




 <b>Basic Info</b>	Course 2 of 4 in the <a href="#">Open Source Software Development, Linux and Git Specialization</a>
 <b>Level</b>	Beginner
 <b>Language</b>	English <a href="#">Volunteer to translate subtitles for this course</a>
 <b>Hardware Req</b>	Minimum 1 GB RAM, 5 GB HD space, any recent Linux distribution. Using a VM is also acceptable.
 <b>How To Pass</b>	Pass all graded assignments to complete the course.
 <b>User Ratings</b>	<div><div></div><div></div><div></div><div></div><div></div></div> Average User Rating 4.4

## Syllabus

<div><div>WEEK 1</div><div><div>LINUX ORIENTATION</div><div><div><div>11 videos, 11 readings</div><div><div><div>1. <a href="#">Video: Introduction to Linux for Developers (Course 2)</a></div><div><div>2. <b>Video:</b> Module 1 Overview</div><div><div>3. <b>Video:</b> Kernel vs. Operating System and Tools</div><div><div>4. <b>Video:</b> History of Linux</div><div><div>5. <b>Video:</b> UNIX and Linux</div><div><div>6. <b>Video:</b> Linux Distributions</div><div><div>7. <b>Video:</b> Using Linux Distributions (Demo)</div><div><div>8. <b>Reading:</b> Linux Standard Base</div><div><div>9. <b>Reading:</b> Software Environment</div><div><div>10. <b>Reading:</b> Preparing Your System</div><div><div>11. <b>Reading:</b> sudo (Lab)</div><div><div>12. <b>Video:</b> Graphical Layers and Interfaces</div><div><div>13. <b>Video:</b> Using KDE Desktop (Demo)</div><div><div>14. <b>Reading:</b> Using Multiple Workspaces (Lab)</div><div><div>15. <b>Reading:</b> Using Multiple Tabs in a Terminal Window (Lab)</div><div><div>16. <b>Video:</b> Getting Help</div><div><div>17. <b>Reading:</b> man Pages</div><div><div>18. <b>Reading:</b> info</div><div><div>19. <b>Reading:</b> --help and help</div><div><div>20. <b>Video:</b> Graphical Interfaces: GNOME and KDE</div><div><div>21. <b>Reading:</b> Multiple man Pages (Lab)</div><div><div>22. <b>Reading:</b> Using info (Lab)</div></div></div><div><div>Show less</div></div><div><div><div><div><div><div></div><div>Graded:</div><div>Linux and the Operating System</div></div><div><div><div></div><div>Graded:</div><div>Graphical Environments and Interfaces</div></div><div><div><div></div><div>Graded:</div><div>Getting Help</div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div>
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<div><div>WEEK 2</div><div><div>STARTING TO WORK IN LINUX</div><div><div><div>8 videos, 20 readings</div><div><div><div>1. <a href="#">Video: Module 2 Overview</a></div><div><div>2. <b>Video:</b> Introduction to Text Editors</div><div><div>3. <b>Reading:</b> echo and cat</div><div><div>4. <b>Video:</b> vi Editor</div><div><div>5. <b>Reading:</b> vi Commands</div><div><div>6. <b>Video:</b> emacs Editor</div><div><div>7. <b>Reading:</b> emacs Commands</div><div><div>8. <b>Reading:</b> vi and emacs Tutorials (Lab)</div><div><div>9. <b>Reading:</b> Shells</div><div><div>10. <b>Video:</b> The Development of Shells</div><div><div>11. <b>Reading:</b> Shell Initialization</div><div><div>12. <b>Reading:</b> Aliases</div><div><div>13. <b>Reading:</b> Environment Variables</div><div><div>14. <b>Reading:</b> Customizing the Command Line Prompt</div><div><div>15. <b>Reading:</b> Special Characters</div><div><div>16. <b>Reading:</b> Redirection</div><div><div>17. <b>Reading:</b> Pipes</div><div><div>18. <b>Reading:</b> Command Substitution and Expressions</div><div><div>19. <b>Reading:</b> Customizing the Prompt (Lab)</div><div><div>20. <b>Reading:</b> Redirection and Pipes (Lab)</div><div><div>21. <b>Video:</b> Introduction to Filesystems</div><div><div>22. <b>Reading:</b> Filesystem Layout</div><div><div>23. <b>Reading:</b> Partitions</div><div><div>24. <b>Video:</b> Using fdisk (Demo)</div><div><div>25. <b>Video:</b> Partitioning Considerations</div><div><div>26. <b>Reading:</b> Paths</div><div><div>27. <b>Reading:</b> Hard and Soft (Symbolic) Links</div><div><div>28. <b>Reading:</b> Adding to the Path (Lab)</div></div></div><div><div>Show less</div></div><div><div><div><div><div><div></div><div>Graded:</div><div>Text Editors</div></div><div><div><div></div><div>Graded:</div><div>Shells, Bash, and the Command Line</div></div><div><div><div></div><div>Graded:</div><div>Filesystem Layout, Partitions, Paths, and Links</div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div>
