

## **SYLLABUS**

### **GENERAL INFORMATION**

|                |                |
|----------------|----------------|
| Course Title:  | CompTIA Linux+ |
| Code:          | XK0-005        |
| Contact Hours: | 40             |
| Academic Term: | TBA            |

### **COURSE DESCRIPTION**

The CompTIA Linux+ course is designed to equip participants with a deep understanding of Linux operating systems, covering essential administration tasks and foundational principles. This course prepares students to manage Linux systems from the command line, while also covering scripting, automation, and security, which are critical for advanced Linux administration. Upon completion of this course, students will be prepared to sit for the CompTIA Linux+ certification exam, a benchmark for Linux administrators in IT infrastructures. The CompTIA Linux+ certification validates the competencies required of an early career system administrator supporting Linux systems.

### **GENERAL OBJECTIVES**

Throughout this course, students will explore a variety of Linux administration tasks through practical, hands-on training and theoretical study. The curriculum aims to:

- Understand Linux fundamentals and the command line.
- Manage software and services and automate tasks across multiple systems.
- Secure Linux systems and manage users and permissions.
- Configure network settings and services.
- Troubleshoot and maintain Linux systems effectively.
- Learn scripting and automation to streamline tasks.

## **COURSE CONTENT**

Lesson 1: Introducing Linux

Lesson 2: Administering Users and Groups

Lesson 3: Configuring Permissions

Lesson 4: Implementing File Management

Lesson 5: Authoring Text Files

Lesson 6: Managing Software

Lesson 7: Administering Storage

Lesson 8: Managing Devices, Processes, Memory, and the Kernel

Lesson 9: Managing Services

Lesson 10: Configuring Network Settings

Lesson 11: Configuring Network Security

Lesson 12: Managing Linux Security

Lesson 13: Implementing Simple Scripts

Lesson 14: Using Infrastructure as Code

Lesson 15: Managing Containers in Linux

Lesson 16: Installing Linux

## EVALUATION CRITERIA

| <b>Criteria</b> | <b>Grade Total</b> |
|-----------------|--------------------|
| Mid-Term Exam   | 100                |
| Final Exam      | 100                |
| Quizzes         | 100                |
| Assessment      | 100                |
| Laboratories    | 100                |
| <b>Total</b>    | <b>500</b>         |

Assignments are due in class on the designated day. Late submissions will incur a penalty of one letter grade per day late, unless previously discussed and approved for extension.

## EDUCATIONAL RESOURCES

Garn, D. (2022). The Official CompTIA PenTest+ Guide (PT0-002). CompTIA Inc., Downers Grove, Illinois.  
ISBN: 978-1-64274-446-0

## NOTES

- **Reasonable Accommodation:** Any student needing accommodation should make a request at the beginning of the course or as soon as possible thereafter.
- **Academic Integrity:** Honesty, fraud, plagiarism, and other forms of academic misconduct are violations of the institution's policies and may result in disciplinary action, including suspension or expulsion.