Linux Course Catalog – 30 Days

Day	Module	Topics Covered
1	**Introduction to Linux**	Overview of Linux, History of Linux, Linux Distributions, Installing Linux
2-3	**Linux File System**	Directory Structure, Files and Directories, Navigating the File System, File Permissions
4-5	**Basic Linux Commands**	pwd, ls, cd, cp, mv, rm, mkdir, touch, cat, more, less
6-7	**File Management & Permissions**	File Ownership, chmod, chown, chgrp, Understanding File Permissions
8-9	**Text Editors**	Using Nano and Vim, Editing Files, Searching within Files
10-11	**Managing Users & Groups**	Creating Users & Groups, User Authentication, Modifying Users, Group Management
12-13	**Package Management**	Using apt, yum, rpm, dpkg, Installing & Removing Software Packages
14-15	**Process Management**	Viewing Processes (ps, top, htop), Managing Processes (kill, nice, renice)
16-17	**Disk Management**	Disk Partitioning, Formatting, Mounting, and Unmounting Partitions, df, du, fdisk, lsblk
18	**Networking Basics**	IP Addressing, Network Interfaces, ifconfig, ip command, ping, netstat
19	**Configuring Network Interfaces**	Static and Dynamic IP Configuration, DHCP Client, Network Configuration Files
20-21	**System Startup & Services**	Boot Process, runlevels, Systemd, Managing Services with systemctl
22	**Shell Scripting Basics**	Introduction to Shell Scripting, Writing Simple Scripts, Variables, Input/Output
23-24	**Advanced Shell Scripting**	Conditional Statements, Loops, Functions, Script Debugging
25	**Cron Jobs & Automation**	Scheduling Tasks with cron, cron syntax, Managing cron jobs
26	**Security Basics**	User Authentication, sudo, Configuring Firewall (iptables, ufw), SELinux
27	**Log Files & System Monitoring**	Viewing Log Files (dmesg, /var/log), Using journalctl, Monitoring System Performance
28	**Backup & Restore**	Backup Tools (rsync, tar), Automating Backups with cron, Restore Files from Backups
29	**Linux File Sharing & Network Services**	NFS, Samba, SSH, FTP, SFTP, Setting up a File Server
30	**Final Project & Certification**	Hands-on Project (e.g., Setting up a Web Server, File Server, or Automating Tasks), Review, Final Exam & Certification