

# **CIS 121: Linux /UNIX 1**

This course introduces UNIX and Linux tools to the experienced computer user and to those with only a basic knowledge of computers. The course covers the UNIX/Linux file system, communication with other users, editors, file manipulation and processing, basics of pipes and redirection, simple shell programming, introduction to the X Windows system, and a basic introduction to Linux. This course is designed to cover the content of the LPI Linux Essentials Certificate.

## **1: Introduction to Linux**

Introduction to Linux and Unix Part 1 (24:46)

<https://www.youtube.com/watch?v=28n5z-KsW1E&index=16&list=PLYCnr23oAKDksGpzmb5kTAadpaxv1Z11z>

Introduction to Linux and Unix Part 2 (20:38)

<https://www.youtube.com/watch?v=zyWJmzIAaRg&index=18&list=PLYCnr23oAKDksGpzmb5kTAadpaxv1Z11z>

## **2: Introduction to the command Line**

First Linux Commands- (8:30)

[https://www.youtube.com/watch?v=k2\\_FAi5KO40&index=49&list=PLYCnr23oAKDksGpzmb5kTAadpaxv1Z11z](https://www.youtube.com/watch?v=k2_FAi5KO40&index=49&list=PLYCnr23oAKDksGpzmb5kTAadpaxv1Z11z)

Setting up the Desktop- (9:53)

<https://www.youtube.com/watch?v=8AEwulnwPbI&index=47&list=PLYCnr23oAKDksGpzmb5kTAadpaxv1Z11z>

## **3: The Joys of the command Line**

The Joy and Pain of the Command Line- (21:19)

<https://www.youtube.com/watch?v=-GY7Rkt1WyU&index=5&list=PLYCnr23oAKDksGpzmb5kTAadpaxv1Z11z>

Getting to Where you Need to Go- (24:25)

<https://www.youtube.com/watch?v=PCoxv3SvqYU&list=PLYCnr23oAKDksGpzmb5kTAadpaxv1Z11z&index=51>

What to Do When You Get there- (19:12)

<https://www.youtube.com/watch?v=dGS8briP0Vv&list=PLYCnr23oAKDksGpzmb5kTAadpaxv1Z11z&index=2>

Searching For Shells- (25:58)

<https://www.youtube.com/watch?v=okUXKkhN0Ps&list=PLYCnr23oAKDksGpzmb5kTAadpaxv1Z11z&index=35>

## **4: Dealing with Files and Directories**

Command Line and Wildcards- (28:49)

[https://www.youtube.com/watch?v=530OTmn\\_QCQ&list=PLYCnr23oAKDksGpzmb5kTAadpaxv1Z11z&index=6](https://www.youtube.com/watch?v=530OTmn_QCQ&list=PLYCnr23oAKDksGpzmb5kTAadpaxv1Z11z&index=6)

Copying and Managing Directories and Files- (25:58)

<https://www.youtube.com/watch?v=CqT0trawvNM&list=PLYCnr23oAKDksGpzmb5kTAadpaxv1Z11z&index=46>

Moving Directories and Files- (17:02)

<https://www.youtube.com/watch?v=bO2f4nFRmaI&list=PLYCnr23oAKDksGpzmb5kTAadpaxv1Z11z&index=13>

Linking Directories and Files- (19:59)

<https://www.youtube.com/watch?v=XbASr8wzJuQ&list=PLYCnr23oAKDksGpzmb5kTAadpaxv1Z11z&index=48>

## **5: Editors and Editing with vi**

Using vi (It Doesn't Have to be Painful) – (29:47)

<https://www.youtube.com/watch?v=TCPD2a--70Q&list=PLYCnr23oAKDksGpzmb5kTAadpaxv1Z11z&index=4>

Editors and vi- (18:38)

<https://www.youtube.com/watch?v=TCPD2a--70Q&list=PLYCnr23oAKDksGpzmb5kTAadpaxv1Z11z&index=4>

## **6: Permissions, Control & User Creation**

Controlling Access: Introduction to Users and Groups- (37:02)

<https://www.youtube.com/watch?v=bliFPjW7T8I&list=PLYCnr23oAKDksGpzmb5kTAadpaxv1Z11z&index=31>

