

SOUTHEAST COMMUNITY COLLEGE
ADVANCED TECHNOLOGIES & SKILLED TRADES DIVISION
Computer Information Technology Program
Revision Date: November 10, 2025

I. CATALOG DESCRIPTION Course

Number: INFO1492
Course Title: Linux Network Administration
Prerequisite(s): INFO1171, INFO1283
Corequisite(s): ELEC2760
Catalog Description: This course covers the skills needed for managing a Linux-based network including installation, resource use, security and user setup. Students create, configure, and manage Linux scripts, tools, network configurations, server, file systems, processes, and system services.
Credit Hours: 3
Class Hours: 45
Lab Hours: 0
Total Contact Hours: 45

II. COURSE OBJECTIVES: *Course will:*

- A. Install and setup a computer with a current Linux distribution.
- B. Understand how to setup and use various fixed and removable media.
- C. Work with various management interfaces that are local and remote.
- D. Configure various services to support a network infrastructure.
- E. Use common maintenance and troubleshooting methods.

III. STUDENT LEARNING OUTCOMES AND GENERAL EDUCATION LEARNING OUTCOMES:

- A. Student Learning Outcomes: *Student will be able to:*
 - 1. Install, setup and configure a newly installed Linux distribution.
 - 2. Identify tasks involved with Linux File System Management and Administration.
 - 3. Provide client access to the network.
 - 4. Manage Linux processes.
 - 5. Demonstrate an understanding of Linux server configuration and management.
 - 6. Describe methods of network administration.
 - 7. Recognize common Linux security operations.
- B. General Education Learning Outcomes (GELOs)
 - 1. GELO #3: Critical Thinking & Problem Solving
Outcome 2: Synthesize information to arrive at reasoned solutions to problems.

IV. CONTENT/TOPICAL OUTLINE

- A. Introduction to Linux
- B. Linux Installation and Usage
- C. Exploring Linux Filesystems
- D. Linux Filesystems Management
- E. Linux Filesystem Administration
- G. Linux Server Development
- H. Working with the Shell
- I. System Initialization, X Windows, and Localization

- J.** Managing Linux Processes
- K.** Common Administrative Tasks
- L.** Compression, System Backup, and Software Installation
- M.** Network Configuration
- N.** Configuring Network Services and Cloud Technologies
- O.** Security, Troubleshooting, and Performance

V. INSTRUCTIONAL MATERIALS

Classroom Course:

- A.** Required Text(s): The eBook is available through Direct Digital Access (DDA) in Canvas on the first day of class and is billed to your student account.
- B.** Other Resources: Computer and Internet Access

VI. METHODS OF PRESENTATION/INSTRUCTION

- A.** Methods of presentation typically include a combination of the following:
 - 1.** Technology enhanced lectures
 - 2.** Group discussions
 - 3.** Engaged learning activities

VII. METHODS OF EVALUATION

- A.** Methods of evaluation, although determined by the individual instructor, traditionally includes a combination of the following:
 - 1.** Quizzes
 - 2.** Projects
 - 3.** Tests

VIII. SPECIFIC COURSE REQUIREMENTS

- A.** This course will not qualify as a prerequisite if the student receives a final grade below a "C" (70%).