**Schedule and outline**

**Texts**

- [DevOps for Web Development](#) (Abbreviated as DWD below)
- [The phoenix project](#)

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**Week 1 (Aug 24 - 28)**

- **Topics:**
  - Continuous Deployment & Integration
  - Git

- **Readings:**
  - [What is Dev Ops](#)
  - [Youtube video](#)
  - [DWD-ch 1](#)
  - [Continuous Integration](#)
  - [Git intro](#)
  - [Version Control](#)
  - [DWD-ch 2](#)
  - [The phoenix project] Chapters 1 - 2

- **Slides:**
  - [Intro](#)
  - [More Intro](#)
  - [Git basics](#)
  - [Git hello world](#)
  - [Basic git](#)
  - [Branching and merging](#)

- **Notes:**
  - [Create EC2 instance](#)

- **Assignments:**
  - [Assignment 1 - AWS](#)

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**Week 2 (Aug 31 - Sep 4)**

- **Topics:**
  - Cloud overview
  - Connecting to EC2 again
  - Our sample petClinic project
  - Jenkins

- **Readings:**
  - The phoenix project (3-6)
  - [DWD-ch 2](#)
  - [DWD-ch 3](#)

- **Slides:**
  - [Chapter 2](#)
  - [Slides](#)

- **Notes:**

- **Assignments:**
  - [Assignment 2 - Git](#)
  - [Assignment 3 - Production VM](#)
  - [Assignment 4 - Jenkins](#)
Week 3 (Sep 7 - 11)

- Topics:
  - The phoenix project (7-10)
- Slides:
- Assignments:
  - Assignment - Jenkins 2
  - Assignment - Jenkins Pipelines

Week 4 (Sep 14 - 18)

- Topics:
  - Jenkins - Deployment to Tomcat
- Assignments:
  - Assignment - Jenkins Production
- Readings:
  - reading phoenix (11-14)
  - wip

Week 5 (Sep 21 - 25)

Exam 1

- Topics:
  - Vagrant
- Readings:
  - reading phoenix (15-18)
- Slides:
  - Slides

Week 6 (Sep 28 - Oct 2)

- Topics:
  - Terraform
- Slides:
  - Vagrant Slides
  - Terraform Slides
  - Terraform From Jenkins
- Assignments:
  - Vagrant local
  - Terraform
  - Terraform and Jenkins
- Readings:
  - reading phoenix (19-22)

Week 7 (Oct 5 - 9)

- Topics:
  - Automated Configuration (Configuration Management)
  - Ansible
  - Ansible Playbooks
  - Vagrant + Ansible
- Readings:
  - How ansible works
  - Benefits of CM
  - Ansible Getting Started (Also covered in my slides)
**Ansible Playbooks Intro**
**More about playbooks**
* reading phoenix (23-26)

**Slides:**
* Ansible 1
* Ansible 2

**Assignments:**
* Ansible - Tomcat

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**Week 8 (Oct 12 - 14)**

* Fall Break
* Topics:
  * Continue with automation
* Readings:
  * See above
* Assignments:
  * Ansible - Users

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**Week 9 (Oct 19 - 23)**

* Review: Kahoot
* Exam 2
* Topics:
* Readings:
  * reading phoenix (27-30)
* Assignments:
  * Cloud 1

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**Week 10 (Oct 26 - 30)**

* Topics:
  * Cloud
* Readings:
  * Materials given
  * reading phoenix (31-34)
* Slides:
  * Cloud basics
  * GCP basics
* Assignments:
  * Cloud 2

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**Week 11 (Nov 2 - 6)**

* Topics:
  * Docker
* Slides:
  * intro
* Readings:
  * files app.py requirements.txt
  * Materials given
  * phoenix up through end of book
* Assignments:
  * Assignment - Docker

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**Week 12 (Nov 9 - 13)**
Topics:
- Guest speakers?
- All day devops

Readings:
- Assignments:

Week 13 (Nov 16 - 20)

Topics:
- Continuous Monitoring
- Nagios

Readings:
- Continuous Monitoring

Video:
- Monitoring for DevOps and Microservices suggested

Assignments:
- Assignment - Nagios
- Slides

Week 14 (Nov 23)

Thanksgiving

Microservices

Readings:
- Monolithic pattern
- Microservice pattern
- Breaking away from the monolith
- The 12 factor app

Assignments:
- Final paper on Phoenix

Week 15 (Nov 30 - Dec 4) (Online only this week)

Work on paper Study for exam

Final - See date on syllabus