Controlling Access: Creating Users and Groups- (22:35)

<https://www.youtube.com/watch?v=sHkmlGbIFUg&list=PLYCnr23oAKDksGpzmb5kTAadpaxv1Z11z&index=19>

Controlling Access: Assigning Users and Groups- (9:14)

[https://www.youtube.com/watch?v=3\\_ugWZ5KhZM&list=PLYCnr23oAKDksGpzmb5kTAadpaxv1Z11z&index=20](https://www.youtube.com/watch?v=3_ugWZ5KhZM&list=PLYCnr23oAKDksGpzmb5kTAadpaxv1Z11z&index=20)

Controlling Access: Assigning Permissions- Character Method- (19:45)

<https://www.youtube.com/watch?v=Up13LFPLUes&list=PLYCnr23oAKDksGpzmb5kTAadpaxv1Z11z&index=21>

Controlling Access: Assigning Permissions- Octal Method- (11:59)

<https://www.youtube.com/watch?v=Lmmc5o88DnY&list=PLYCnr23oAKDksGpzmb5kTAadpaxv1Z11z&index=22>

Controlling Access: How Permissions Work and Setting Defaults (umask) – (29:03)

<https://www.youtube.com/watch?v=KXDDsfbHLyc&list=PLYCnr23oAKDksGpzmb5kTAadpaxv1Z11z&index=23>

## **7: Redirection & Wild Cards**

Redirection- (16:49)

<https://www.youtube.com/watch?v=rV6PSZdfAZw>

grep Command- (9:50)

[https://www.youtube.com/watch?v=MLH\\_q4BqAsU&list=PLYCnr23oAKDksGpzmb5kTAadpaxv1Z11z&index=39](https://www.youtube.com/watch?v=MLH_q4BqAsU&list=PLYCnr23oAKDksGpzmb5kTAadpaxv1Z11z&index=39)

Find Command- (23:06)

<https://www.youtube.com/watch?v=aXeUSBhuKTE&list=PLYCnr23oAKDksGpzmb5kTAadpaxv1Z11z&index=38>

## **8: Filters 1**

Filtering Output and Data- (28:25)

<https://www.youtube.com/watch?v=CvpvIQQMksQ&list=PLYCnr23oAKDksGpzmb5kTAadpaxv1Z11z&index=40>

More Filters- Part 1- (13:03)

<https://www.youtube.com/watch?v=eGwqiMIHHS&list=PLYCnr23oAKDksGpzmb5kTAadpaxv1Z11z&index=41>

More Filters- Part 2- (18:04)

<https://www.youtube.com/watch?v=9thyDhF7KbA&list=PLYCnr23oAKDksGpzmb5kTAadpaxv1Z11z&index=42>

More Filters- Part 3- (17:49)

<https://www.youtube.com/watch?v=838wEd3wvHg&index=43&list=PLYCnr23oAKDksGpzmb5kTAadpaxv1Z11z>

## **9: Filters 2- Regular Expressions**

Regular Expressions- Character and Character Set Presentation- (22:30)

<https://www.youtube.com/watch?v=kFbxf7B0xhc&index=25&list=PLYCnr23oAKDksGpzmb5kTAadpaxv1Z11z>

Regular Expressions- Character Set BOL and EOL- (12:37)

[https://www.youtube.com/watch?v=lg-wwqIf1\\_Q&index=26&list=PLYCnr23oAKDksGpzmb5kTAadpaxv1Z11z](https://www.youtube.com/watch?v=lg-wwqIf1_Q&index=26&list=PLYCnr23oAKDksGpzmb5kTAadpaxv1Z11z)

Regular Expressions- Zero to Many Characters- (25:49)

<https://www.youtube.com/watch?v=gObbGbRiiGs&index=27&list=PLYCnr23oAKDksGpzmb5kTAadpaxv1Z11z>

## **10: Job Control and Processes**

Package Management and System Monitoring- (27:16)

<https://www.youtube.com/watch?v=qjv22CESD7c&index=10&list=PLYCnr23oAKDksGpzmb5kTAadpaxv1Z11z>

Controlling Processes- (22:47)

