

Course Name: Programming-1

Course Code: COMP112

General Information						
Course Code	COMP112	Level/Year	2/1	Required (R) / Selected Elective (SE)		R
Credit Hours	Theory	2	Lab	1	Total	3
Prerequisites	Nil	Course Coordinator		Dr. Muhammad Ali Mozhary		
Corequisites	Nil					
Course Description						
This course emphasizes skills and concepts for the beginners essential to programming practice independent of the underlying paradigm and programming language. It also provides an overview of basic Elements of Java, Branching Mechanism, Iteration and loops.						
Course Objectives : On completion of the course, the student will be able to:						
<ul style="list-style-type: none">• Make the student understand the different Data types and variables used in Java programming.• Explain the branching mechanism as well as looping concepts for programming.• Provide an overview of programming language, methods and arrays						
Course Contents						
List of Topics						
CH 1: Introduction to Programming Language						
CH 2: Variables and types						
CH 3: Branching Mechanism						
CH 4: Iteration and loops						
CH 5: Selected Topics: Methods & Arrays						
Textbook						
<ul style="list-style-type: none">• Allen B. Downey, “Think Java: How To Think Like a Computer Scientist”						
Reference Materials						
<ul style="list-style-type: none">• Savitch, W. J., Absolute Java						
Course Learning Outcomes						
CLO#01	Describe the basic elements of computer programming languages.					
CLO#02	Define the variables, looping and branching mechanism of the specific programming language.					

CLO#03	Analyze a computing problem and implement it into a program for solution.
CLO#04	Develop a program using an efficient technique to solve particular problem.
CLO#05	Show the ability to perform in a group to design and develop a mini software project.