



SCANS Matrix

Program: INFORMATION TECHNOLOGY AND NETWORKING

Program: Network Administration AAS: Track A - Network and Computer System Administrator Specialty

CIP: 11.0901

LIST ALL COURSES REQUIRED AND IDENTIFIED COMPETENCIES

Competencies								Course Number	Course Title
1	2	3	4	5	6	7	8		
X	X	X		X	X	X	X	ITSC 1316	Linux Installation and Configuration
X	X	X		X	X	X	X	ITSC 1325	Personal Computer Hardware
X	X	X		X	X	X	X	ITSC 1305	Introduction to PC Operating Systems
X	X	X		X	X	X	X	ITCC 1414	CCNA 1: Introduction to Networks
X	X	X	X	X	X	X	X	ITSY 1342	Information Technology Security
X	X	X	X	X	X	X	X	ITNW 1316	Network Administration
X	X	X	X	X	X	X	X	ITNW 1313	Computer Virtualization
X	X	X		X	X	X	X	ITCC 1444	CCNA 2: Switching, Routing, and Wireless Essentials
X	X	X	X	X	X	X	X	CSIR 2351	Fiber Optic Communication System Installation and Repair
X	X	X	X	X	X	X	X	ITNW 1172	Select Topics in Computer Systems Networking and Telecommunications
X	X	X		X	X	X	X	ITNW 1345	Implementing Network Directory Services
X	X	X		X	X	X	X	ITSC 2325	Advanced Linux
X	X	X		X	X	X	X	ITSY 2301	Firewalls and Network Security
X	X			X	X	X	X	ITNW 1335	Information Storage and Management
X	X		X	X	X	X	X	ITNW 2335	Network Troubleshooting and Support
								MATH 1314	College Algebra
								ENGL 1301	Composition I
								ENGL 1302	Composition II
								GOVT 2305 or GOVT 2306	Federal Government or Texas Government
									Humanities/Fine Arts

COMPETENCY REFERENCES

		8 Basic use of computers
		7 Workplace Competencies: resources; interpersonal skills; information; systems; and technology.
		6 Personal Qualities: A worker must display responsibility, self-esteem, sociability, self-management, integrity, and honesty.
	5 Thinking Skills: A worker must think creatively, make decisions, solve problems, visualize, know how to learn, and reason effectively.	
	4 Speaking and Listening: Organize ideas and communicate orally; receive, attend to, interpret, and respond to verbal messages and other cues.	
	3 Arithmetic or Mathematics: Perform basic computations and approach practical problems by choosing appropriately from a variety of mathematical techniques.	
	2 Writing: Communicate thoughts, ideas, information, and messages in writing, and create documents such as letters, directions, manuals, reports, graphs, and flow charts.	
1 Reading: Locate, understand, and interpret written information in prose and in documents such as manuals, graphs, and schedules.		

SCANS Competencies Checklist

Academic Year: 2022-2023

SCANS COMPETENCIES FOR PROGRAM: Network Administration AAS: Track A - Network and Computer Systems Administrator Specialty

Competency	Course where Competency is Assessed	Method of Assessment	Improvements as a Result of Assessment Findings
1 READING: Locate, understand, and interpret written information in prose and in documents such as manuals, graphs, and schedules.	ITNW 1313	Project that develops directory services for clients, support users remotely, and install and configure network services.	All the students finished the directory services project on time.
2 WRITING: Communicate thoughts, ideas, information, and messages in writing, and create documents such as letters, directions, manuals, reports, graphs, and flow charts.	ITNW 1316	Written Assignment (Describe and draw a network) and Module 1 Quiz Module 1-Lab 1 – Installing Windows Server 2019 Module 4-Lab 5 – Managing Active Directory Accounts	8 out of 9 students completed the written assignment with a grade of A and 1 student did not complete the assignment. All students completed M1 Quiz with a grade of 92 or higher. All students met the criteria. 1 student made a B remaining 8 students made an A. 7 students made an A and 2 students did not complete the M4-L5 assignment.
3 ARITHMETIC OR MATHEMATICS: Perform basic computations and approach practical problems by choosing appropriately from a variety of mathematical techniques.	ITCC 1444	Packet Tracer Project offers various scenarios and challenges students to go through various troubleshooting steps to resolve both IPv4 and IPv6 network issues	Since student virtual lab environment mimic real-world networks, 9 out of 11 students scored good or higher
4 SPEAKING AND LISTENING: Organize ideas and communicate orally; receive, attend to, interpret, and respond to verbal messages and other cues.	ITSY 1342	TestOut Security Pro lab exercises, quizzes, and exams in the following: Students in this class will understand the differences between viruses, worms, Trojans, bots, and rootkits. Students in this class will understand the limitations of current anti-virus scanners.	85% of the class will maintain an 80% or higher grade on all lab, quiz, and exam assignments in TestOut Security Pro

Competency	Course where Competency is Assessed	Method of Assessment	Improvements as a Result of Assessment Findings
5 THINKING SKILLS: A worker must think creatively, make decisions, solve problems, visualize, know how to learn, and reason effectively.	ITSY 1342	TestOut Security Pro lab exercises, quizzes, and exams in the following: Students in this class will recognize the issues with database security. Students in this class will analyze the security issues with cloud-based computing. Students in this class will recognize the potential problems in developing and using computer software. Demonstrate knowledge of security auditing principles.	87.5% of the class is achieving the criteria for success for the class
6 PERSONAL QUALITIES: A worker must display responsibility, self-esteem, sociability, self-management, integrity, and honesty.	ITCC 1444	Packet Tracer Project offers various scenarios and challenges students to go through various troubleshooting steps to resolve both IPv4 and IPv6 network issues	Most of the class averaged 80% on their labs/projects which translated into good outcome. A few students had difficulty finishing because of work schedule or personal issues
7 WORKPLACE COMPETENCIES: resources; interpersonal skills; information; systems; and technology	ITNW 1316	Module 11-Lab 16 – Implementing Centralized Event Logs Module 11-Lab 17 – Managing Server Performance Module 11 Quiz – Managing and Securing Windows Networks	6 students made an A, 1 student made a B, 1 student made a D and 1 student did not complete the assignment. 5 students made an A, 1 student made a B, 1 student made an D, 1 student made an F and 1 student did not complete the assignment. 7 students made an A, 2 students did not complete
8 BASIC USE OF COMPUTERS	CSIR 2351	Project that focuses on installation, and repair of fiber optic communication systems including networks and peripherals system.	86% students in this class exceeded the criteria set. Students understand the basic use of network.