
		<b>Daffodil International University</b> Department of Computer Science and Engineering (CSE) OBE Course Outline				
<b>Course Code:</b>	CSE314					
<b>Course Title:</b>	Computer Networks Lab					
<b>Program:</b>	B.Sc. in CSE					
<b>Faculty:</b>	Faculty of Science and Information Technology (FSIT)					
<b>Semester:</b>	<b>SUMMER</b>	<b>Year:</b>	2020			
<b>Credit:</b>	1.00	<b>Contact Hour:</b>	3 hr / week			
<b>Course Level:</b>	Level 3 Term 1	<b>Prerequisite:</b>	CSE233			
<b>Course Category:</b>	Core Engineering					
<b>Instructor Name:</b>						
<b>Designation:</b>						
<b>Email:</b>						
<b>Office Address:</b>						
<b>Class Hours:</b>	<b>Section</b>	<b>Class Day</b>	<b>Class Hours</b>	<b>Classroom</b>		
<b>Google Classroom Code:</b>						

## 1. Course Rationale

This course is designed to impart knowledge about detailed knowledge of Computer Networks, various protocols used in Communication, Managing and configuring Cisco Switches and Routers and various WAN technologies.

### 1.1.Course Objective

1. Explain network technologies and how devices access local and remote networks.
2. Describe router hardware.
3. Explain how switching operates in a small to medium-sized business network.
4. Design an IPv4 and IPv6 addressing scheme to provide network connectivity for a small to medium-sized business network.
5. Configure initial settings on a network device using Cisco command-line interface (CLI)
6. Implement basic network connectivity between devices.

## 1.2.Course Outcomes (CO's)

<b>CO1</b>	Demonstrate a broad knowledge of the area of computer networking and its terminology
<b>CO2</b>	Design, implement, and test the operation of a basic computer network
<b>CO3</b>	Demonstrate an understanding of the operation of a range of networking protocols and devices
<b>CO4</b>	Able to create a network for a small organization

## 2. Strategies and approaches to learning

### 2.1. Teaching and Learning Activities (TLA)

<b>TLA1</b>	Demonstrations once a week according to the university policy using multimedia of different topics.
<b>TLA2</b>	Active discussion in class regarding efficient designing and solving of the logical and mathematical problems.
<b>TLA3</b>	Group discussion and presentation regarding diverse problems and corresponding lectures.
<b>TLA4</b>	Evaluation of class performances to reach each student in a class for every topic.

## 3. Course Schedule and Structure

### 3.1.Textbook

Cisco CCNA Study Guide v2.71, Aaron Balchunas

### 3.2.Reference Books

- CCNA, Study Guide, 6th Edition, TodLammle
- Cisco website ([www.cisco.com](http://www.cisco.com)) for technical data sheets of devices.

### 3.3.Course Plan/Lesson Plan

Lesson/ Labs	Topic	Teaching and Learning Activities (TLAi)	Textbook & Video Reference	Related CO's
1	Basic Network Topology, Introduction of simulator and networking devices and cabling.	TLA2	(Aaron Balchunas Sec. 3)	CO1
2	Different topology configuration with multiple networks using basic routing command	TLA2	(Aaron Balchunas Sec. 3)	CO2
3	Introduction of Routing protocols and Configure static routing	TLA2, TLA4	(Aaron Balchunas Sec. 16)	CO2,CO3
4	Design and Implementation of Dynamic (RIP) Protocol	TLA2, TLA4	(Aaron Balchunas Sec. 17, 19)	CO2,CO3
5	Design and Implementation of Dynamic (EIGRP) Protocol	TLA2, TLA4	(Aaron Balchunas Sec. 17, 19)	CO2,CO3
6	Design and Implementation of Dynamic (OSPF) Protocol	TLA2, TLA4	(Aaron Balchunas Sec. 20)	CO2,CO3
7	Midterm Examination of Theory Course			
8	Configuration of DHCP	TLA2, TLA4	(Aaron Balchunas Sec. 23)	CO2,CO3
9	Implementation of VLAN in catalyst switch	TLA2, TLA4	(Aaron Balchunas Sec. 21)	CO2,CO3

<b>Lesson/ Labs</b>	<b>Topic</b>	<b>Teaching and Learning Activities (TLAi)</b>	<b>Textbook &amp; Video Reference</b>	<b>Related CO's</b>
10	Design and Configure Static and Dynamic NAT	TLA2, TLA4	(Aaron Balchunas Sec. 27)	CO2,CO3
11	Project Submission	-	-	CO1, CO2,CO3 and CO4
12	(LAB FINAL)	-	-	-

#### **4. Assessment Methods**

##### **4.1. Grading System**

<b>Numerical Grade</b>	<b>Letter Grade</b>	<b>Grade Point</b>
80-100	A+	4.00
75-79	A	3.75
70-74	A-	3.50
65-69	B+	3.25
60-64	B	3.00
55-59	B-	2.75
50-54	C+	2.50
45-49	C	2.25
40-44	D	2.00
Less than 40	F	0.00

## **5. Additional Support for Students**

- Student Portal:  
<http://studentportal.diu.edu.bd/>
- Academic Guidelines  
<https://daffodilvarsity.edu.bd/article/academic-guidelines>
- Rules and Regulations of DIU  
<https://daffodilvarsity.edu.bd/article/rules-and-regulation>
- Career Development Center:  
<https://cdc.daffodilvarsity.edu.bd/>
- For general queries:  
<http://daffodilvarsity.edu.bd/>