

J. Sargeant Reynolds Community College
Course Content Summary

Course Prefix and Number: ITN 156

Credits: 4

Course Title: Basic Switching and Routing -- Cisco

Course Description (including lecture hours, lab hours, total contacts)

Centers instruction in LAN segmentation using bridges, routers, and switches. Includes fast Ethernet, access lists, routing protocols, spanning tree protocol, virtual LANS and network management.

Lecture 4 hours per week.

General Course Purpose

Prepares students to configure Cisco Switches in a networked environment. Can lead to industry certification.

Course Prerequisites/Corequisites (*Entry-level competencies **required** for enrollment*)

ITN 155 Introductory Routing -- Cisco

Course Objectives (Each item should complete the following sentence.)

Upon completing the course, the student will be able to:

- Explain the function of a hierarchical network design
- Configure a switch for basic functionality
- Implement Virtual LANS
- Configure the VLAN trunking protocol in a converged network
- Implement rapid spanning tree in a converged network
- Implement inter-VLAN routing
- Configure a Wireless Router

Major Topics to be Included

- LAN Design
- Cisco Switches
- VLANs
- VLAN Trunking Protocol
- Spanning Tree Protocols
- Inter-VLAN Routing
- Wireless Router
- OSPF

Effective Date of Course Content Summary (Month, Date Year): May, 2010