COURSE PLAN

FIRST: BASIC INFORMATION

College

College	: Karak College
Department	: Engineering Department.

Course

Course Title	Programming Language I
Course Code	020406131
Credit Hours	3 (1 Theoretical, 2 Practical)
Prerequisite	

Instructor

Name	
Office No.	
Tel (Ext)	
E-mail	
Office Hours	

Class Times

Building	Day	Start Time	End Time	Room No.

Text Book

Programming Language I, Al-Balqa Applied University & KOICA, 2022

References

- Stephen Kochan, “Programming in C,” 4th Ed., Addison-Wesley, 2014
- Greg Perry and Dean Miller, “C Programming Absolute Beginner’s Guide,” 3rd Ed., Que Publishing, 2013
- Jeff Szuhay, “Learn C Programming,” Packt Publishing, 2020

SECOND: PROFESSIONAL INFORMATION

COURSE DESCRIPTION

This course explains the concepts in programming languages and major tools and techniques to use programming language with an emphasis on C language which is the main programming language used in areas related to hardware including electronics.

COURSE OBJECTIVES

The objectives of this course are to enable the student to do the following:

- Develop logics which will help them to create programs.
- Explain the Tools of C programming language.
- Develop simple codes in C programming language.
- Develop codes related to data manipulations with arrays.
- Explain any other programming language easily.

COURSE LEARNING OUTCOMES

By the end of this course the students should be able to:

CLO1. Explain basic concept of programming language and its development environment
CLO2. Explain the structure of C-programming language
CLO3. Explain and use variable syntax in programming language
CLO4. Explain and use data types and its declarations in programming language
CLO5. Explain and use control statements including if and switch-case statements
CLO6. Explain and use loop statements including do, while, and for loops
CLO7. Explain and use array structure and its manipulation
CLO8. Write programs using functions

COURSE SYLLABUS

week	Topic	Topic details	Related OL	Proposal assignments
1	Start Programming	• Introduction to programming language • Interpreters and Compilers • Integrated development environment	CLO1	
2	Structure of a C program	• 'Hello World' program • Structure of C programming language • Components of C programming language	CLO2	
3	Variables	• Variables • Variables and memory • Variables and constants • Display the value of a variable : printf	CLO3	
4	Data types	• Understanding Data Types • Working with Variables • Working with Constant.	CLO4	
5	Data types or operations	• Working with Arithmetic Expressions • Arithmetic operators • Combining Operations with Assignment	CLO4	
6	Operation and operators	• The if Statement • The if-else Construct • Nested if Statements	CLO5	
7	Control statement and expressions	• The switch Statement • Boolean Variables • The Conditional Operator	CLO5	
8		**Midterm Exam**		
9	Looping – For	• The concept of a loop • The for Statement • Relational Operators	CLO6	

week	Topic	Topic details	Related OL	Proposal assignments
10	Looping – For (continue), While	• Nested for Loops • for Loop Variants • The while Statement	CLO6	
11	Looping- do-while	• The do-while Statement • The break Statement • The continue Statement	CLO6	
12	Array and string	• Defining an Array • Initializing an array • Using an array	CLO7	
13	Array and string	• Character arrays and string. • Multidimensional arrays • Arrays and loops	CLO7	
14	Array and string	• Array and memory • Variable Length Arrays • Dynamic allocation	CLO7	
15	Functions	• Concept of a function. • System defined function • User defined function.	CLO8	
16		**Final Exam**	**Final Exam**	

COURSE LEARNING RESOURCES

Teaching will be achieved using available resources including lectures, data show, and materials uploaded on the e-learning system.

ONLINE RESOURCES

Google search engine

ASSESSMENT TOOLS

Assessment Tools	%
Projects and Quizzes	20%
MID Exam	30%
Final Exam	50%
Total Marks	100%

THIRD: COURSE RULES

ATTENDANCE RULES

Attendance and participation are extremely important, and the usual University rules will apply. Attendance will be recorded for each class. Absence of 10% will result in a first written warning. Absence of 15% of the course will result in a second warning. Absence of 20% or more will result in forfeiting the course and the student will not be permitted to attend the final examination. Should a student encounter any special circumstances (i.e. medical or personal), he/she is encouraged to discuss this with the instructor and written proof will be required to delete any absences from his/her attendance records.

GRADING SYSTEM
Example:

	Grade	points	
	FAILED	0-49	
	PASSED	50-100	

REMARKS

{The instructor can add any comments and directives such as the attendance policy and topics related to ethics}

COURSE COORDINATOR

Course Coordinator:	**Department Head:**
Signature:	**Signature:**