IT 3110: Systems Automation

Spring 2019 Schedule

Week 1 (Jan 6 - 10)

- Slides
  - Logger Slides
  - DHCP Slides
- Readings
- Lectures
  - DHCP Lecture
  - Bionic Networking
- Screenshots/Helps
  - Syslog Server
  - Syslog Client
  - Syslog Filters
  - Log Rotate
  - DHCP Dynamic
  - DHCP Fixed
  - DHCP Dynamic Client
- Assignment
  - Hosts
  - Logger

Week 2 (Jan 13 - 17)

- Slides
  - NFS Slides
- Reading
- Lectures
- Screenshots/Helps
  - NFS How To
- Assignment
  - DHCP

Week 3 (Jan 20 - 24)

- NO CLASS ON JAN 20
- Slides
  - PXE Boot
  - Kickstart
  - Diskless
- Reading
- Lectures
- Screenshots/Helps
  - Diskless boot = Note that instead of using the cp command as outlined in the screenshots, you can use the debootstrap command as shown in the diskless assignment instructions.
  - Netboot
  - FOG
- Assignment
  - NFS 1

Week 4 (Jan 27 - Jan 31)

** EXAM 1 **
Week 5 (Feb 3 - Feb 7)

- Slides
  - Shell 1
  - StdOut
  - StdIn
  - Command Execution
- Reading
  - Shell review
  - stdout review
  - stdin review
  - executing commands
- Lectures
- Screenshots/Helps
- Assignment
  - Bash on Windows

Week 6 (Feb 10- 14)

- Slides
  - Variables
  - Logic
  - Sed/Awk
- Reading
  - Variables
  - Shell logic and arithmetic
  - AWK, SED - Read 7.10- 7.11
- Lectures
- Screenshots/Helps
  - SSH As root
- Assignment
  - Shell Script 1
  - Shell Script 2

Week 7 (Feb 17 - 21)

- NO CLASS FEB 17
- Slides
  - Regex
  - Shell Features
- Reading
• Additional Scripting
• Lectures
• Screenshots/Helps
• Assignment
  • Shell Script 3
  • Regex

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**Week 8 (Feb 24 - Feb 28 )**

• Slides
  • Shell Speed
  • Shell Speed

• Reading
  • Quick Shell
  • Troubleshooting

• Lectures
• Screenshots/Helps
  • Sample scripting exam

• Assignment
  • Shell Script 4
  • Shell Script 5

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**Week 9 (Mar 2 - 6)**

**TEST 2**

• Slides
  • Automation with Ansible
  • Ansible Playbooks

• Reading
• Lectures
• Screenshots/Helps
• Assignment

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**Week 10 (Mar 9 - 13)**

• Slides
  • Ansible Playbooks 2

• Reading
• Lectures
• Screenshots/Helps
• Assignment
  • Ansible 1
  • Ansible 2

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**Week 11 (Mar 16 - 20)**

SPRING BREAK
Week 12 (Mar 23 - 27)

- Slides
  - Ansible Roles
- Reading
- Lectures
- Screenshots/Helps
- Assignment
  - Ansible 3

Ansible/Python Exam

Week 13 (Mar 30 - Apr 3)

- Slides
  - Python curtis example
- Reading
- Lectures
- Screenshots/Helps
- Assignment
  - Python

Week 14 (Apr 6 - 10)

- Slides
  - Salt
- Reading
  - Chapter 1
- Lectures
- Screenshots/Helps
- Assignment
  - Salt 1
  - Salt 2
  - Salt 3

Week 15 (Apr 13 - 17)

- SALT

Week 16 (Apr 20 - 22)

- SALT
- REVIEW
- EXAM