|  |  |  |
| --- | --- | --- |
| **UNITED INTERNATIONAL UNIVERSITY** Department of Computer Science and Engineering (CSE) **Course Syllabus** | | |
|  |  | |
| **1** | **Course Title** | Computer Networks Laboratory |
| **2** | **Course Code** | CSE 324/CSE 3712 |
| **3** | **Trimester and Year** | Spring 2022 |
| **4** | **Status** | Compulsory course |
| **5** | **Credit Hours** | 1.00 |
| **6** | **Section** | B |
| **7** | **Class Hours** | **Section D**: Wednesday, 2:00PM - 4:30PM |
| **8** | **Classroom** | 427 |
| **9** | **Instructor’s Name** | Mahbub Hossain Raton |
| **10** | **Email** | mahbub@cse.uiu.ac.bd |
| **11** | **Office** | 319-C |
| **12** | **Counseling Hours** | See on eLMS |
| **13** | **Text Book** | Computer Networks Lab Manual version 3 |
| **14** | **Reference** | Cisco Networking Academy Materials provided in the lab |
| **15** | **Course Rationale** | This course is necessary for helping the students achieve some practical basic knowledge in computer network issues and network applications using the existing protocols and architectures. |
|  | | |

|  |  |
| --- | --- |
| **19** | **Lecture Outline** |
|  | |  |  |  |  | | --- | --- | --- | --- | | **Week** | **Course Content** | **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** | **Mid-term Examination** |  | **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**, Lab Experiment, Assignment | | 10 | Socket Programming | Lab Manual | **Quiz 6**, Lab Experiment, Assignment | | 11 | Introduction VLAN and Inter-VLAN Routing | Lab Manual | Lab Experiment, Assignment | | **12** | **Final Exam** |  | **Quiz, Practical (set up)** | |

**Appendix 1: Assessment Methods**

|  |  |
| --- | --- |
| **Assessment Types** | **Marks** |
| Attendance | 10% |
| Home Assignments | 5% |
| Class Assessments | 20% |
| Midterm Assessment | 20% |
| Final Assessment | 30% |
| Term Project | 15% |
| **Total** | **100%** |

**Appendix 2: Grading Policy**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Letter Grade** | **Marks %** | **Grade Point** | **Letter Grade** | **Marks%** | **Grade Point** |
| A (Plain) | 90-100 | 4.00 | C+ (Plus) | 70-73 | 2.33 |
| A- (Minus) | 86-89 | 3.67 | C (Plain) | 66-69 | 2.00 |
| B+ (Plus) | 82-85 | 3.33 | C- (Minus) | 62-65 | 1.67 |
| B (Plain) | 78-81 | 3.00 | D+ (Plus) | 58-61 | 1.33 |
| B- (Minus) | 74-77 | 2.67 | D (Plain) | 55-57 | 1.00 |
|  |  |  | F (Fail) | <55 | 0.00 |