El Centro College  
ITSC 1416  
LINUX INSTALLATION AND CONFIGURATION  
Syllabus

COURSE DESCRIPTION

Prerequisites: Basic understanding of personal computers and operating systems as obtained in ITSC 1401 or BCIS 1405 or COSC 1401 or equivalent experience approved by Instructor.

Introduction to the Linux operating system. Includes Linux installation, basic administration, utilities and commands, upgrading, networking, security, and application installation. Emphasizes hands-on setup, administration, and management of Linux. Also covers maintaining and securing reliable Linux systems.

This course introduces students to the knowledge and skills needed to manage all Linux distributions. Specifically, the course covers the objectives outlined by CompTIA® for its Linux+ exam and certification. In addition, the course prepares students for the Novell Certification Linux Professional (Novell CLP) practicum exam. After completing this course, students will have acquired one-third the knowledge needed to become a full Novell CLP.

This is a 4 credit hour course. (3 Lec., 3 Lab.)

WECM END-OF-COURSE OUTCOMES: Install, administer, and manage a Linux system; demonstrate proficiency with Linux utilities, commands, and applications; identify and resolve security-based issues; and integrate a Linux system into an existing network.

STUDENT LEARNING OUTCOMES:

Upon successful completion of ITSC 1416 Linux Installation and Configuration, the student will be able to:

- Utilize basic Linux commands
- Collaborate with classmates regarding the benefits of Linux
- Define and apply terminal emulation
- Create scripts using the system editor
- Create and manage user accounts
- Install, administer, and manage a Linux system

COURSE MATERIALS


A student of this institution (El Centro College) is not under any obligation to purchase a textbook from a university-affiliated bookstore. The same textbook may also be available from an independent retailer, including an online retailer.
**Major Course Requirement**

Students will participate in Discussion Board addressing topics in each chapter.

Students will complete the review questions in each chapter.

Students will complete an assigned case study Exercise from each chapter.

Students will produce a Case Study Project paper.

- Install Linux
- Navigate the Filesystem
- Create Device Files
- Writing a BASH File
- Managing the Linux Processes
- Linux Software Installation
- Configure Network Interfaces
- Configure Network Services
- Resolving Common System Problems

A mid-term and final exam will evaluate the student's understanding of the fundamentals of Linux.

**Subject Matter**

Topics covered in the lecture portion of the course include:

- Introduction to Linux
- Linux Installation and Usage
- Exploring Linux Filesystems
- Linux Filesystem Management
- Linux Filesystem Administration
- Advanced Installation
- Working with the BASH Shell
- System Initialization and X Windows
- Managing Linux Processes
- Common Administrative Tasks
- Compression, System Backup, and Software Installation
- Network Configuration
- Configuring Network Services
- Configuring Network Services
- Troubleshooting, Performance, and Security

**Disclaimer**

The provisions contained in this syllabus do not constitute a contract between the student and El Centro College. These provisions may be changed at the discretion of the Coordinator/Instructor. When necessary, appropriate notice of such changes will be given to the student.

The instructor-of-record may provide additional information to enhance the course to meet the needs of the enrolled students, provided that the enhancements do not conflict with the official course syllabus.
Policies

Students should click on the links below and read all of these policies.

General institutional policies

Course-related institutional policies