	Ministry of Higher Education and Scientific Research - Iraq University of Technology Department of Computer Science	

MODULE DESCRIPTOR FORM
نموذج وصف المادة الدراسية

Module Information معلومات المادة الدراسية				
Module Title	STRUCTURED PROGRAMMING		**Module Delivery**	
Module Type	CORE			
Module Code	CS103		**-Theory Lecture** **-Lab** **-Practical Seminar**	
ECTS Credits	8			
SWL (hr/sem)	102			
Module Level	1	**Semester of Delivery**	2	
Administering Department		**College**		
Module Leader	Anmar A. Mohammed	**e-mail**	anmar.a.aljanabi@uotechnology.edu.iq	
Module Leader's Acad. Title	Lecturer	**Module Leader's Qualification**	Ph.D.	
Module Tutor	None	**e-mail**	None	
Peer Reviewer Name		**e-mail**		
Review Committee Approval		**Version Number**		

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 Aims أهداف المادة الدراسية	1. Teaching the students the concept of the array , performing many operation on them. 2. Studying the functions and how to call then and passing values to them. 3. Teaching students strings manipulate 4. Teaching student the pointers and the structures in C++
Module Learning Outcomes مخرجات التعلم للمادة الدراسية	1. Understanding the meaning of one dimension array 2. Understanding the meaning of two dimension array 3. Perform operations on arrays. 4. Understanding the concept of function and who to return values from them 5. Learn how to pass parameters to functions 6. Capable of using string and manipulate them in the program 7. Give the student the ability of using pointers and structures in there programs
Indicative Contents المحتويات الإرشادية	1- Explain how to define one dimension and two dimension array 2- Define functions with their various types. Explain how to use strings in the program 3- Let the students see many examples about pointers and structures and there effects on the programs
Learning and Teaching Strategies استراتيجيات التعلم والتعليم	
Strategies	The main strategy that will be adopted in delivering this module is to encourage students' participation in the exercises, while at the same time refining and expanding their critical thinking skills. This will be achieved through classes, interactive tutorials and by considering type of simple experiments involving some sampling activities that are interesting to the students.

Student Workload (SWL) الحمل الدراسي للطالب			
Structured SWL (h/sem) الحمل الدراسي المنتظم للطالب خلال الفصل	102	**Structured SWL (h/w)** الحمل الدراسي المنتظم للطالب أسبوعيا	7
Unstructured SWL (h/sem) الحمل الدراسي غير المنتظم للطالب خلال الفصل	98	**Unstructured SWL (h/w)** الحمل الدراسي غير المنتظم للطالب أسبوعيا	6.5
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**	1	10% (10)	5	LO # 1 and 3
	Practical Seminar (Lab).	2	15% (15)	Continuous	LO # 2 , 4 and 5
Summative assessment	**Midterm Exam**	1 hr	15% (15)	14	LO # 1 to 5
	Final Exam	3hr	60% (60)	16	All
Total assessment			100% (100 Marks)		

Delivery Plan (Weekly Syllabus)
المنهاج الاسبوعي النظري

	Material Covered
Week 1	• **Functions, program in functions** • **Passing parameters**
Week 2	• **Arrays: one dimensional array**
Week 3	• **Arrays: two dimensional array**
Week 4	• **Array and functions**
Week 5	**Quizzes**
Week 6	• **Strings**
Week 7	• **Member function of strings**
Week 8	• **Structure : Type of Structure declaration**
Week 9	• **Array of Structures**

Week 10	• **Structure within structure** • **Functions and structures**
Week 11	• **pointers declaration** • **pointers and functions parameters passing**
Week 12	• **Pointers and arrays**
Week 13	• **Arrays of pointers** • **pointers to pointers**
Week 14	**Midterm Exam**
Week 15	**Preparatory Week**
Week 16	**Final Exam**

Delivery Plan (Weekly Lab. Syllabus) المنهاج الاسبوعي للمختبر	
	Material Covered
Week 1	• **Functions, program in functions** • **Passing parameters**
Week 2	• **Arrays: one dimensional array**
Week 3	• **Arrays: two dimensional array**
Week 4	• **Array and functions**
Week 5	**Quizzes**
Week 6	• **Strings**
Week 7	• **Member function of strings**
Week 8	• **Structure : Type of Structure declaration**
Week 9	• **Array of Structures**
Week 10	• **Structure within structure** • **Functions and structures**
Week 11	• **pointers declaration** • **pointers and functions parameters passing**
Week 12	• **Pointers and arrays**
Week 13	• **Arrays of pointers** • **pointers to pointers**

Learning and Teaching Resources مصادر التعلم والتدريس		
	Text	**Available in the Library?**
Required Texts	Mastring C++, Amman-Jordan, AL-Shorok, 2002	Yes
Recommended Texts	1- OqeiliSalch, prof. Department of IT-AL-Balqa Applied University.	No
Websites		

APPENDIX:

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	مقبول بقرار	(45-49)	More work required but credit awarded
	F – Fail	راسب	(0-44)	Considerable amount of work required
Note:				

NB 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.