



STARK STATE COLLEGE

GENERAL SYLLABUS

Course Information

Course Name: UNIX/LINUX System Administration
Course Number: NET264

Required Materials

Textbook(s): Unix and Linux System Administration Handbook 5th Edition, Evi Nemeth, Garth Snyder, Trent R. Hein, Ben Whaley, Dan Mackin & others, Pearson Education, ISBN-13: 978-0-13-427755-4

Required Readings: None

Additional Materials: A desktop or laptop computer with a 64-bit CPU, 8GB RAM (12GB recommended), an Internet connection, 120GB hard disk or SSD or an eSATA USB 3 or 3.1 hard drive with at least 120GB of space available.

Course Outline/Calendar

The date of coverage and order of coverage may be modified based on the faculty member and events beyond the control of faculty members that interfere with class times and teaching.

Week	Chapter/Topic/Lab
Week 1	History & Getting Acquainted <ul style="list-style-type: none"> • Review all items in Start Here! • Introduction Videos (LMS) Review all items in Week 1 Materials folder (LMS) <ul style="list-style-type: none"> • Student Introduction Discussion • Scavenger Hunt Quiz • Ch 1 Quiz • Lab 1 – Vmware Installation • Lab 2 – Ubuntu Installation
Week 2-3	Scripting <ul style="list-style-type: none"> • Review all items in Week 2 & 3 materials folder Read Chapter 7: Scripting and the Shell <ul style="list-style-type: none"> • Lab – VI and Grep exercise • Quiz – Chapter 7
Week 4	System Startup & Recovery <ul style="list-style-type: none"> • Review all items in Week 4 materials folder • Read Chapter 2: Booting and System Management Daemons Read Chapter 3: Access Control and Rootly Powers <ul style="list-style-type: none"> • Quiz – Ch. 2 & 3

Week	Chapter/Topic/Lab
Week 5	Linux Kernel <ul style="list-style-type: none"> Review all items in Week 5 materials folder Read Chapter 4: Process Control Read Chapter 11: Drivers & the kernel <ul style="list-style-type: none"> Quiz – Ch. 4 & 11
Week 6-7	File System and Devices, Capacity Planning <ul style="list-style-type: none"> Review all items in Weeks 6 & 7 materials folders Read Chapter 5: The Filesystem Read Chapter 6: Software Installation & Mgmt Read Chapter 20: Storage Read Chapter 21: Network File System (pg. 807-810 only) Exam 1
Week 8	Advanced Storage Device Administration <ul style="list-style-type: none"> Reivew all items in Week 8 materials folder Read Chapter 8: User Management Read Chapter 10: Logging <ul style="list-style-type: none"> Lab – User Management
Week 9	Networking Configuration & Troubleshooting <ul style="list-style-type: none"> Review all items in Week 9 materials folder Read Chapter 13: TCP/IP Networking <ul style="list-style-type: none"> Lab – TCP/IP Networking
Week 10	Network Client Management <ul style="list-style-type: none"> Review all items in Week 10 materials folder Read Chapter 15: IP Routing Read Chapter 16: DNS – Domain Name System <ul style="list-style-type: none"> Quiz – Ch. 15 & 16
Week 11	File Sharing <ul style="list-style-type: none"> Review all items in Week 11 materials folder Read Chapter 22: SMB Exam 2
Week 12	System Security <ul style="list-style-type: none"> Review all items in Week 12 materials folder Read Chapter 27: Security <ul style="list-style-type: none"> Lab – Security
Week 13	Web Services <ul style="list-style-type: none"> Review all items in Week 13 materials folder Read Chapter 19 : Web Hosting <ul style="list-style-type: none"> Quiz – Chapter 19
Week 14	System Maintenance <ul style="list-style-type: none"> Review all items in Week 14 materials folder Read Chapter 28: Monitoring <ul style="list-style-type: none"> Lab – Monitoring
Week 15	System Maintenance <ul style="list-style-type: none"> Review all items in Week 15 materials folders Read Chapter 29: Performance Analysis <ul style="list-style-type: none"> Lab – Performance Analysis
Week 16	Final Exam