

Programme	Semester 2	Course Code	GC-109	Credit Hours	3
Course Title	Introduction to Computer Programming				
Course Introduction					
The course is designed to familiarize students with the basic programming, to develop programming logic and understanding. Emphasizes on problem analysis and program development and basic concepts of functions, statement and pointers.					
Learning Outcomes					
On the completion of the course, the students will:					
<ol style="list-style-type: none"> 1. Arrays Concept 2. Program Algorithms 3. Loops 4. Objects and Classes 					
Course Content				Assignments/Readings	
Week 1	Fundamental programming concepts and constructs				
Week 2	Purposes of programming and software development				
Week 3	Translation of solution (algorithms) to programs				
Week 4	Control structures i.e. conditional statements and Iterative/Loops statements.				
Week 5	Implementation of procedure/functions				
Week 6	Handling of arrays				
Week 7	Handling of pointers				
Week 8	Objects and Classes				
Week 9	Streams and Files.				
Week 10	Coding, executing and debugging of simple programs				

Week 11	Implementation of Constructs: if, then, switch, etc.	
Week 12	Implementation of loops: for, while	
Week 13	Implementations of simple functions and overloading functions	
Week 14	Implementations of Arrays (1D, 2D), pointers (dynamic memory allocation)	
Week 15	Implementation of linked list	
Week 16	Implementation of Filing.	
Textbooks and Reading Material		
<ol style="list-style-type: none"> 1. Schildt, H. (2000). C: The Complete reference, 4th Edition. 2. Deitel, H.M & Deitel, P.J. (2012). C++ How to Program 8th Edition 3. Bailey & Lundgaard, (1988) Program Design with Pseudo-code, Brooks/Cole Publishing. 4. Robertson, L.A. (2004). Simple Program Design: A step-by-step approach, ISBN: 0-619-16046-2 		
Teaching Learning Strategies		
<ol style="list-style-type: none"> 1. Lectures 2. Written Assignments 3. Quizzes 4. Lab Work 		
Assignments: Types and Number with Calendar		
<ol style="list-style-type: none"> 1. Practical 2. Quiz 3. Presentation 4. Assignment 		