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 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 10,12)

- 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 19)

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

Week 3 (Jan 24, 26)

- Slides
  - Diskless
- Reading
Lectures
- Screenshots/Helps
  - Dual netboot
  - Create an Initial ramdisk
  - Use debootstrap to create a disk image
  - FOG

Assignment
- NFS 1
- DHCP 2 - netboot/kickstart

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**Week 4 (Jan 31, Feb 2)**

** EXAM 1 **

- Slides
- Reading
- Lectures
- Screenshots/Helps
  - Review
  - Capture image fog video old video
  - Deploy image fog video
- Assignment
  - Diskless Boot
  - FOG

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**Week 5 (Feb 7, 9)**

- Slides
  - Shell 1
  - StdOut
  - StdIn
  - Command Execution
  - Variables
- Reading
  - Shell review - Cookbook ch1
  - The bash cookbook version 2 is located on Oreilly. Navigate to library.dixie.edu -> ebook collections -> O'Reilly. Search for “bash cookbook”.
  - stdout review - Cookbook 2
  - stdin review - Cookbook 3
  - Executing commands - Cookbook 4
- Lectures
  - Sample files
- Screenshots/Helps
- Assignment
  - Bash on Windows

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**Week 6 (Feb 14, 16)**

- Slides
  - Logic
  - Sed/Awk
- Reading
  - Variables - cookbook 5
  - Shell logic and arithmetic - cookbook 6
  - A better one on logic
  - Recommended on brackets
  - AWK, SED - Read 7.10 - 7.11
Week 7 (Feb 23)

• NO CLASS FEB 21
• Slides
  • Regex
  • Shell Features
• Reading
  • Additional Scripting - Cookbook 10
  • Shell Speed
  • Shell troubleshooting
• Lectures
• Screenshots/Helps
• Assignment
  • Shell Script 1
  • Shell Script 2

Week 8 (Feb 28, Mar 2)

• Slides
• Reading
  • Quick Shell - cookbook 18
  • Troubleshooting - cookbook 19
• Lectures
• Screenshots/Helps
  • Sample scripting exam
  • Sample solution other
• Assignment
  • Shell Script 3
  • Regex

TEST 2

Week 9 (Mar 7,9)

• 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

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**Week Mar 13-19**

SPRING BREAK

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**Week 10 (Mar 21,23)**

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

• Reading
  • Ansible variables

• Lectures
  • Configuration management with Ansible

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

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**Week 11 (Mar 28,30)**

• Slides
  • Ansible Roles
  • Ansible Advanced stuff

• Reading
• Lectures
  • Ansible Roles
  • Example of Roles

• Screenshots/Helps
• Assignment
  • Ansible 3

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Terraform and Ansible Exam

**Week 12 ( Apr 4,6)**

• Slides
  • Python
• Reading
• Lectures
  • Python video slide lecture
• Screenshots/Helps
  • Python example
• Assignment
  • Python

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**Week 13 (Apr 11,13)**

• Slides
  • Salt
• Reading
  • Salt states
  • Basic usage
  • More complex states
• Screenshots/Helps
• Assignment
  • Salt 1

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**Week 14 (Apr 18,20)**

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

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**Week 15 (Apr 25,27)**

• SALT
• REVIEW
• EXAM