TEMPLATE FOR COURSE SPECIFICATION

HIGHER EDUCATION PERFORMANCE REVIEW: PROGRAMME REVIEW

COURSE SPECIFICATION

This course focuses on the fundamentals of programming and the basics of the C language. This semester covers topics including variables, input/output, conditional statements, loops, arrays, functions, pointers, arrays, strings, structures, and reading/writing files.

1. Teaching Institution	Al-Nahrain University/ College of Science
2. University Department/Centre	Computer Science
3. Course title/code	C-Language
4. Modes of Attendance offered	Attending
5. Semester/Year	First Semester/ 2022-2023
6. Number of hours tuition (total)	5 a week (2 Theoretical/ 3 Practical)
7. Date of production/revision of this specification	28/9/2022

8. Aims of the Course
Understand fundamental concepts of computer programming and structured programming languages
Design algorithms to solve "simple" problems
Use the C programming language

9· Learning Outcomes, Teaching ,Learning and Assessment Method
A- Cognitive goals . A1. A2. A3. A4. A5. A6 .
B. The skills goals special to the course. B1. B2. B3.
Teaching and Learning Methods
Assessment methods
C. Affective and value goals C1. C2. C3. C4.
Teaching and Learning Methods
Assessment methods

Mid Term Exams (15 points)

Assignments (10 points)

Quizzes and Attendance (5 points)

Lab Exam and (10 points)

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Final Lab Exam (10 points)

Final Exam (50 points)

-------------------------------------- (60 points)

D. General and rehabilitative transferred skills(other skills relevant to employability and personal development)	
D1.	
D2.	
D3.	
D4.	

10. Course Structure

Week	Hours	ILOs	Unit/Module or Topic Title	Teaching Method	Assessment Method
Week 1	5	Introduction Fundamentals Writing Your First C Program	Chapter 1-3	Slides, whiteboard, explanation, asking questions, groups discussion.	Assignments, answering different questions, quizzes and mid term
Week 2	5	Variables, Data Types and Arithmetic Expressions	Chapter 4		
Week 3	5	Program Loops: for, nested loops, while, do, break, continue	Chapter 5		
Week 4	5	Conditional Statements: if, if-else, nested if, else if, switch, conditional operator	Chapter 6		
Week 5	5	Mid Term Exam#1	Chapters (1-6)		
Week 6	5	Arrays: The	Chapter 7		

		concept of array; Defining arrays; Initializing arrays; Multidimension al arrays; Variable length array			
Week 7	5	Functions: Defining a function; calling a function; Arguments; Local variables; Returning function results; Declaring a function prototype	Chapter 8		
Week 8	5	Functions: Glo bal variables. Automatic and Static local variables	Chapter 8		
Week 9	5	More on Data types: Structures	Chapter 9		
Week 10	5	Character Strings: Chara cter Arrays/ Character Strings; Initializing Character Strings	Chapter 10		
Week 11	5	Mid Term Exam #2	Chapters (1-10)		
Week 12	5	Pointers: Pointers and	Chapter 11		

		Addresses; Pointers and Function Arguments; Pointers and Arrays; Pointer Arithmetics; Pointers and strings Dynamic memory allocation			
Week 13	5	Continue with Pointers	Chapter 11		
Week 14	5	Working with Files	Chapter 12		

11. Infrastructure	
1. Books Required reading:	**Stephen G. Kochan, Programming in C, Developer's Library, Third Edition, 2005, ISBN-13: 978-0-672-32666-0.**
2. Main references (sources)	**Stephen G. Kochan, Programming in C, Developer's Library, Third Edition, 2005, ISBN-13: 978-0-672-32666-0.**
A- Recommended books and references (scientific journals, reports…).	
B-Electronic references, Internet sites…	
12. The development of the curriculum plan	