UNITED INTERNATIONAL UNIVERSITY
Department of Computer Science and Engineering (CSE)
Course Syllabus

1	Course Title	Introduction to Computer Systems
2	Course Code	CSE 1110
3	Trimester and Year	Fall 2022
4	Pre-requisites	
5	Credit Hours	1.0
6	Section	F, U, V
7	Class Hours	
8	Class Room	
9	Instructor's Name	Shoib Ahmed Shourav
10	Email	shoib@cse.uiu.ac.bd
11	Office	536/B
12	Counselling Hours	
13	Reference	Teach yourself C – Herbert Schildt
14	Course Contents (approved by UGC)	

15	Course Outcomes (COs)		
		COs	Description
		CO1	Identify the components of a computer and demonstrate its internal mechanisms.
		CO2	Derive the solution steps and flowchart of basic decision and repetition problems.
		CO3	Use a programming language to write error-free programs using conditional statements and loops.
		CO4	Work in a team and communicate effectively to present a topic about CSE.

16	Teaching Methods	Lecture, Laboratory exercise and reports, Project Developments.

17	CO with Assessment Methods			
		CO	Assessment Method	(%)
		-	Attendance	10%
		CO2	Assignment (code.org)	5%

CO3	Assignment (BeeCrowd)	5%
CO2	Class performance (problem solving & Flowchart)	10%
CO3	Class performance (programming)	20%
CO4	Presentation On CSE related topics (tech companies, products, personalities etc.)	10%
CO1, CO2	Mid-term examination	15%
CO3	Final examination	25%

18	Mapping of COs and Program outcomes

CO	Statement	Bloom's Domain
CO1	Identify the components of a computer and demonstrate its internal mechanisms.	C
CO2	Derive the solution steps and flowchart of basic decision and repetition problems.	C
CO3	Use a programming language to write error-free programs using conditional statements and loops.	C
CO4	Work in a team and communicate effectively to present a topic about CSE.	P, A

19	Lab Outline

Class	Lectures/Activities	Evaluation method	COs
1	**Introduction to software** Using basic softwares (Word, PowerPoint) and websites (Google, Wikipedia), how softwares are stored in computer **Introduction to code.org** Enroll students to "Accelerated Intro to CS" course and begin coding by blocks	-	-
2	**Introduction to hardware** Parts of a computer and their basic functionalities, how computer works, memory vs. storage, **Introduction to problem solving** Writing problem solving steps formally, solving decision problems	-	-
3	**Introduction to number systems** Introduction to binary numbers, bits, bytes (kB, MB, GB ...), words, interchanging decimal and binary numbers, representing data in a computer (positive and negative integers, complements, ASCII code) **Problem solving**	Class test and assignment on problem solving	CO2

		Solving repetition problems		
	4	**Introduction to C programming** Standard input/output functions, variables and arithmetic operators **Problem solving** Solving more repetition problems	URI submissions Class test and assignment on problem solving	CO3 CO2
	5	**Group presentation** On CSE related topics (tech companies, products, personalities etc.)	Presentation	CO4
	6	**Mid-term examination** Syllabus: Software, Hardware, Number systems, Problem solving	Written quiz	CO1, CO2
	7	**C programming** Solving decision problems (if ... else and switch ... case)	URI submissions	CO3
	8	**C programming** Solving more decision problems	URI submissions and coding test (with viva) Website submission in github.io	CO3 CO3
	9	**C programming** Introduction to loops	URI submissions and coding test (with viva)	CO3
	10	**C programming** Solving more loop problems	URI submissions and coding test (with viva)	CO3
	11	**C programming** Solving more loop problems	URI submissions and coding test (with viva)	CO3
	12	**Final examination** Syllabus: C programming	**Coding test (with viva)**	**CO3**

Appendix 1: Assessment Methods

Appendix 2: Grading Policy

Letter Grade	Marks %	Grade Point	Letter Grade	Marks%	Grade Point
A (Plain)	90-100	4.00	C+ (Plus)	70-73	2.33
A- (Minus)	86-89	3.67	C (Plain)	66-69	2.00
B+ (Plus)	82-85	3.33	C- (Minus)	62-65	1.67
B (Plain)	78-81	3.00	D+ (Plus)	58-61	1.33
B- (Minus)	74-77	2.67	D (Plain)	55-57	1.00
			F (Fail)	<55	0.00

Appendix-3: Program outcomes

POs	Program Outcomes
PO1	An ability to apply knowledge of mathematics, science, and engineering
PO2	An ability to identify, formulate, and solve complex engineering problems
PO3	An ability to design solutions for complex engineering problems and design systems, components or processes that meet specified needs with appropriate consideration for public health and safety, cultural, societal, and environmental considerations
PO4	An ability to investigate complex problems using research-based knowledge and research methods design and conduct experiments, as well as to analyze and interpret data
PO5	An ability to use the techniques, skills, and modern engineering tools necessary for engineering practice
PO6	The broad education necessary to understand the impact of engineering solutions in a global, economic, environmental, and societal context
PO7	Understand and evaluate the sustainability and impact of professional engineering work in the solution of complex engineering problems in societal and environmental contexts
PO8	An understanding of professional and ethical responsibility
PO9	An ability function effectively as an individual, and as a member or leader in diverse teams and in multi-disciplinary settings
PO10	An ability to communicate effectively
PO11	Project management and finance
PO12	A recognition of the need for, and an ability to engage in life-long learning