

NOVA COLLEGE-WIDE COURSE CONTENT SUMMARY ITN 170 – LINUX SYSTEM ADMINISTRATION (3CR.)

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.

Course Prerequisites/Corequisites

Prerequisite: ITE 152 or ITE 115, ITE 119.

Course Objectives

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

- Install common Linux distributions
- Automate the installation of Linux through the use of “kickstart” scripts
- Modify and maintain system configuration files and startup scripts
- Install and maintain software applications
- Administer user and group accounts
- Configure and control hardware devices
- Integrate Linux as a client within an existing network
- Configure TCP/IP network parameters
- Configure client software
- Configure and use the X-Window system
- Perform basic troubleshooting
- Configure basic host security
- Compile and install a custom Linux kernel
- Describe and identify the run levels 0-6
- Configure printing (local and network)

Major Topics to be Included

- a. Installation of Linux
- b. System initialization scripts
- c. Installation and upgrade of system software
- d. Compiling system software from source code
- e. User administration
- f. Installing and configuring hardware devices
- g. Installing and configuring print services
- h. Network configuration
- i. Utilizing network services
- j. Configuration of X-Windows
- k. Troubleshooting system failures
- l. System security