

University of Asia Pacific

Department of CSE

Lesson Plan

Course Code & Title: CSE 421, Computer Network

Semester: Fall 2015

Teacher: Md. Akhtaruzzaman Adnan

Office/Room:

D 404
Department of Computer Science and Engineering
House # 52/1, Road # 4/A,
Dhanmondi, Dhaka-1209.

Consultation/Contact time:

Check the notice board on the door.

E-mail: adnan.cse@uap-bd.edu

Mobile: 01711281379

Course outline:

Introduction, History of Networking, Basic Computer Networks, Networking Devices, Different Servers, Basic Computer Networks, Networking Terminologies and their Introduction, Industry Overview of Networking, How Different Networks Work, Network Model, Network Topology, Network Architecture, IP Overview, IPv4, IPv6, Transition from IPv4 to IPv6, Subnet, Routing, Switching, IP in Detail, Subnetting in Detail, Transmission Media, Error Detection & Correction Schemes and Implementation of those Schemes, Routing Protocol: Static, OSPF, BGP, Routing Protocol: Static, OSPF, BGP, Servers in Detail, IP in more Detail, ATM Network, IPv6 Facilities, VoIP, Security Issues in Networking, Different Security Protocols, Hacking, Ethical Hacking, Encryption, VPN, IPSec, Firewall, SSL, Wireless Sensor Network, Cloud Network, NFC Grid Network, More Detail about Cloud Network, Ad-hoc Networks, Servers: DNS-Mail-Proxy-DHCP, Firewalls, ISP-IIG-IGW-ICX-ITC-SMC Configuration and Design Concept.

Teaching method: Lectures, assignments, interactive sessions, quizzes.

Prerequisites: CSE 315

Basic text(s):

Data Communications and Networking - Behrouz A. Forouzan

Reference text(s):

TCP/IP: Protocol Suite - Behrouz A. Forouzan

Additional reading material: PowerPoint slides & PDF provided by the teacher

Lecture Plan:

Lecture	Topic	Reading assignment	Work assignment
Week 1	Introduction, History of Networking	Text Book	
	Basic Computer Networks, Networking Devices, Servers		
Week 2	Basic Computer Networks, Networking Terminologies and their Introduction,	PowerPoint slides, Text Book	
	Industry Overview of Networking		
Week 3	How Different Networks Work, Network Model	Text Book	Quiz 1
	Network Topology, Network Architecture		
Week 4	IP Overview, IPv4, IPv6,	Power point slides & PDF given in the class	
	Transition from IPv4 to IPv6, Subnet, Routing, Switching	Power point slides & PDF given in the class	
Week 5	IP in Detail, Subnetting in Detail, Transmission Media	Text Book	
Week 6	Continuation of week 5	Text Book	
Week 7	Error Detection & Correction Schemes and Implementation of those Schemes	Text Book	Quiz 2
	Continuation of week 7		

Mid-term Exam			
Week 8	Servers: DNS-Mail-Proxy-DHCP, Firewalls	Text Book	Quiz 3
Week 9	ISP-IIG-IGW-ICX-ITC-SMC Configuration and Design Concept	Text Book	
	Routing Protocol: Static, OSPF, BGP		
Week 10	Servers in Detail, IP in more Detail, ATM Network, IPv6 Facilities, VoIP	Text Book	
Week 11	Security Issues in Networking	Text Book	
	Different Security Protocols, Hacking, Ethical Hacking, Encryption		
	VPN, IPSec, Firewall, SSL		
Week 12	Wireless Sensor Network,	Text Book	Quiz 4
	Cloud Network, Grid Network		
Week 13	More Detail about Cloud Network	Text Book	
	Ad-hoc Networks		
Week 14	Overview , Semester-Final Preparation		

Assessment methods:

Component	Weight/percentage
Quizzes	20%
Class participation	5%
Assignments	5%
Term Paper	n/a
Presentation	n/a
Midterm	20%
Final	50%
Total	100%

Grading system:

Numeric Grade	Letter Grade	Grade Point
80% and above	A+	4.00
75% to less than 80%	A	3.75
70% to less than 75%	A-	3.50
65% to less than 70%	B+	3.25
60% to less than 65%	B	3.00
55% to less than 60%	B-	2.75
50% to less than 55%	C+	2.50
45% to less than 50%	C	2.25
40% to less than 45%	D	2.00
Less than 40%	F	0.00