

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

Course Prefix and Number: ITN 260

Credits: 4

Course Title: Network Security Basics

Course Description: Provides instruction in the basics of network security in depth. Includes security objectives, security architecture, security models and security layers; risk management, network security policy, and security training. Includes the five security keys, confidentiality integrity, availability, accountability and auditability. Prerequisite: ITE 115 or equivalent. Lecture 4 hours per week.

General Course Purpose: This course provides an introduction to Network Security.

Course Prerequisites and Co-requisites:

Prerequisite: ITE 115 or equivalent

Student Learning Outcomes:

Upon completing the course, the student will be able to:

- a. Recognize computer, network, and information security;
- b. Explain why network security is important;
- c. Explain network security prevention, detection, and response;
- d. Define and explain the concept of network confidentiality;
- e. Define and explain the concept of information integrity;
- f. Define and explain the concept of network availability;
- g. Define and explain the concept of network audit ability;
- h. Define and explain the concept of non-repudiation;
- i. Recognize management's role in the development, implementation, and maintenance of network security;
- j. Recognize the value of education, training, and awareness programs to the organization; and
- k. Explain security architecture, its principles, components, and employment.

Major Topics to Be Included:

- a. Network security basics, security architecture, security models, and the five keys to security
- b. Network security risk management
- c. Network security policy
- d. Network security organization

Effective Date of Course Content Summary: August 17, 2016