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

MODULE DESCRIPTOR FORM
نموذج وصف المادة الدراسية

Module Information معلومات المادة الدراسية					
Module Title	**NETWORK MANAGEMENT I**			**Module Delivery**	
Module Type	BASIC			**-Theory Lecture** **-PracticalSeminar**	
Module Code	**CSCN4117**				
ECTS Credits	**2**				
SWL (hr/sem)	**100**				
Module Level	4		**Semester of Delivery**	1	
Administering Department	Department of Computer Science		**College**	Computer Science	
Module Leader	L.WISAM MAHMOOD LAFTA		**e-mail**	WISAM.M LAFTA@uotechnology.edu.iq	
Module Leader's Acad. Title	**Lecturer**		**Module Leader's Qualification**	**MASTER**	
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	**Network Management I**	**Semester**	1
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 types of networks. 2. Classify hard ware and soft ware networks . 3. Teaching students the types of networks and the mechanisms for using them. 4. Teaching students the differences between using internal and external protocols and explaining their static and dynamic mechanisms. 5. Explaining the seven layers of the Internet and linking them to the way data is transmitted in the network. 6. Distinguish between static and dynamic protocols, their working methods, and their strategies for transferring data. 7. Explaining the mechanism of communication in the network and knowing its methods and types.
Module Learning Outcomes مخرجات التعلم للمادة الدراسية	1. Understanding the Concept of networks. 2. Understanding the meaning of static and dynamic protocols. 3. Understand the working of the Internet layers and their connection to the network . 4. Perform Classes Constant Member Functions and Constant Objects, Static Data Member and Static Function. 5. Understanding the differences between TCP and UDP protocol . 6. Learn how to deal with types of external protocols layers . 7. Learn how to deal with types of internal protocols layers . 8. Learn how to deal with types of communications. 9. Understand the process of congestion and ways to avoid it.
Indicative Contents المحتويات الإرشادية	1. Explain how to define networks. 2. Explain how to apply best strategies in net work. 3. Let the students see many examples about new mechanism .
Learning and Teaching Strategies استراتيجيات التعلم والتعليم	
Strategies	The main purpose of applying the above-mentioned mechanisms is to make the student understand accurately the mechanisms of working and implementing protocols and to overcome or avoid their problems..

Student Workload (SWL) الحمل الدراسي للطالب			
Structured SWL (h/sem) الحمل الدراسي المنتظم للطالب خلال الفصل	98	**Structured SWL (h/w)** الحمل الدراسي المنتظم للطالب أسبوعيا	7
Unstructured SWL (h/sem) الحمل الدراسي غير المنتظم للطالب خلال الفصل	92	**Unstructured SWL (h/w)** الحمل الدراسي غير المنتظم للطالب أسبوعيا	5.7
Total SWL (h/sem) الحمل الدراسي الكلي للطالب خلال الفصل	100		

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)				
Summative assessment	Midterm Exam	1 hr	20% (15)	14	LO # 1 to 5
	Final Exam	3hr	70% (60)	16	All
Total assessment			100% (100 Marks)		

Delivery Plan (Weekly Syllabus)
المنهاج الاسبوعي النظري

	Material Covered
Week 1	➢ **Overview for networks** • Hard ware • software
Week 2	➢ **Introduction to networks type** • Software types (protocols ,communications)
Week 3	• IOS modules • Protocolo lyares
Week 4	➢ **Linking communication mechanisms with the Internet layers.**
Week 5	➢ **Explain how avoid congestion .**
Week 6	• Explain the main structure of the protocol and the process affected by the transport mechanism.
Week 7	➢ **Methods that generate network overloads and how to avoid them by controlling congestion**
Week 8	➢ **Take examples of static protocols**
Week 9	➢ **Take examples of dynamic protocols**
Week 10	➢ **Explain the main strategies in networking to make the network work efficiently**
Week 11	➢ **Explain quality of services**
Week 12	➢ **Clarifying the mechanisms and methods for using quality of service.**

Week 13	• DATA-LINK LAYER PROTOCOLS
Week 14	➢ Error Detection and Correction
Week 15	**Mid Term Exam and Preparatory Week**
Week 16	**Final Exam**

Delivery Plan (Weekly Lab. Syllabus) المنهاج الاسبوعي للمختبر	
	Material Covered

Learning and Teaching Resources مصادر التعلم والتدريس		
	Text	**Available in the Library?**
Required Texts		No
Recommended Texts	1.“Data communication and networking”, Behrouz A. Forouzan, 2.“ Administration CISCO QoS in IP Networks” 3.“Network Management Fundamentals”, Alexander Clemm, Ph.D., 2007 Cisco Systems, Inc.	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.