

# CompTIA Linux+ Syllabus

## **Lesson 1: Performing Basic Linux Tasks** **2 Hours - 3 Topics**

- **Topic A: Identify the Linux Design Philosophy (Day 1)**
- **Topic B: Enter Shell Commands (Day 1)**
- **Topic C: Get Help with Linux (Day 1)**

## **Lesson 2: Managing Users and Groups** **2 Hours - 5 Topics**

- **Topic A: Assume Superuser Privileges (Day 2)**
- **Topic B: Create, Modify, and Delete Users (Day 2)**
- **Topic C: Create, Modify, and Delete Groups (Day 2)**
- **Topic D: Query Users and Groups (Day 2)**
- **Topic E: Configure Account Profiles (Day 2)**

## **Lesson 3: Managing Permissions and Ownership** **2 Hours - 4 Topics**

- **Topic A: Modify File and Directory Permissions (Day 3)**
- **Topic B: Modify File and Directory Ownership (Day 3)**
- **Topic C: Configure Special Permissions and Attributes (Day 3)**
- **Topic D: Troubleshoot Permissions Issues (Day 3)**

## **Lesson 4: Managing Storage** **2 Hours - 6 Topics**

- **Topic A: Create Partitions (Day 4)**
- **Topic B: Manage Logical Volumes (Day 4)**
- **Topic C: Mount File Systems (Day 4)**
- **Topic D: Manage File Systems (Day 4)**
- **Topic E: Navigate the Linux Directory Structure (Day 4)**
- **Topic F: Troubleshoot Storage Issues (Day 4)**

## **Lesson 5: Managing Files and Directories** **2 Hours - 5 Topics**

- **Topic A: Create and Edit Text Files (Day 5)**
- **Topic B: Search for Files (Day 5)**
- **Topic C: Perform Operations on Files and Directories (Day 5)**
- **Topic D: Process Text Files (Day 5)**
- **Topic E: Manipulate File Output (Day 5)**

## **Lesson 6: Managing Kernel Modules** **2 Hours - 3 Topics**

- **Topic A: Explore the Linux Kernel (Day 6)**
- **Topic B: Install and Configure Kernel Modules (Day 6)**
- **Topic C: Monitor Kernel Modules (Day 6)**

## **Lesson 7: Managing the Linux Boot Process** **2 Hours - 2 Topics**

- **Topic A: Configure Linux Boot Components (Day 7)**
- **Topic B: Configure GRUB 2 (Day 7)**

**Lesson 8: Managing System Components** **2 Hours - 5 Topics**

- **Topic A: Configure Localization Options (Day 8)**
- **Topic B: Configure GUIs (Day 8)**
- **Topic C: Manage Services (Day 8)**
- **Topic D: Troubleshoot Process Issues (Day 8)**
- **Topic E: Troubleshoot CPU and Memory Issues (Day 8)**

**Lesson 9: Managing Devices** **2 Hours - 4 Topics**

- **Topic A: Identify the Types of Linux Devices (Day 9)**
- **Topic B: Configure Devices (Day 9)**
- **Topic C: Monitor Devices (Day 9)**
- **Topic D: Troubleshoot Hardware Issues (Day 9)**

**Lesson 10: Managing Networking** **2 Hours - 6 Topics**

- **Topic A: Identify TCP/IP Fundamentals (Day 10)**
- **Topic B: Identify Linux Server Roles (Day 10)**
- **Topic C: Connect to a Network (Day 10)**
- **Topic D: Configure DHCP and DNS Client Services (Day 10)**
- **Topic E: Configure Cloud and Virtualization Technologies (Day 10)**
- **Topic F: Troubleshoot Networking Issues (Day 10)**

**Lesson 11: Managing Packages and Software** **2 Hours - 7 Topics**

- **Topic A: Identify Package Managers (Day 11)**
- **Topic B: Manage RPM Packages with YUM (Day 11)**
- **Topic C: Manage Debian Packages with APT (Day 11)**
- **Topic D: Configure Repositories (Day 11)**
- **Topic E: Acquire Software (Day 11)**
- **Topic F: Build Software from Source Code (Day 11)**
- **Topic G: Troubleshoot Software Dependency Issues (Day 11)**

**Lesson 12: Securing Linux Systems** **2 Hours - 6 Topics**

- **Topic A: Implement Cybersecurity Best Practices (Day 12)**
- **Topic B: Implement Identity and Access Management Methods (Day 12)**
- **Topic C: Configure SELinux or AppArmor (Day 12)**
- **Topic D: Configure Firewalls (Day 12)**
- **Topic E: Implement Logging Services (Day 12)**
- **Topic F: Back Up, Restore, and Verify Data (Day 12)**

**Lesson 13: Working with Bash Scripts** **2 Hours - 4 Topics**

- **Topic A: Customize the Bash Shell Environment (Day 13)**
- **Topic B: Identify Scripting and Programming Fundamentals (Day 13)**
- **Topic C: Write and Execute a Simple Bash Script (Day 13)**
- **Topic D: Incorporate Control Statements in Bash Scripts (Day 13)**

**Lesson 14: Automating Tasks****2 Hours - 3 Topics**

- **Topic A: Schedule Jobs (Day 14)**
- **Topic B: Implement Version Control Using Git (Day 14)**
- **Topic C: Identify Orchestration Concepts (Day 14)**

**Lesson 15: Installing Linux****2 Hours - 2 Topics**

- **Topic A: Prepare for Linux Installation (Day 15)**
- **Topic B: Perform the Installation (Day 15)**