**Data Science & Society**

**\* Readings and assignments are to be completed prior to class/lab.**

**Jan 9** *Discussion*: What is Data Science?

Required reading:

Additional reading:

**Jan 14** Lab: Introduction to R and RStudio

Assignment:

Install R and R Studio on your laptop

Install the following packages on RStudio:

Resources:

Installing R (Mac / PC)

Installing packages in RStudio

**Jan 16** *Discussion*: New Data, Old Problems

Required reading:

Additional reading:

**Jan 21**  Lab: Data Wrangling

Assignment: dplyr

Resources:

**Jan 23**  *Discussion*: Research Ethics

Required reading:

Additional reading:

**Jan 28**  Lab: Basic Programming

Assignment:

Resources:

**Jan 30** *Discussion*: What is a Social Network?

Required reading:

Additional reading:

**Feb 4**  Lab: Working with APIs

Assignment:

Resources:

**Feb 6**  *Discussion*: Social Network basics

Required reading:

Additional reading:

**Feb 11** Lab: Network Analysis

Assignment:

Resources:

**Feb 13** *Discussion:*

Required reading:

Additional reading:

**Feb 18** Lab: Calculating centrality measures

Assignment:

Resources:

**Feb 20** *Discussion:* Text analysis: how do we get from words to numbers?

Required reading:

Additional reading:

**Feb 25** Lab: Getting started with text data

Assignment:

Resources:

**Feb 27** *Discussion:* Sentiment analysis

Required reading:

Additional reading:

**Mar 3** Lab: Dictionary-based text analysis and sentiment analysis

Assignment:

Resources:

**Mar 5**  **Midterm Exam**

**Mar 10** SPRING RECESS

**Mar 12** SPRING RECESS

**Mar 17** *Discussion:* Topic Models

Required reading:

Additional reading:

**Mar 19** Lab: Basic topic modeling

Assignment:

Resources:

**Mar 24** *Discussion:* What are the most promising applications of data science?

Required reading:

Additional reading:

**Mar 26** Lab:

Assignment:

Resources:

**Mar 31** *Discussion:*

Required reading:

Additional reading:

**Apr 2** Lab:

Assignment:

Resources:

**Apr 7** *Discussion:*

Required reading:

Additional reading:

**Apr 9** Lab:

Assignment:

Resources:

**Apr14** *Discussion:*

Required reading:

Additional reading:

**Apr 16 Final Presentations 1 & 2**

**Apr 21 Final Presentations 3 & 4**