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

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**Week 4 (Sep 13 - 17)**

- Topics:
  - Finish up, Proxmox exam
  - REview
- Readings:
  - Proxmox 8
- Assignments:
  - Proxmox Stats

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**Week 5 (Sep 20 - 24)**

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

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**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

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**Week 7 (Oct 4 - 8)**

- Topics:
  - More Docker
  - docker compose
- Assignments:
  - Docker - bind mounts

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**Week 8 (Oct 11 - 14)**
- Review
- Docker Exam
- Fall Break

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

- Topics:
  - Kubernetes
  - [demo](#)
- Readings:
  - [K8S tutorial](#)
  - [K8s overview](#)
- Slides:
  - [Slides](#)
  - [Slides](#)
- Assignments:

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

- Topics:
  - Kubernetes
- Slides:
  - [Slides](#)
- Assignments:
  - [K8s sentiment](#)
  - [K8s wordpress](#)

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

- Topics:
  - More kubernetes
- Slides:
  - [Slides](#)
  - [Slides](#)
- Assignments:

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

- Topics:
  - More kubernetes
  - Cloud?
  - [Walkthrough](#)
- Slides:
  - [Cheatsheet 1](#)
  - [Cheatsheet 2](#)
- Assignments:
  - [K8s php and redis](#)

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

- Topics:
  - More kubernetes
  - [Slides](#)
  - [Example backend](#)
  - [Example frontend](#)
  - [Cloud howto](#)
- Assignments:
  - [K8s pokemon](#)
**Week 14 (Nov 22)**

- Topics:
  - Kubernetes exam
  - Canvas exam
  - **Thanksgiving**

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**Week 15 (Nov 29 - Dec 3)**

- Topics:
- Assignments:
  - [Presentation Instructions](#)
- Monday - Presentations
- Wed - Presentations
- Day of finals?