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<div><div>WEEK 3</div><div><div>System Components</div><div><div><div>7 videos, 9 readings</div><div><div><div>1. <a href="#">Video: Module 3 Overview</a></div><div><div>2. <b>Video:</b> System Boot</div><div><div>3. <b>Reading:</b> /boot Directory</div><div><div>4. <b>Video:</b> Using GRUB (Demo)</div><div><div>5. <b>Video:</b> System Initialization</div><div><div>6. <b>Reading:</b> System Runlevels</div><div><div>7. <b>Reading:</b> Killing the Graphical User Interface (Lab)</div><div><div>8. <b>Reading:</b> Memory</div><div><div>9. <b>Reading:</b> Swap</div><div><div>10. <b>Video:</b> Using Swap and OOM (Demo)</div><div><div>11. <b>Video:</b> Threading Models</div><div><div>12. <b>Reading:</b> Invoking the OOM Killer (Lab)</div><div><div>13. <b>Reading:</b> Networking and Network Interfaces</div><div><div>14. <b>Video:</b> Using Predictable Network Interface Device Names</div><div><div>15. <b>Reading:</b> Networking and Network Interfaces (Cont.)</div><div><div>16. <b>Reading:</b> Static Configuration of a Network Interface (Lab)</div></div></div><div><div>Show less</div></div><div><div><div><div><div><div></div><div>Graded:</div><div>System Initialization</div></div><div><div><div></div><div>Graded:</div><div>Memory</div></div><div><div><div></div><div>Graded:</div><div>Networking</div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div>
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<div><div>WEEK 4</div><div><div>Command Details</div><div><div><div>8 videos, 6 readings</div><div><div><div>1. <a href="#">Video: Module 4 Overview</a></div><div><div>2. <b>Reading:</b> Basic Commands and Utilities</div><div><div>3. <b>Video:</b> File Transfer Tools</div><div><div>4. <b>Reading:</b> Monitoring and Performance Utilities</div><div><div>5. <b>Video:</b> Graphical Monitoring Tools</div><div><div>6. <b>Video:</b> Using System Monitoring (Demo)</div><div><div>7. <b>Reading:</b> Installing and Running ksysguard (Lab)</div><div><div>8. <b>Reading:</b> Loading/Unloading Kernel Modules</div><div><div>9. <b>Video:</b> Using Kernel Modules (Demo)</div><div><div>10. <b>Video:</b> Device Management</div><div><div>11. <b>Video:</b> Using udev (Demo)</div><div><div>12. <b>Reading:</b> Managing System Services</div><div><div>13. <b>Video:</b> Using systemctl (Demo)</div><div><div>14. <b>Reading:</b> Using stress (Lab)</div></div></div><div><div>Show less</div></div><div><div><div><div><div><div></div><div>Graded:</div><div>System Monitoring</div></div><div><div><div></div><div>Graded:</div><div>Kernel Modules and Device Management</div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div>
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<div><div>WEEK 5</div><div><div>System Administration and User Management</div><div><div><div>9 videos, 9 readings</div><div><div><div>1. <a href="#">Video: Module 5 Overview</a></div><div><div>2. <b>Video:</b> System Installation</div><div><div>3. <b>Video:</b> Using Graphical Package Management (Demo)</div><div><div>4. <b>Video:</b> Using Yast (Demo)</div><div><div>5. <b>Reading:</b> Software Management and Packaging</div><div><div>6. <b>Video:</b> Using rpm (Demo)</div><div><div>7. <b>Video:</b> Using dpkg (Demo)</div><div><div>8. <b>Video:</b> Using yum and dnf (Demo)</div><div><div>9. <b>Reading:</b> Upgrading and Patching</div><div><div>10. <b>Reading:</b> User Directories, Environments, etc.</div><div><div>11. <b>Reading:</b> Logging Files</div><div><div>12. <b>Reading:</b> Installing a New Repository on a Red Hat and CentOS (Lab)</div><div><div>13. <b>Video:</b> Basics of Users and Groups</div><div><div>14. <b>Reading:</b> Adding and Removing Users and Groups</div><div><div>15. <b>Video:</b> Creating, Modifying, and Removing User Accounts (Demo)</div><div><div>16. <b>Reading:</b> Files, Users, and Permissions</div><div><div>17. <b>Reading:</b> root (super) user, su and sudo</div><div><div>18. <b>Reading:</b> Working with User Accounts (Lab)</div></div></div><div><div>Show less</div></div><div><div><div><div><div><div></div><div>Graded:</div><div>System Administration</div></div><div><div><div></div><div>Graded:</div><div>Users and Groups</div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div>
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## How It Works

