Schedule and outline

Texts
- Proxmox Admin guide (PX)

Week 1 (Aug 23 - 27)
- Topics:
  - Hypervisors
  - Types of virtualization
  - Virtualization with Proxmox
  - connect iso to proxmox
  - Virtual Machines
- Readings:
  - PX 1, PX 2.3.1, 2.3.2
  - Explained by vmware
- Slides:
  - Intro Slides
  - More Slides
  - Proxmox Chapter 1
- Notes:
  - Movie - Connect to proxmox with tunnel from mac/linux
  - Movie - install vm
- Assignments:
  - Project 1 - Research
  - Also begin project 2

Week 2 (Aug 30 - Sep 3)
- Topics:
  - More on VMs
  - NFS and proxmox
  - Clustering
- Readings:
  - PX 5 (Explanation of the GUI) (review if needed)
  - PX 10
- Slides:
  - Proxmox Chapter 10
- Notes:
  - TrueNas Install
  - TrueNas NFS
  - TrueNas networking
- Assignments:
  - Equipment List
  - Proxmox Install

Week 3 (Sep 6 - Sep 10)
- Topics:
  - Clustering
  - High availability
- Readings:
  - PX 6
- Slides:
  - Proxmox Chapter 6
  - Proxmox Chapter 8
- Notes:
  - Add node to cluster
• Assignments:
  • FreeNAS Install
  • Template creation
  • Proxmox HA

Week 4 (Sep 13 - 17)

• Topics:
  • Finish up, Proxmox exam
  • Review
• Readings:
  • Proxmox 8
• Assignments:
  • Proxmox Stats

Week 5 (Sep 20 - 24)

• Topics:
  • containers
  • docker
• Readings:
  • LXC vs Docker
  • Chapter 1
  • Good overview video of Docker
• Slides:
  • Containers
  • Docker 1
  • Docker 2
  • Docker 3
• Assignments:
  • Docker - hello
  • Docker - identidock
  • Docker - webapp

Week 6 (Sep 27 - Oct 1)

• Topics:
  • More Docker
  • docker compose
• Readings:
  • Entrypoint vs CMD
  • Chapter 3
  • Basic container networking
• Slides:
  • Docker storage
  • Docker compose
• Assignments:
  • Docker - Mysql Apache

Week 7 (Oct 4 - 8)

• Topics:
  • Kubernetes
  • demo
• Readings:
  • K8S tutorial
• Slides:
  • Slides
  • Slides
Assignments:
- K8s sentiment

**Week 8 (Oct 11 - 14)**

- Topics:
  - Kubernetes
  - K8s yml files

**Week 9 (Oct 18 - 22)**

- Topics:
  - Kubernetes
- Slides:
  - Slides
- Assignments:

**Week 10 (Oct 25 - Oct 29)**

- Topics:
  - More kubernetes
- Slides:
  - Slides
  - Slides
- Assignments:
  - K8s wordpress

**Week 11 (Nov 1 - 5)**

- Topics:
  - More kubernetes
  - Cloud?
    - Walkthrough
- Slides:
- Assignments:
  - K8s php and redis

**Week 12 (Nov 8 - 12)**

- Topics:
  - More kubernetes
  - Slides
- Assignments:
  - K8s pokemon
  - K8s cloud

**Week 13 (Nov 15-19)**

- Topics:
  - Slides
  - Example backend
  - Example frontend

**Week 14 (Nov 22)**
• Topics:
  ◦ Kubernetes exam
  ◦ Canvas exam
  ◦ ** Thanksgiving **
• Assignments:
  ◦ Presentation Instructions

Week 14 (Nov 29 - Dec 3)

• Monday - Presentations
• Wed - Presentations