

School School of Science and Engineering (SOSE)

Department / Centre Computer Science and Engineering

Program CSE

Name of Course Computer Networks Lab

Course Code CSE 324/CSE 3712

Trimester and Year Fall 2022

Status Compulsory Course

Credit Hours

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 | 10% |
| Mid Assessment | 20% |
| Final Assessment | 30% |
| Term Project | 10% |
| | |
| Total | 100% |

Assessment Methods

| | opic 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 |
| | | Lab | Quiz-5, Assignment Lab Experiment |
| 10 | Socket Programming | Manual | Lab Experiment |
| 10 | Socket Programming Introduction VLAN and Inter-VLAN Routing | Manual Lab Manual | Quiz-6, Assignment Lab Experiment |