<div><div>GENERAL</div><div><div><div>How do I pass the course?</div><div>To earn your Course Certificate, you'll need to earn a passing grade on each of the required assignments—these can be quizzes, peer-graded assignments, or programming assignments. Videos, readings, and practice exercises are there to help you prepare for the graded assignments.</div><div>What do start dates and end dates mean?</div><div>Once you enroll, you'll have access to all videos, readings, quizzes, and programming assignments (if applicable). If you choose to explore the course without purchasing, you may not be able to access certain assignments. If you don't finish all graded assignments before the end of the course, you can reset your deadlines. Your progress will be saved and you'll be able to pick up where you left off.</div><div>What are due dates? Is there a penalty for submitting my work after a due date?</div><div>Within a course, there are suggested due dates to help you manage your schedule and keep coursework from piling up. Quizzes and programming assignments can be submitted late without consequence. However, it is possible that you won't receive a grade if you submit your peer-graded assignment too late because classmates usually review assignment within three days of the assignment deadline.</div><div>Can I re-attempt an assignment?</div><div>Yes. If you want to improve your grade, you can always try again. If you're re-attempting a peer-graded assignment, re-submit your work as soon as you can to make sure there's enough time for your classmates to review your work. In some cases you may need to wait before re-submitting a programming assignment or quiz. We encourage you to review course material during this delay.</div><div>Show less</div></div></div></div>
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## Course 2 of Specialization

<div><div><div>Learn How To Develop Open Source Software</div><div>Get the skills and knowledge you need to develop open source software using Linux, git, and more!</div></div><div><div><div><div><div></div><div>Open Source Software Development, Linux and Git</div><div>The Linux Foundation</div></div><div>Learn More</div></div></div></div></div>
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View the course in catalog

<div><div><div><div><div></div><div>Big Data Tools</div><div>Arizona State University</div></div><div></div></div></div></div>
<div><div><div><div><div></div><div>Using Git for Distributed Development</div><div>The Linux Foundation</div></div><div></div></div></div></div>
<div><div><div><div><div></div><div>Data Wrangling, Analysis and AB Testing with SQL</div><div>University of California, Davis</div></div><div></div></div></div></div>
<div><div><div><div><div></div><div>Linux Tools for Developers</div><div>The Linux Foundation</div></div><div></div></div></div></div>
<div><div><div><div><div></div><div>NoSQL Database Systems</div><div>Arizona State University</div></div><div></div></div></div></div>