Resources

- CIT VM Farm
  - Create VM and connect from osx/Linux
  - Manage VMs with CLI instead of Web
  - Connect to vm from Linux host

- AWS
  - Create AWS Educate Account
  - Create EC2 instance
  - Connect EC2 instance

- Software
  - If you are using windows to connect to your vm, you might need the following:
    - Putty
    - TightVNC
  - If you have a newer version of windows 10 and have installed the linux subsystem, you can just ssh from the command line like you do in OSX and Linux.

Week 1 (Jan 11,13)

- Slides
  - DHCP Slides

- Readings

- Lectures
  - DHCP Lecture
  - Bionic Networking
  - Wireshark DHCP Capture

- Screenshots/Helps
  - DHCP Dynamic
  - DHCP Fixed
  - DHCP Dynamic Client

- Assignment
  - Hosts

Week 2 (Jan 20)

- Slides
  - NFS Slides
  - PXE Boot
  - Kickstart

- Reading

- Lectures

- Screenshots/Helps
  - NFS How To
  - kickstart
  - tftp and Netboot

- Assignment
  - DHCP

Week 3 (Jan 25, 27)

- Slides
  - Diskless
Week 4 (Feb 1, 3)

** EXAM 1 **

- Slides
- Reading
- Lectures
- Screenshots/Helps
  - Review
  - Capture image fog video, old video
  - Deploy image fog video
- Assignment
  - DHCP 2 - netboot/kickstart
  - Diskless Boot
  - FOG

Week 5 (Feb 8,10)

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

Week 6 (Feb 17)

- NO CLASS FEB 15

- Slides
  - Logic
  - Sed/Awk

- Reading
  - Variables
  - Shell logic and arithmetic
  - A better one on logic
  - Recommended on brackets
  - AWK, SED - Read 7.10 - 7.11
Week 7 (Feb 22, 24)

- Slides
  - Regex
  - Shell Features
- Reading
  - Additional Scripting
  - Shell Speed
  - Shell troubleshooting
- Lectures
- Screenshots/Helps
- Assignment
  - Shell Script 3
  - Regex

Week 8 (Mar 1, 3)

- Slides
- Reading
  - Quick Shell
  - Troubleshooting
- Lectures
- Screenshots/Helps
  - Sample scripting exam
  - Sample solution other
- Assignment
  - Shell Script 4
  - Shell Script 5

TEST 2

Week Mar 7-13

SPRING BREAK

Week 9 (Mar 15, 17)

- Slides
  - Terraform
  - Terraform2
  - Terraform3
- Reading
  - Read chapter 2 in “Terraform up and running 2nd edition” found on Oreilly (safarionline) from library.dixie.edu website.
- Lectures
  - Review AWS
  - Infrastructure as Code
  - Terraform
• Screenshots/Helps
• Assignment
  • Terraform
  • Terraform 2

**Week 10 (Mar 22, 24)**

• Slides
  • Automation with Ansible
  • Ansible Playbooks
  • Ansible Playbooks 2

• Reading
  • Ansible variables

• Lectures
  • Configuration management with Ansible

• Screenshots/Helps

• Assignment
  • Ansible 1
  • Ansible 2

**Week 11 (Mar 29, 31)**

• Slides
  • Ansible Roles
  • Ansible Advanced stuff

• Reading

• Lectures
  • Ansible Roles
  • Example of Roles

• Screenshots/Helps

• Assignment
  • Ansible 3

**Terraform and Ansible Exam**

**Week 12 (Apr 5, 7)**

• Slides
  • Python

• Reading

• Lectures
  • Python video slide lecture

• Screenshots/Helps
  • Python example

• Assignment
  • Python
Week 13 (Apr 12,14)

- Slides
  - Salt
- Reading
  - Salt states
  - Basic usage
  - More complex states
- Lectures
  - Installing saltstack
- Screenshots/Helps
- Assignment
  - Salt 1

Week 14 (Apr 19,21)

- Reading
- Lectures
  - Salt 1
  - Salt 2
- Screenshots/Helps
  - Salt example file
- Assignment
  - Salt 2
  - Salt 3

Week 15 (Apr 26,28)

- SALT
- REVIEW
- EXAM