Cisco Networking Academy

Computer Networking Theory and Practice

(Cisco Semesters One and Two)

XXXXXXXXXXXXX	AUG.	SEPT.	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY
Essential		Who is Cisco and What is Networking?								
Questions	How does a computer work?									
				How do you design a network?						
					What are the parts of a network and how do they work?					
				What types of problems do networks have?				How do you fix them?		
					What are Routers and Switches and how are they used?					
						How do Technicians calculate and configure?				
				How do Routers talk to each other?						
					What is Binary; Hexadecimal; and Octets?					
Content	Computing basics; The OSI model; LANs					Routing and Addressing; Protocols;				
in terms of essential	Electronic Signals; Media; Conncections;				Cable;	The seven layers of the OSI				
concepts and topics	Connections; Collisions; Concepts; Standards					WANs and Routing				
						Router Components; Router set-up and start-up				
						IOS images; TCP/IP				
				Raddressing; Routing; Routing Protocols; Configurations; Commands						
					Network troubleshooting; Practical Router Configurations					
Standards/Skills	1.1, 1.2,	1.8, 1.9,	4.15, 4.17	6.2, 13.1	13.13, 13.17		13.17, 13.18		7.3, 10.4	
i.e., processes and		3.14, 3.20	5.4, 5.11	13.3		3.2, 4.14,		10.4, 11.13		13.1, 13.3
skills emphasized			5.15			13.17		13.18, 16.20		13.15
Indiana Academic									11.13, 12.8	
Standards									13.1	13.16
plus										13.17
MCSC skills										16.2
Products/Assessments		Group Work		Individual	Group	Practice	Configuration		E-sim Labs	
It is assumed that			Individual	Practical	Practical	Router	Worksheets			Practical
teachers will assess			Simulation	Labs	Work	Configuration		Hexadecimal		Config.
students with traditional			Labs					and		Exam
tests.								Binary		
								Work-		
								sheets		