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.

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**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

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**Week 2 (Jan 20)**

- **Slides**
  - NFS Slides
  - PXE Boot
  - Kickstart
- **Reading**
- **Lectures**
- **Screenshots/Helps**
  - NFS How To
  - kickstart
  - tftp and Netboot
- **Assignment**
  - DHCP

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**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
Lectures

Screenshots/Helps

- SSH As root

Assignment

- Shell Script 1
- Shell Script 2

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**Week 7 (Feb 22, 24)**

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

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**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

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**Week Mar 7-13**

SPRING BREAK

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**Week 9 (Mar 15, 17)**

- Slides
- Reading
- Lectures
  - Review AWS
  - Infrastructure as Code
  - Terraform
- Screenshots/Helps
- Assignment

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**Week 10 (Mar 22, 24)**
• Slides
  • Automation with Ansible
  • Ansible Playbooks
  • Ansible Playbooks 2

• Reading

• Lectures
  • Configuration management with Ansible

• Screenshots/Helps

• Assignment
  • Ansible 1
  • Ansible 2

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

• Slides
  • Ansible Roles

• Reading

• Lectures
  • Ansible Roles
  • Example of Roles

• Screenshots/Helps

• Assignment
  • Ansible 3

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**Ansible Exam**

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

• Slides
  • Python

• Reading

• Lectures
  • Python video slide lecture

• Screenshots/Helps
  • Python example

• Assignment
  • Python

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**Week 13 (Apr 12,14)**

• Slides
  • Salt

• Reading
  • Salt states
  • Basic usage
  • More complex states

• Lectures
  • Installing saltstack

• Screenshots/Helps
Week 14 (Apr 19, 21)

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

Week 15 (Apr 26, 28)

- SALT
- REVIEW
- EXAM