<https://www.youtube.com/watch?v=RESml4QbTUA&index=8&list=PLYCnr23oAKDksGpzmb5kTAadpaxv1Z11z>

Nice And Renice- (12:42)

<https://www.youtube.com/watch?v=RESml4QbTUA&index=8&list=PLYCnr23oAKDksGpzmb5kTAadpaxv1Z11z>

Killall- (5:46)

<https://www.youtube.com/watch?v=vanziMDyND0&list=PLYCnr23oAKDksGpzmb5kTAadpaxv1Z11z&index=52>

## **11: Introduction and Scripting Variables**

UNIX/Linux Scripting- Automating and Screen Level Task- (24:09)

<https://www.youtube.com/watch?v=oP1gjlJmjUA&list=PLYCnr23oAKDksGpzmb5kTAadpaxv1Z11z&index=28>

UNIX/Linux Scripting- Conditional Statements and Loops- (17:16)

<https://www.youtube.com/watch?v=X2Rj7W5bADU&list=PLYCnr23oAKDksGpzmb5kTAadpaxv1Z11z&index=29>

UNIX/Linux Scripting- nohub Command

<https://www.youtube.com/watch?v=qFHnZjaEwf0&list=PLYCnr23oAKDksGpzmb5kTAadpaxv1Z11z&index=44>

## **12: Networking and Navigating**

Where the Files Go at Night- (22:31)

<https://www.youtube.com/watch?v=Og53zUKpn3M&list=PLYCnr23oAKDksGpzmb5kTAadpaxv1Z11z&index=1>

Introduction to Networking with Linux- (21:58)

<https://www.youtube.com/watch?v=GkgCQnTOK2w&list=PLYCnr23oAKDksGpzmb5kTAadpaxv1Z11z&index=17>

UNIX Linux Scripting- ftp sftp- (6:27)

<https://www.youtube.com/watch?v=a9ufyck7uDE&list=PLYCnr23oAKDksGpzmb5kTAadpaxv1Z11z&index=45>

## **13: Protecting and Managing Data**

Data Protection and Management- (10:06)

<https://www.youtube.com/watch?v=1IjIoCuHwc&list=PLYCnr23oAKDksGpzmb5kTAadpaxv1Z11z&index=30>

## **A: Linux Philosophy and Software Licensing**

Software Licensing Does Matter- (28:31)

<https://www.youtube.com/watch?v=C9WCrWk6pIg&list=PLYCnr23oAKDksGpzmb5kTAadpaxv1Z11z&index=32>

Linux Philosophy- (15:47)

<https://www.youtube.com/watch?v=43KiFKh01MY&list=PLYCnr23oAKDksGpzmb5kTAadpaxv1Z11z&index=15>

## **B: Help & Communication**

Getting Help- (12:12)

[https://www.youtube.com/watch?v=a\\_lAhzFHR-g&list=PLYCnr23oAKDksGpzmb5kTAadpaxv1Z11z&index=37](https://www.youtube.com/watch?v=a_lAhzFHR-g&list=PLYCnr23oAKDksGpzmb5kTAadpaxv1Z11z&index=37)

Communicating with Users- (14:42)

[https://www.youtube.com/watch?v=a\\_lAhzFHR-g&list=PLYCnr23oAKDksGpzmb5kTAadpaxv1Z11z&index=37](https://www.youtube.com/watch?v=a_lAhzFHR-g&list=PLYCnr23oAKDksGpzmb5kTAadpaxv1Z11z&index=37)

## **C: Common Linux Programs**

Getting to Know Basic Linux Programs- (30:30)

<https://www.youtube.com/watch?v=cnVr8OImWmY&list=PLYCnr23oAKDksGpzmb5kTAadpaxv1Z11z&index=50>

## **D: Hardware Issues**

Understanding and Dealing with Hardware- Part 1 (23:08)

<https://www.youtube.com/watch?v=S0oQh0TAIas&list=PLYCnr23oAKDksGpzmb5kTAadpaxv1Z11z&index=34>

Understanding and Dealing with Hardware- Part 2 (8:00)

<https://www.youtube.com/watch?v=n12zVTjWHZI&list=PLYCnr23oAKDksGpzmb5kTAadpaxv1Z11z&index=33>

