

**J. Sargeant Reynolds Community College**  
**Course Content Summary**

**Course Prefix and Number:** ITN 298 **Credits:** 4

**Course Title:** Seminar and Project Capstone Course

**Course Description**

This course covers the use of advanced concepts and utilities with current network operating systems. This includes administrator duties such as server organization, permissions and rights, as well as client side issues such as configuration, troubleshooting, and installation of applications. Lecture 4 hours per week.

**General Course Purpose**

The course will provide training in how to use the tools provided by Windows 2003 Server to analyze and design network security. The course is required for the Microcomputer Technical Support (Networking) Specialization. However, additional student interest will probably be from people wanting to learn how to analyze and design Network Security for a business environment.

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

ITN 115, ITN 260, ITN 171, or equivalent

**Course Objectives**

Upon successful completion of the course, the student will be able to:

- a. Manage a computer network using tools and commands
- b. Deploy and test client and server services for peer sharing applications.
- c. Demonstrate an understanding of device driver, memory, and peripheral configuration options.
- d. Use operating system utilities and scheduling software to configure automatic and manual maintenance.
- e. Implement security and data integrity measures such as firewalls and anti-virus.
- f. Plan and maintain a network infrastructure.

**Major topics to be Included**

**CONTENT:**

- a) Demonstrate proficiency in the area of specialization.
- b) Integrate technical skills to develop business solutions.
- c) Gather, organize, and classify data in order to solve complex networking issues.
- d) Develop network configuration to meet business needs.
- e) Installation and configuration of networking protocols
- f) Plan and troubleshoot a routing strategy.
- g) Install and configure firewall
- h) Install and configure anti-virus software and anti spy-ware software.

- i) Installation and configuration of Active Directory
- j) Installation and configuration of server services

**Course Effective Date:** Spring Semester, 2008