final Term Exam		
16		-----	-----