

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

Course Prefix and Number: ITN 298

Credits: 4

Course Title: Seminar and Project: Networking Capstone

Course Description: Covers the use of advanced concepts and utilities with current network operating systems. Includes administrator duties, such as server organization, permissions and rights, and client side issues, such as configuration, troubleshooting, and installation of applications. Prerequisites: ITN 110 and ITN 111, or school approval. Lecture 4 hours per week.

General Course Purpose: Serves as the capstone course requirement for students in the Cyber Security Career Studies Certificate or the Network Administration Career Studies Certificate in the Information Systems Technology program.

Course Prerequisites and Co-requisites:

Prerequisites: ITN 110 and ITN 111, or school approval

Student Learning Outcomes:

Upon completing the course, the student will be able to

- a. Manage and secure a computer network using tools and commands;
- b. Deploy and test client and server roles and features;
- 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; and
- f. Plan and maintain a network infrastructure.

Major Topics to Be Included:

- a. Computer, network, and information security
- b. Management's role in the development, implementation, and maintenance of network security
- c. The value of education, training, and awareness programs to the organization
- d. Security architecture, its principles, components, and employment

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