

LESSON PLAN

CSE 3251: COMPUTER NETWORKS

Total Credit	:	03
Total Marks	:	75
Total no of Weeks	:	13
Final Exam	:	52½ (70% of total marks)
		Section - A — 26¼
		Section - B — 26¼
Quiz/CT	:	15 (20% of total marks)
Attendance	:	7½ (10% of total marks)
Course Teacher	:	Dr. ASIF ZAMAN, Professor, CSE RU
Class Room	:	219
Class Schedule	:	As mentioned in class routine.

Weeks	Contents	Materials
1-2	Introduction: Basic concept of computer network; Network classification, structure/topology; Protocol Hierarchies; Open System Interconnection; Example networks.	https://sites.google.com/site/asifzaman3180/lecture-slides
3-4	Physical Layer: Guided physical transmission media, UTP, STP, Optic fiber, Wireless Media, IEEE standards, baseband and passband transmission, PSTN; circuit and packet switching, Mobile telephone system; ADSL. Class Test-1	
5	Data Link Layer: Data link layer design issues; Framing, Error detection and correction; Elementary data link protocols; Sliding window protocols; The data link layer in the Internet	
6	Multiple Access Protocols: ALOHA; CSMA/CD Protocol; Collision-free protocols; Wireless LAN protocols; Ethernet; Bluetooth; Datalink layer switching.	
7-9	Network Layer: Network layer design issues; IP address and subnet masking, Routing algorithms; Congestion control algorithms; Internetworking; Network layer in the internet; Network layer Class Test-2	
10	Transport Layer: The transport service; Elements of transport protocols; three-way handshake; TCP Congestion Control, The internet transport protocols;	
11	Presentation Layer: Data Compression techniques, Frequency Dependent Coding, Context Dependent Encoding.	
12	Application Layer: DNS-Domain Name System; Electronic Mail; The World Wide Web; Multimedia.	
13	Presentation Week	

LESSON PLAN

CSE 3252: COMPUTER NETWORKS LAB

Total Credit : 01
 Total Marks : 25
 Total no of Weeks : 13
 Final Exam : 17½ (70% of total marks)
 Quiz/Viva-voce/CA : 05 (20% of total marks)
 Attendance : 2½ (10% of total marks)

Course Teacher : Dr. ASIF ZAMAN, Professor, CSE RU
 Class Room : As mentioned in class routine.
 Class Schedule : As mentioned in class routine.

Weeks	Contents
1	<ul style="list-style-type: none"> Building Ethernet cable – straight and crossover cable (for both T568A & T568B standards). Assigning and checking IP configuration of a machine. Checking connectivity in between two nodes (using ping command). Windows file/folder/printer sharing. Configuring a DHCP server (openDHCP).
2	
3	
4	<ul style="list-style-type: none"> Socket programming – interchange message in between two machines. Socket programming – sending email using SMTP server. Configuring POP3 email server for windows – hMailServer.
5	
6	
7	Evaluation Exam
8	<ul style="list-style-type: none"> Cisco packet tracer – simulating HUB & Switch operation. Cisco packet tracer – Creating VLAN in cisco switch. Cisco packet tracer – Basic router configuration. Cisco packet tracer – Inter VLAN routing.
9	
10	
11	
12	Configuring Squid proxy – as transparent/ non-transparent proxy server.
13	Lab Internal Exam