Department of Computer Science & Engineering

Air University Multan Campus

Course Title	Computer Communication and Network		
Credit Hours	4	**Lab**	Yes
Course Instructor	Muhammad Islam	**Email**	islam.m1991@gmail.com
Office Hours	0830 to 1630 Hrs	**Office**	DLD Lab at 5th Floor

COURSES DESCRIPTION

Computer Communication and Networks Analogue & digital transmission, network layers; network models (OSI, TCP/IP); and protocol standards, Network topologies, data communications, signals, LAN and WAN, Networking technologies, Transmission media, circuit and packet switching networks, Routing protocols, Cryptography , subnetting & Supernetting and congestion control.

Evolution of Outcomes

Evaluation will be done based on the following.

1: Quizzes	**10%**
2: Assignments	**05 %**
3: Presentations /Project	**05%**
4: Midterm Exam	**35%**
5: Final Exam	**45%**
6: Lab Project /Viva	**15%**

Course Outline

Week #	Topics
1	Introduction to Data Communication
2	Network /Internet /Protocols
3	Network Model /OSI Model
4	TCP/IP Model
5	Analogue Signals
6	Digital Signals
7	Transmission Impairment
8	Introduction to IP Address /Classes
9	**Mid Term –Exam**
10	Subnetting /Classfull Adressing

11	Supernetting /Classless Addressing
12	WWW and HTTP
13	Congestion Control
14	Cryptography
15	Network Security
16	Entity Authentication /Key Management
17	Research Papers on User Authentication

Textbook:

Data Communications and Networking by BEHROUZ A FOROUZAN