

## COURSE OUTLINE

Revision: C. Koepke, September, 2009

DEPARTMENT:	Technical Education
CURRICULUM:	Computing Technology
COURSE TITLE:	Operating Systems III
COURSE NUMBER:	CTN 143
TYPE OF COURSE:	Vocational Preparatory
COURSE LENGTH:	1 quarter
CREDIT HOURS:	5
LECTURE HOURS:	55
LAB HOURS:	0
CLASS SIZE:	24
PREREQUISITES:	CTN 142 Operating Systems III

## COURSE DESCRIPTION:

Introduction to the Linux operating system including features and distributions; introduction to shells; X Window System and user commands; installation, administration, and networking. Will help prepare the student for the CompTIA Linux+ certification and Red Hat certification exams.

## STUDENT LEARNING OUTCOMES ADDRESSED:

1. Technology - Demonstrate problem solving and network design by utilizing critical thinking skills.
2. Technology: Be able to select the best distribution of Linux for a given set of conditions.
3. Human Relations - Use social interactive skills to work in teams effectively
4. Logical thinking – Be able to configure, troubleshoot, analyze, and explain procedures; problems; and concepts of the Linux operating systems at an introductory level.

CTN 143 Operating Systems III  
Sept., 2002

STUDENT LEARNING OUTCOMES ADDRESSED (Cont'd):

5. Personal Responsibility - Be able to demonstrate time management skills and independent work habits.
6. Personal Responsibility -: Recognize the need to continue to learn computer hardware and software and adapt to industry changes
7. Information literacy - Access and evaluate information from a variety of sources and contexts

GENERAL COURSE OBJECTIVES:

At the end of the course the student will:

1. Know basic user and administration commands from command line.
2. Be able to install different versions of a distribution of Linux from the Standard and Custom installs
3. Know the basic procedures and concepts of the Linux operating system.
4. Be able conduct basic administration of the Linux operating system such as adding users, groups, file transfer, file permissions.
5. Be able to use vi editor and one other editor.
6. Configure computer for Xwindows; configure Xwindows
7. Perform certain administrative tasks through Xwindows
8. Understand the Xwindows component programs
9. Be able to use two Desktop Managers.

TOPICAL OUTLINE:	APPROX. HOURS
I. Basic concepts: Kernels, distributions, packages	3
II. Disk structure MBR, LILO, BIOS	4
III. Types of installs (GUI, CLI, network, upgrades, dual boot)	12
IV. Partitioning hard drive w/ CLI, FDISK, Disk Druid	4
V. Configuration of X Windows	5
VI. Configuring Linux for networks	6
VII. User environment settings	2
VIII. Introduction to the vi editor, other editor	3
IX. Adding physical devices	3
X. Users and Groups	4
XI. Common file and directory commands	4
XII. Terminals and shells -introduction	2
XIII. System commands	3
Total	55 hours

REVISED BY: C. Koepke  
DATE: Sept., 2009