**COLLIN COLLEGE**

**COURSE SYLLABUS**

## Course Information

**Course Number**: ITCC 2372

**Course Title:** CCNA 4 – Connecting Networks

**Course Description:** This course explains the principles of traffic control, Borderless Networks, Virtualization, Collaboration, Tunneling, IPSec VPN, Syslog Operation, SNMP Operation and provides an overview of the services and protocols at the data link layer for wide-area access. Describes user access technologies and devices and discover how to implement and configure Point-to-Point Protocol (PPP), Point-to-Point Protocol over Ethernet (PPPoE), DSL, and Frame Relay. WAN security concepts, tunneling, and VPN basics are introduced. Discuss the special network services required by converged applications and an introduction to quality of service (QoS).

**Course Credit Hours:** 3
Lecture Hours: 2
Lab Hours: 3

**Prerequisite:** ITCC 2371

**Student Learning Outcomes:** Upon successful completion of this course, students will be able to:
Describe the impact of applications (Voice Over IP and Video Over IP) on a network; implement configure, verify, and troubleshoot Collaboration Tunneling, IPSec VPN, Syslog Operation, and SNMP Operation; describe DSL, Borderless Networks and Virtualization. Configure and verify a basic WAN serial connection; configure and verify Frame Relay and PPP on Cisco routers; and describe VPN technology (importance, benefits, role, impact, components).
SCANS: (F1, F3-5, F8-12, F14, F16) (C1, C10-16, C18-20)

**Secretary's Commission on the Acquisition of Necessary Skills (SCANS) -** SCANS skills are a group of foundational skills and workplace competencies that the Secretary's Commission on the Acquisition of Necessary Skills established as vitally important for workplace success in the 21st century. In Collin's workforce programs, the SCANS skills are developed and reinforced throughout the curriculum to provide students with an opportunity to hone these skills/competencies in the context of their education. Over the course of an entire degree program, the successful student is expected to demonstrate all of the SCANS skills and competencies as part of their education. The SCANS Foundation Skills and Workplace Competencies are described at:
http://www.collin.edu/academics/programs/Workforce_SCANS_Skills_Syllabi_Code_Key.pdf

**Withdrawal Policy:** See the current *Collin Registration Guide* for last day to withdraw.

**Collin College Academic Policies:** See the current *Collin Student Handbook.*

**Americans with Disabilities Act Statement:** Collin College will adhere to all applicable federal, state and local laws, regulations and guidelines with respect to providing reasonable accommodations as required to afford equal educational opportunity. It is the student's responsibility to contact the ACCESS office, SCC-D140 or 972.881.5898 (V/TTD: 972.881.5950) to arrange for appropriate accommodations. See the current *Collin Student Handbook* for additional information.