## UNITED INTERNATION AL UNIVERSITY COURSE SYLLABUS

School School of Science and Engineering (SOSE)

**Department / Centre** Computer Science and Engineering

**Programme** CSE

Name of Course Computer Networks Lab

Course Code CSE 324/CSE 3712

**Trimester and Year** Spring 2022

Status Compulsory Course

Credit Hours 1

Course website <u>www .lms.uiu.ac.bd</u>

Adiba Shaira

Course Instructor E-mail: adiba@cse.uiu.ac.bd

Office Room 419,UIU

**Text Book** Computer Networks Lab Manual version 3, (Provided in the lab.)

Reference & Equipment Cisco Networking Academy Materials provided in the lab

This course is required for the students to provide them with a practical base in

**Course Rationale** computer network issues and network applications using the existing protocols

and architectures.

Assessment Types	Marks
Attendance	10%
Class Assessment	20%
Homework	5%
Mid Assessment	20%
Final Assessment	30%
Term Project	10%
Socket Programing	5%
Total	100%

**Assessment Methods** 

Topic Outline			
Lab	Topics/Assignments	Reading Reference	Activities
1	Introduction to Network Lab, Understanding Network, Networks Components and TCP/IP Properties	Lab Manual	Q/A, Lab Experiment, Assignment
2	IP Addressing and Subnetting	Lab Manual	Lab Experiment, Assignment
3	Introduction to Packet Tracer, Building a single-segment Network using PT	Lab Manual	Quiz 1 Lab Experiment
4	Basic Router Configuration (Term Project Group)	Lab Manual	Quiz 2, Assignment Lab Experiment
5	Internetworking using Routers/Routing Protocols (Static,  Default and Dynamic Routing)  (Term Project Assignment)	Lab Manual	Quiz 3 Lab Experiment
6	Midterm Exam	Quiz, Practical ( Set-up)	
7	Dynamic Host Configuration Protocol (DHCP) and Introduction to Wireshark	Lab Manual	Lab Experiment, Assignment
8	Basic Firewalls – Access Control Lists (ACLs)	Lab Manual	Quiz-4 Lab Experiment
9	Network Address Translation (NAT) – Connecting to an ISP (Internet)	Lab Manual	Quiz-5, Assignment Lab Experiment
10	Socket Programming	Lab Manual	Quiz-5, Assignment Lab Experiment
11	Introduction VLAN and Inter-VLAN Routing	Lab Manual	Quiz-6, Assignment Lab Experiment
12	Final Exam	Quiz, Practical (Set-up)	