



## NDG Linux Essentials Version 2 – Cisco NetAcad™ Scope and Sequence

### Instructors and Administrators

Last updated July 22, 2019

A course developed by NDG (Network Development Group) to teach Linux.

#### Target Audience

The NDG Linux Essentials curriculum is designed for individuals interested in learning Linux and institutions interested in NDG Linux course offerings.

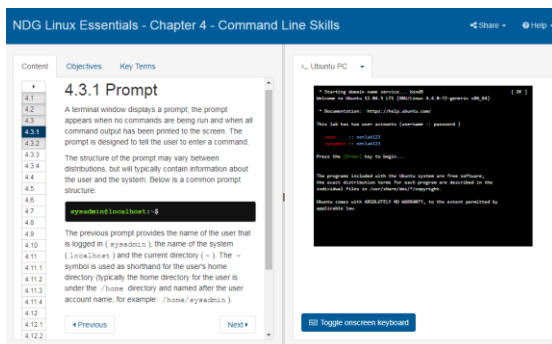
#### Prerequisites

There are no prerequisites for [NDG Linux Essentials v2](#). The curriculum is designed for individuals with no Linux experience.

#### Curriculum Description

This 18 chapter, 70-hour course covers Linux as an operating system, basic open source concepts, and the basics of the Linux command line. The goal of this course is to provide academic institutions, organizations, and individual learners curriculum to help prepare for the exam objectives aligned to the Linux Professional Institute, LPI.org, [Linux Essentials Professional Development Certificate](#) Version 1.6 ([Exam 010-160](#)).

This course implements a "practice as you read" approach to learning. Each learner has hands-on access to a Linux virtual machine to practice, explore, and trial Linux command line concepts. The learner is also provided 14 prescriptive step-by-step labs. These labs provide a learning environment where students interact with the Linux operating system and build on their skills and knowledge as they progress through the course.



#### Curriculum Objectives

The NDG Linux Essentials course focuses on the basic Linux skills needed in preparation for the [Linux Professional Institute Linux Essentials Professional Development Certificate](#). The course objectives align to the following concepts:

- FOSS, the various communities, and licenses
- Knowledge of open source applications in the workplace as they relate to closed source equivalents
- Basic concepts of hardware, processes, programs and the components of the Linux operating system
- Work on the command line and with files
- Create and restore compressed backups and archives
- System security, users/groups and file permissions for public and private directories
- Create and run simple scripts

## Course Outline

Title of Learning Module / Chapter	Exam 010-160 Objectives
Before You Get Started	Course Introduction
Chapter 1: Introduction to Linux	1.1 Linux Evolution and Popular Operating Systems
Chapter 2: Operating Systems	4.1 Choosing an Operating System
Chapter 3: Working in Linux	1.2 Major Open Source Applications
	1.4 ICT Skills and Working in Linux
Chapter 4: Open Source Software and Licensing	1.3 Open Source Software and Licensing
Chapter 5: Command Line Skills	2.1 Command Line Basics
Chapter 6: Getting Help	2.2 Using the Command Line to Get Help
Chapter 7: Navigating the Filesystem	2.3 Using Directories and Listing Files
Chapter 8: Managing Files and Directories	2.4 Creating, Moving, and Deleting Files
Chapter 9: Archiving and Compression	3.1 Archiving Files on the Command Line
Chapter 10: Working With Text	3.2 Searching and Extracting Data from Files
Chapter 11: Basic Scripting	3.3 Turning Commands into a Script
Chapter 12: Understanding Computer Hardware	4.2 Understanding Computer Hardware
Chapter 13: Where Data is Stored	4.3 Where Data is Stored
Chapter 14: Network Configuration	4.4 Your Computer on the Network
Chapter 15: System and User Security	5.1 Basic Security and Identifying User Types
Chapter 16: Creating Users and Groups	5.2 Creating Users and Groups
Chapter 17: Ownership and Permissions	5.3 Managing File Permissions and Ownership
Chapter 18: Special Directories and Files	5.4 Special Directories and Files

### Minimum System Requirements

NDG recommends using a desktop operating system (Windows, Mac, or Linux) with a physical keyboard. Smartphones and tablet devices are not currently supported. The following web browsers are recommended:

- Google Chrome 56+
- Safari 10+
- Mozilla Firefox 53+

### Industry Certification

The NDG Linux Essentials course focuses on the basic Linux skills needed in preparation for the [Linux Professional Institute Linux Essentials Professional Development Certificate](#). To earn this certification, learners must take the [010-160 Exam](#).

For additional information about the Linux Professional Institute certifications, review their website here:

<https://www.lpi.org/our-certifications/summary-of-certifications>

### Whom should I contact if I have questions about this course that are not explained in this document?

Questions specific to the NDG Linux courses should be directed to Network Development Group at [hostedsupport@netdevgroup.com](mailto:hostedsupport@netdevgroup.com). Please take a few minutes to review the NDG website, [www.netdevgroup.com](http://www.netdevgroup.com), the course materials, and this document before emailing the NDG staff.