

J. Sargeant Reynolds Community College
Course Content Summary

Course Prefix and Number: ITN 170

Credits: 3

Course Title: Linux System Administration

Course Description : Focuses instruction on the installation, configuration, and administration of the Linux operating system and emphasizes the use of Linux as a network client and workstation. Lecture 3 hours per week.

General Course Purpose: Prepares students to manage Linux computers in a networked environment. Can lead to industry certification. Serves as either a requirement or elective for designated Information Systems Technology programs.

Course Prerequisites and Co -requisites:
None

Student Learning Outcomes:

Upon completing the course, the student will be able to

- a. Install common Linux distributions;
- b. Automate the installation of Linux through the use of “kick start” scripts;
- c. Modify and maintain system configuration files and startup scripts;
- d. Install and maintain software applications;
- e. Administer user and group accounts;
- f. Configure and control hardware devices;
- g. Integrate Linux as a client within an existing network;
- h. Configure TCP/IP network parameters;
- i. Configure client software;
- j. Configure and use the X-Window system;
- k. Perform basic troubleshooting;
- l. Configure basic host security;
- m. Compile and install a custom Linux kernel;
- n. Describe and identify the run levels 0-6; and
- o. Configure printing (local and network).

Major Topics to Be Included:

- a.