



Course Weekly Outline

Course Instructor	Aymen Hasan Rashid AlAwadi				
E_mail	aymen@uokufa.edu.iq				
Title	Computer Networks, communication and Security				
Course Coordinator	Type here the ame of course coordinator				
Course Objective	<ol style="list-style-type: none"> 1. To give the student an introduction about the computer networks and its basic infrastructure and it's properties and the main theory of networking. 2. To introduce the various theories of the digital communication. 3. To introduce the various theories of computer and network security and how to build trustworthy systems. 				
Course Description	This course is about introducing the following the terms to the students (physical level, communication system, transmission media, multiplexing, networks types, communication, error detection, correction, IOS reference model, internetworking, introducing to computer security, information security and network security)				
Textbook	Communication Networks, Sharam Hekmat, PragSoft Corporation, 2005				
References					
Course Assessment	Term Tests	Laboratory	Quizzes	Project	Final Exam
	%30	%10	%5	%5	%50
General Notes					

Course weekly

Outline

week	Date	Topics Covered	Lab. Experiment Assignments	Notes
1	18/10/2014	An introduction, overview and discussion of Why Study Computer Networking?		
2	26/10/2014	Transmission Medium and their Criteria.	Bluetooth and it's usage in Networking	
3	9/11/2014	<ol style="list-style-type: none"> 1. Connection Types 2. Transmission 3. Modulation 4. Types of modulation 5. Digitization 		
4	16/11/2014	<ol style="list-style-type: none"> 1. Synchronization transmission 2. Asynchronous transmission 3. Multiplexing and it's types 	Asynchronous transmission and Synchronous transmission Advantages and disadvantages	
5	23/11/2014	<ol style="list-style-type: none"> 1. Network Components 2. Network Types 	Practically prepare an ad-hoc network between two or more computers running Windows7	
6	30/11/2014	<ol style="list-style-type: none"> 1. OSI Model 2. OSI Layers' Function 3. The lower 3 layers 		
7	7/12/2014	<ol style="list-style-type: none"> 1. Data Link Layer 2. Network Layer 3. Transport Layer 		

8	14/12/2014	<ol style="list-style-type: none"> 1. Session Layer 2. Presentation Layer 3. Application Layer 4. Protocol Notations 5. 		
9	21/12/2014	<ol style="list-style-type: none"> 1. Data Link Layer details and protocols 		
10	28/12/2014	<ol style="list-style-type: none"> 1. Data Link Layer - Link Protocol Functions. 2. Acknowledgments 3. Timers 4. Error Checking 		
11	4/1/2015	<ol style="list-style-type: none"> 1. Cyclic Redundancy Check (CRC) 2. The Network Layer details 3. Packet Structure 4. Routing 		
12				
13				
14				
15				
16				
Half-year Break				
17		TEACHING PRACTICING AT SECONDARY SCHOOLS.		
18				
19				
20				
21				
22				
23				
24				
25				
26				
27				
28				
29				
30	11/1/2015	<ol style="list-style-type: none"> 1. Routing algorithms 2. Static routing 3. Dynamic routing 4. Network Layer Standards 5. IP 		
31	18/1/2015	<ol style="list-style-type: none"> 1. Security Overview 2. The Security Definition 3. The Security Goals 		

32	25/1/2015	1. Security Threats and Attacks 2. Security Threats 3. Security Attacks 4. Typical Attacks: Man-In-The-Middle 5. Security Policy and Mechanism 6. How to Make a System Trustworthy		

Instructor Signature:

Dean Signature: