Delivery Plan (Weekly Syllabus)	
	Material Covered
Week 1, 2	Introduction: Data communications, classification of computer networks, computer network topologies, communication protocols, and standards, layered tasks, the OSI model and layers, TCP/IP protocol suite, addressing.
Week 3-5	Physical Layer: Data and signals, analog and digital, analog and digital signals, signals and communication, digital signals, transmission of digital signals, transmission impairments, data rate limits and transmission and performance, digital to digital conversion, , connecting devices: Hub, Switches, Repeaters, Bridges, Routers, Gateways and Routers.
Week 6	Data Link Layer: Error detection and correction: introduction, CRC and checksum, framing, flow and error control.
Week 7-9	Network Layer: Class full and classless addressing, internetworking, routing concepts, IP routing, routing table, routing components, routing algorithm types (Static V.S. Dynamic, Source routing V.S. Hop-by-hop, Centralize V.S. Distributed, and Distance vector V.S. Link state).
Week 10-11	Transport Layer: Process to process delivery, Protocols: UDP, TCP and SCTP, congestion control, quality of service.
Week 12-14	Application Layer Functionality and Protocols: How do the functions of the three upper OSI model layers provide network services to end-user applications?, How do the TCP/IP application layer protocols provide the services specified by the upper layers of the OSI model?, How do people use the application layer to communicate across the information network?, What are the functions of well-known TCP/IP applications, such as the World Wide Web and e-mail, and their related services (HTTP, DNS, DHCP, STMP/POP, and Telnet)?.
Week 15	The preparatory week before the final exam
Delivery Plan (Weekly Lab. Syllabus)	
	Material Covered

Week 1,2	Lab 1: Study of different types of Network cables and practically implement the cross-wired cables and straight-through cables using a clamping tool
Week 3,4	Lab 2: Study of network devices in detail.
Week 5,6	Lab 3: Study of network addressing
Week 7,8	Lab 4: Connect the computers to LAN.
Week 9,10	Lab 5: Introduction to packet tracer program.
Week 11,12	Lab 6: Basic switch & router configuration
Week 13,14	Lab 7: Router configuration in small network

Learning and Teaching Resources

	Text	**Available in the Library?**
Required Texts	3. Behrouz Forouzan, "Introduction to Data Communication and Networking", Tata McGraw Hill, New Delhi. 4. Mark A. Dye, Rick McDonald, Antoon W. Rufi, "Network Fundamentals, CCNA Exploration Companion Guide", Copyright© 2008 Cisco Systems, Inc.	Yes
Recommended Texts	Nagpal D P, "Local Area Networks", Asian Books P Ltd, New Delhi	No
Websites	https://www.netacad.com/courses/networking	

Group	**Grade**	**Marks (%)**	**Definition**
Success Group (50 - 100)	**A -** Excellent	90 - 100	Outstanding Performance
	B - Very Good	80 - 89	Above average with some errors
	C - Good	70 - 79	Sound work with notable errors
	D - Satisfactory	60 - 69	Fair but with major shortcomings
	E - Sufficient	50 - 59	Work meets minimum criteria
Fail Group (0 – 49)	**FX –** Fail	(45-49)	More work is required, but credit awarded
	F – Fail	(0-44)	A considerable amount of work required