### **Schedule**

A week-by-week breakdown of the material.

#### Week 1 (09/05-09/09)

- Day 1
  - Introduction, case studies
- Day 2
  - Data formats 1 (tabular, JSON)
- Day 3
  - Data formats 2 (HTML, XML)
  - Assignment 1: Reading and writing data

#### Week 2 (09/12-09/16)

- Day 1
  - Introduction to Web APIs and Web Services.
- Day 2
  - Web API case study
- Day 3
  - Assignment 2: Querying an API

### Week 3 (09/19-09/23)

- Day 1
  - Introduction to databases and SQL
- Day 2
  - Schema descriptions (Entity-Relation model)
- Day 3
  - Assignment 3: Working with MySQL database tables

#### Week 4 (09/26-09/30)

- Day 1
  - Normalization
- Day 2
  - SQL Queries
- Day 3
  - More on SQL queries
  - Assignment 4: Practice with SQL queries

#### Week 5 (10/03-10/07)

- Day 1
  - Updates and Deletes
- Day 2
  - Indexes and Views
- Day 3
  - Assignment 5: More advanced work with SQL databases

#### Week 6 (10/10-10/14)

- Day 1
  - Introduction to NoSQL databases
- Day 2
  - More on NoSQL databases (Mongo?)
- Day 3
  - Midterm

### Week 7 (10/17-10/21)

- Day 1
  - Fall Break
- Day 2
  - Introduction to Hadoop
- Day 3
  - TBA

### Week 8 (10/24-10/28)

- Day 1
  - TBA
- Day 2
  - TBA
- Day 3
  - TBA

### Week 9 (10/31-11/04)

- Day 1
  - TBA
- Day 2
  - TBA
- Day 3
  - TBA

#### Week 10 (11/07-11/11)

- Day 1
  - TBA
- Day 2
  - TBA
- Day 3
  - TBA

## Week 11 (11/14-11/18)

- Day 1
  - TBA
- Day 2
  - TBA
- Day 3
  - TBA

### Week 12 (11/21-11/25)

- Day 1
  - TBA
- Day 2
  - Thanksgiving
- Day 3
  - Thanksgiving

### Week 13 (11/28-12/02)

- Day 1
  - TBA
- Day 2
  - TBA
- Day 3
  - TBA

# Week 14 (12/05-12/09)

- Day 1
  - TBA
- Day 2
  - TBA
- Day 3
  - Project presentations