Course Prefix and Number:  ITN 156  

Credits: 4

Course Title:  Basic Switching and Routing -- Cisco

Course Description:  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. Prerequisite: ITN 155 – Introductory Routing – Cisco. 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 and Co-requisites:
Prerequisite: ITN 155 Introductory Routing – Cisco

Course Objectives:
Upon completing the course, the student will be able to
a. Explain the function of a hierarchical network design;
b. Configure a switch for basic functionality;
c. Implement Virtual LANS;
d. Configure the VLAN trunking protocol in a converged network;
e. Implement rapid spanning tree in a converged network;
f. Implement inter-VLAN routing; and
g. Configure a wireless router.

Major Topics to Be Included:
  a. LAN design
  b. Cisco switches
  c. VLANs
  d. VLAN trunking protocol
  e. Spanning tree protocols
  f. Inter-VLAN routing
  g. Wireless router
  h. OSPF

Effective Date of Course Content Summary: May, 2010