

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

Course Prefix and Number: ITN 170

Credits: 4

Course Title: Linux System Administration

Course Description

Focuses on the installation, configuration, and administration of the Linux operating system and emphasizes the use of Linux as a network client and workstation. Prerequisite: ITN 171 or school approval. Lecture 4 hours per week.

General Course Purpose

The course will provide training for configuring and administering a Linux Server. The course will include the installation, configuration, troubleshooting, networking, Internet connectivity, security, and monitoring of a UNIX/Linux server.

Course Prerequisites/Co-requisites

ITN 171 or school approval

Course Objectives

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

- a. install and configure Linux operating system
- 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. Install and Configure Linux Server
- 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. Monitor and Troubleshoot Linux Server
- g. Install and configure firewall

Course Effective Date: 9/24/2008