

MODULE PLAN AND CONTENT

Module 7

C, C++ AND C#



Version 1.0

MODULE PLAN

Module Plan	
Module Title	INTRODUCTION TO C PROGRAMMING
Duration	1.5 hours (90 minutes)
Learning Objectives	By the end of this module, participants will be able to: - Understand what C is and why it is important. - Write a simple program in C (input, process, output). - Recognize variables and data types. - Explain how step-by-step instructions work in C.
Lesson Plan	C Training Module for Deaf Youth Duration: ~90 minutes (intro + 2 hands-on blocks + wrap-up)
	0. Welcome & Setup (Intro) — 10 minutes • Objective: Introduce C and its use in systems. • Main Point to Cover: C is the foundation of many modern languages. • Activity: Show pictures of ATMs, cars, phones – all often use C.

Module Plan	
	• Teaching Methodology: Visual slides, sign language explanation.
	1. Getting Data — 15 minutes • Objective: Learn input/output functions. • Main Point to Cover: <code>printf</code> (output) and <code>scanf</code> (input). • Demo Example: Ask age, print result. • Activity: Write program “Hello [name]”. • Teaching Methodology: Code-along with diagrams. 2. Changing Data Safely — 20 minutes • Objective: Work with variables. • Main Point to Cover: Integers, floats, chars. • Demo Example: Add two numbers. • Activity: Students modify numbers and recalc. • Teaching Methodology: Guided practice, peer support.
Materials Needed	Laptop, projector, handouts with simple code examples.

MODULE CONTENT

Content	Description	Content
Lesson Content	Key Digital Terms:	Key Digital Terms: • Variable • Input / Output • Data type • Bug
Video summary	Youtube Links	• C Programming Basics – Subtitled - https://www.youtube.com/watch?v=KJgsSFOSQv0
Activity		Real-life analogy: Write an algorithm for “Making tea” in C (input = water, tea bag; process = boil; output = tea).
Assessment	Quiz	1. What does <code>printf</code> do? A. Reads input B. Shows output ☒ C. Saves data D. Stops the program

Content	Description	Content
		2. What is %d used for? A. Text (string) B. Decimal numbers (integers) ✓ C. Characters (letters) D. Colors
		3. Which part is “input”? A. <code>main()</code> B. <code>printf</code> C. <code>scanf</code> ✓ D. <code>return 0;</code>
		4. What happens if code has a bug? A. It works faster B. It gives the wrong result ✓ C. It becomes more secure D. It disappears
		5. Correct order in an algorithm? A. Output → Process → Input B. Process → Input → Output C. Input → Process → Output ✓ D. Input → Output → Process

1. MODULE PLAN

Module Plan	
Module Title	INTRODUCTION TO C++ PROGRAMMING
Duration	1.5 hours (90 minutes)
Learning Objectives	By the end of this module, participants will be able to: • Understand C++ as evolution of C. • Use <code>cin</code> and <code>cout</code> for input/output. • Recognize classes and objects. • Write a small program in C++.
Lesson Plan	C++ Training Module for Deaf Youth Duration: ~90 minutes (intro + 2 hands-on blocks + wrap-up)
	0. Welcome & Setup (Intro) — 10 minutes • Objective: Explain C++ in games/apps. • Main Point: Adds Object-Oriented Programming. • Activity: Show video game screenshots.

Module Plan	
	• Methodology: Visual + story. 2. Getting Data — 15 minutes • Objective: Use <code>cin/cout</code>. • Demo Example: Ask name, print greeting. • Activity: Compare two numbers. • Methodology: Input/output diagram. 2. Changing Data Safely — 20 minutes • Objective: Learn about objects. • Demo Example: Class “Car” with model and drive function. • Activity: Create class “Student”. • Methodology: Role-play analogy (student card).
Materials Needed	Laptop, projector, flowchart symbols.

2. MODULE CONTENT

Content	Description	Content
Lesson Content	Key Digital Terms:	Key Digital Terms: • Variable • Class • Object • Input/Output
Video summary	Youtube Links	• C++ Basics – Subtitled - https://www.youtube.com/watch?v=vLnPwxZdW4Y
Activity		Scenario: “Design an algorithm for school attendance system in C++.”
Assessment	Quiz	1. cin means? A. Output B. Input ☒ C. Variable D. Function

Content	Description	Content
		2. cout means? A. Input B. Loop C. Output ✓ D. Class
		3. What is a class? A. A type of variable B. Template/blueprint for objects ✓ C. Function D. A bug
		4. Where is C++ often used? A. Cooking recipes B. Games ✓ C. Text editing D. Music
		5. Correct order in an algorithm? A. Output → Input → Process B. Input → Process → Output ✓ C. Process → Output → Input D. Input → Output → Process

MODULE PLAN

Module Plan	
Module Title	INTRODUCTION TO C# PROGRAMMING
Duration	1.5 hours (90 minutes)
Learning Objectives	By the end of this module, participants will be able to: • Understand C# and its link with Microsoft and Unity. • Use <code>Console.WriteLine</code> and <code>Console.ReadLine</code>. • Apply variables and simple conditions. • Write a simple C# program.
Lesson Plan	C# Training Module for Deaf Youth Duration: ~90 minutes (intro + 2 hands-on blocks + wrap-up)
	0. Welcome & Setup (Intro) — 10 minutes • Objective: Present C# as modern language.

Module Plan	
	• Main Point: Used in Office, Skype, Unity. • Activity: Show app logos. • Methodology: Picture-based. 3. Getting Data — 15 minutes • Objective: Practice input/output. • Demo Example: Ask favorite color. • Activity: Ask age, print result. • Methodology: Code-along. 2. Changing Data Safely — 20 minutes • Objective: Use <code>if</code> conditions. • Demo Example: Check if number > 5. • Activity: Even/odd checker. • Methodology: Guided coding.

Module Plan	
Materials Needed	Computer, IDE (Visual Studio), slides.

MODULE CONTENT

Content	Description	Content
Lesson Content	Key Digital Terms:	Key Digital Terms: • Variable • Condition (if) • Input/Output • Bug
Video summary	Youtube Links	• C# Basics – Subtitled - https://www.youtube.com/watch?v=GhQdlIFylQ8
Activity		Scenario: “Create a program that asks for password. If correct → login; if wrong → error.”
Assessment	Quiz	1. Console.ReadLine does what? A. Output B. Input ☒

Content	Description	Content
		C. Loop D. Variable
		2. Console.WriteLine does what? A. Input B. Output ✓ C. Function D. Class
		3. What is if used for? A. Looping B. Making decisions ✓ C. Printing text D. Storing data
		4. C# is used in? A. Cooking recipes B. Unity games ✓ C. Music D. Painting



Content	Description	Content
		5. Correct order in an algorithm? A. Output → Input → Process B. Input → Process → Output ✓ C. Process → Output → Input D. Input → Output → Process