

MODULE DESCRIPTION FORM

نموذج وصف المادة الدراسية

Module Information			
معلومات المادة الدراسية			
Module Title	Programming in C++ I		Module Delivery
Module Type	C		<input checked="" type="checkbox"/> Theory <input checked="" type="checkbox"/> Lecture <input checked="" type="checkbox"/> Lab <input type="checkbox"/> Tutorial <input type="checkbox"/> Practical <input type="checkbox"/> Seminar
Module Code	CSDC111		
ECTS Credits	8		
SWL (hr/sem)	200		
Module Level	UGI	Semester of Delivery	
Administering Department	CSIT	College	Type College Code
Module Leader	Saad Adnan Abed	e-mail	E-mail: saad.adnan@uoanbar.edu.iq
Module Leader's Acad. Title	Lecturer	Module Leader's Qualification	Ph.D.
Module Tutor	Name (if available)	e-mail	E-mail
Peer Reviewer Name	Name	e-mail	E-mail
Scientific Committee Approval Date	01/06/2023	Version Number	1.0

Relation with other Modules			
العلاقة مع المواد الدراسية الأخرى			
Prerequisite module	None	Semester	
Co-requisites module	None	Semester	

Module Aims, Learning Outcomes and Indicative Contents

أهداف المادة الدراسية ونتائج التعلم والمحتويات الإرشادية

Module Objectives أهداف المادة الدراسية	<ul style="list-style-type: none"> Gain a solid understanding of the basic principles, syntax, and structure of the C++ programming language. Develop the ability to write and compile C++ programs, including understanding the use of variables, data types, and operators. Learn how to use control structures, including if-else statements, loops (while, for, do-while), and switch statements, to control the flow of a program.
Module Learning Outcomes مخرجات التعلم للمادة الدراسية	On successful completion of the module, students will be able to: <ul style="list-style-type: none"> Explain the basic concepts and features of C++. Describe the underlying memory model and explain the role of the execution stack and the heap. Make effective use of the C++ Standard Template Library. Make effective use of the control structures.
Indicative Contents المحتويات الإرشادية	Introduction to computer programming Introduction to C++ Programming C++ Standard Library Control flow in C++ Memory Management in C++ C++ Application Development

Learning and Teaching Strategies

استراتيجيات التعلم والتعليم

Strategies	Conceptual Understanding: Hands-on Practice Code Review and Feedback Problem-Solving Exercises
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Student Workload (SWL)

الحمل الدراسي للطالب محسوب لـ ١٥ اسبوعا

Structured SWL (h/sem) الحمل الدراسي المنتظم للطالب خلال الفصل	123	Structured SWL (h/w) الحمل الدراسي المنتظم للطالب أسبوعيا	8
Unstructured SWL (h/sem) الحمل الدراسي غير المنتظم للطالب خلال الفصل	77	Unstructured SWL (h/w) الحمل الدراسي غير المنتظم للطالب أسبوعيا	5
Total SWL (h/sem) الحمل الدراسي الكلي للطالب خلال الفصل	200		

Module Evaluation					
تقييم المادة الدراسية					
		Time/Number	Weight (Marks)	Week Due	Relevant Learning Outcome
Formative assessment	Quizzes	2	10% (10)	5 and 10	LO #1, #2 and #10, #11
	Assignments	2	10% (10)	2 and 12	LO #3, #4 and #6, #7
	Projects / Lab.	1	10% (10)	Continuous	All
	Report	1	10% (10)	13	LO #5, #8 and #10
Summative assessment	Midterm Exam	2hr	10% (10)	7	LO #1 - #7
	Final Exam	3hr	50% (50)	16	All
Total assessment			100% (100 Marks)		

Delivery Plan (Weekly Syllabus)	
المنهاج الاسبوعي النظري	
	Material Covered
Week 1	Introduction to computer programming
Week 2	Introduction to programming languages and C++
Week 3	Variables
Week 4	C++ Libraries
Week 5	C++ User Input and Output
Week 6	C++ Operators (Arithmetic operators, Bitwise operators, logical operators, and Relational operators)
Week 7	Mid-term Exam
Week 8	C++ Strings & C++ Math
Week 9	C++ Booleans
Week 10	C++ conditions
Week 11	Switch statement
Week 12	While loop
Week 13	For loop
Week 14	Break and Continue statements
Week 15	Preparatory week before the final Exam

Delivery Plan (Weekly Lab. Syllabus)

المنهاج الاسبوعي للمختبر

	Material Covered
Week 1	C++ Libraries
Week 2	C++ User Input
Week 3	C++ Operators
Week 4	If condition
Week 5	Switch condition
Week 6	Break and Continue
Week 7	For loop
Week 8	While loop C++
Week 9	Do-while loop
Week 10	Break and Continue statements

Learning and Teaching Resources

مصادر التعلم والتدريس

	Text	Available in the Library?
Required Texts	The C++ Programming Language (4th Edition) by Bjarne Stroustrup	No
Recommended Texts		
Websites	https://www.learncpp.com/ https://www.w3schools.com/CPP/default.asp	

Grading Scheme

مخطط الدرجات

Group	Grade	التقدير	Marks %	Definition
Success Group (50 - 100)	A - Excellent	امتياز	90 - 100	Outstanding Performance
	B - Very Good	جيد جدا	80 - 89	Above average with some errors
	C - Good	جيد	70 - 79	Sound work with notable errors
	D - Satisfactory	متوسط	60 - 69	Fair but with major shortcomings
	E - Sufficient	مقبول	50 - 59	Work meets minimum criteria
Fail Group (0 - 49)	FX – Fail	راسب (قيد المعالجة)	(45-49)	More work required but credit awarded
	F – Fail	راسب	(0-44)	Considerable amount of work required

Note: Marks Decimal places above or below 0.5 will be rounded to the higher or lower full mark (for example a mark of 54.5 will be rounded to 55, whereas a mark of 54.4 will be rounded to 54. The University has a policy NOT to condone "near-pass fails" so the only adjustment to marks awarded by the original marker(s) will be the automatic rounding outlined above.

