

J. Sargeant Reynolds Community College
Course Content Summary

Course Prefix and Number: ITN 270 **Credits:** 4

Course Title: Advanced Linux System Network Administration

Course Description

This course focuses on instruction on the configuration and administration of the Linux operating system as a network server. Emphasizes the configuration of common network services such as routing, http, DNS, DHCP, ftp, telnet, SMB, NFS, and NIS. Lecture 4 hours per week.

General Course Purpose

The course will provide training in how to configure and administer a Linux operating system as a network server.

Course Prerequisites/Co-requisites

ITN 170 or equivalent

Course Objectives

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

- a. install and configure Linux operating system
- b. install and configure networking protocols.
- c. use operating system utilities and scheduling software to configure automatic and manual maintenance.
- d. implement security and data integrity measures such as firewalls and anti-virus.
- e. plan and maintain a network infrastructure.

Major topics to be Included

CONTENT:

- a. Install and Configure Linux Server.
- b. Installation and configuration of Domain Name Service (DNS).
- c. Installation and configuration of Dynamic Host Configuration Protocol (DHCP).
- d. Installation and configuration of Telnet and File Transfer Protocol (FTP).
- e. Installation and configuration of networking protocols
- f. Monitor and Troubleshoot Linux Server
- g. Install and configure firewall

Course Effective Date: 2/11/2009