COURSE SYLLABUS

Course number and name	222CSC-3 Programming Language
Credits hours	3 Credit hours
Contact hours	4 Contact hours; 2 for lecture and 2 for practical
Instructor name	Dr Ashfaq Ahmad
Textbook	Schaum's Outlines - Programming with C++, 2nd Edition, Author: John R. Hubbard, ISBN: 9780071353465
Other supplemental materials	Lecture notes
Specific course information	
Catalog description	Introduction to the use of the C++ programming language as an aid to solving mathematical and scientific problems. Students design, write, and implement programs. This knowledge area consists of those skills and concepts that are essential to programming practice independent of the underlying paradigm and programming language for the beginners. Specific topics covered include: An overview of programming languages, basic elements of C++, variables, types, operators, branching mechanism, iteration and loops, functions and arrays.
Prerequisite	None
Required / Elective	Required
Specific goals for the course	
Course Learning Outcomes (CLO)	**1.0 Knowledge** 1.1 Describe the basic elements of computer programming languages. 1.2 Define the fundamentals of programming using branching mechanism, loops, functions, and arrays. **2.0 Skills** 2.1 Analyze a computing problem and implement it into a program for solution. 2.2 Develop a program using an efficient technique to solve a particular problem. **3.0 Competence** 3.1 Ability to work in a group to design and develop a mini software project. 3.2 Demonstrate the outcomes of program.
List of topics to be covered	1 Introduction to Programming Language 2 Variables, primitive data types, and operators 3 Branching mechanism 4 Iteration and loops 5 Function concept, standard library and user-defined function, function overloading 6 Array declaration and processing