COLLIN COLLEGE

COURSE SYLLABUS

Course Information

Course Number: ITNW 2374

Course Title: Advanced Computer Networking Case Study

Course Description: A study of how to design networks in a hierarchical, modular fashion, design WAN networks, develop IP addressing, and select protocols for various designs. Also, students will learn how to assess security and the implications of voice and wireless traffic. A case study puts students in the role of a network administrator proposing solutions to design problems. Study advanced network deployment and methods used to configure network devices for effective LAN and WAN traffic management. Topics include designing internetworks, managing traffic, configuring various routing and switching protocols, and techniques used for network security.

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

Prerequisites: ~~ITCC 2372 or CCNA~~ ITMT 2371 and either ITCC 1374 or CCENT Certification with consent of Program Director

Student Learning Outcomes:

1. Students will analyze a network design requirement, develop a network design solution, and implement the solution. (SCANS: F1,F3-5,F8-12,F14,F16) (SCANS: C1,C10-16,C18-20)
2. The students will demonstrate their knowledge of routing, switching, and security. (SCANS: F1,F3-5,F8-12,F14,F16) (SCANS: C1,C10-16,C18-20)
3. Problems will be introduced into the network to develop troubleshooting skills. (SCANS: F1, F3-5, F8-12, F14, F16) (SCANS: 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.