

# CPMT 1076 Course Syllabus

## Name of Course

LPIC-1 Certification (Course 2)

## Number of Hours

32 classroom hours

## Course Description & Learning Objectives

This course gives students the information and framework to prepare to take the 102 exam of the LPI level 1 certification. The course is based upon the LPI Current Version (at time of this writing, March 2017): 4.0 (Exam codes 101-400 and 102-400). The [Linux Professional Institute](#) (LPI) is the go to certification body for vendor independent Linux certifications. The course learning objectives are listed below. The classroom environment includes multiple hands-on labs and practice exams.

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*NOTE! The LPIC-1 certification requires passing scores on two exams, the LPI 101 and the LPI 102. This course is intended to prepare the student for only the LPI 102 exam. A separate course offering provides preparation for the LPI 101 exam.*

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In a survey conducted by the ACC High Technology Institute, 50% of respondents listed Linux skills as important. Organizations benefit by having employees that can manage and administer computers that utilize the Linux operating system.

The LPIC-1 certification from the Linux Professional Institute is accepted as fulfilling in full or in part the requirements for several other certifications. CompTIA has made the LPI exams the foundations for its Linux+ certification. Those who pass the CompTIA versions of the exams are eligible to receive the LPIC-1 as well as the CompTIA Linux+.

## Certification Exam Objectives

These objectives are taken from the [LPI Course Objectives](#), and reflects the content of the Guru Lab course book that will be provided in class.

### Topic 105: Shells, Scripting and Data Management

- 105.1 Customize and use the shell environment
- 105.2 Customize or write simple scripts
- 105.3 SQL data management

### Topic 106: User Interfaces and Desktops

- 106.1 Install and configure X11
- 106.2 Setup a display manager
- 106.3 Accessibility

### Topic 107: Administrative Tasks

- 107.1 Manage user and group accounts and related system files
- 107.2 Automate system administration tasks by scheduling jobs
- 107.3 Localisation and internationalisation

### Topic 108: Essential System Services

- 108.1 Maintain system time
- 108.2 System logging
- 108.3 Mail Transfer Agent (MTA) basics
- 108.4 Manage printers and printing

### Topic 109: Networking Fundamentals

- 109.1 Fundamentals of internet protocols
- 109.2 Basic network configuration
- 109.3 Basic network troubleshooting
- 109.4 Configure client side DNS

### Topic 110: Security

- 110.1 Perform security administration tasks
- 110.2 Setup host security
- 110.3 Securing data with encryption

## Prerequisites

This is an entry level Linux System Administration course.

- LPI101 "LPIC-1 (Course 1)" or knowledge and experience equivalent to the LPI101 course.
- This course will focus heavily on use of the command line and shell environment.

## Optional but recommended

- Additional knowledge of computer hardware and operating systems, as well as TCP/IP networking basics, will be helpful in this course.
- Please note that this course is a focused study of Linux Administration procedures. Some students may have difficulty with the concepts offered and the pace of the course. Additional effort outside class may be necessary to fully realize the benefits of the information offered in the course.

## Required textbook

The Guru Labs Exam Prep course book for this class is included with course registration, and will be issued on the first night of class.

## Additional Resources

- In the interest of thoroughness and relativity, a second certification source is recommended. [LPIC Certification in a Nutshell](#) has proven to be an excellent resource.
- Additional web sources, such as [Penguin Tutor](#), have shown to be helpful and will be referenced in class.
- Additional information will be posted to the [instructor website](#).

## Tangible Outcomes

Those who participate in class discussions and labs, and miss no more than 3 four-hour class sessions will earn 3.2 continuing education units. A certificate of completion will be issued on the last night of class to eligible students. ACC also offers job placement assistance to students who successfully complete the course as well as obtain the LPIC-1 certification.