Course Plan for STAT 412/612

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2019-04-15

- Week 1: 01/16

    - Chapters 1, 2, 4, 10, and 27 of RDS
    - Install all tools for the semester.
    - R in the context of Data Science.
    - Proper file system organization.
    - Basics of R
    - Basics of R Markdown
    - Data Frames
    - Logicals

- Week 2: 01/23

    - Chapters 6, 17, 18, and 19 of RDS
    - Using pipes (magrittr)
    - Creating functions
    - R Scripts

- Week 3: 01/30

    - Chapter 3 of RDS
    - Data visualization and ggplot2.

- Week 4: 02/06

    - Chapter 5 of RDS
    - Manipulating data frames.
    - Calculating summary statistics.
    - dplyr

- Week 5: 02/13

    - Chapters 7 and 11 of RDS
    - Data import/export.
    - Exploratory Data Analysis (EDA).
    - EDA exercise.

- Week 6: 02/20

    - Snow day, AU closed.

- Week 7: 02/27

    - Midterm exam covering weeks 1 through 4.

- Week 8: 03/06

    - Chapter 12 of RDS
    - Tidying data
    - tidyr

- NO CLASS ON 03/13 (Spring Break)
- Week 9: 03/20

    - Chapter 13 of RDS
    - Relational Data

- Week 10: 03/27
    - Chapter 14 of RDS
    - Strings and regular expressions
- Week 11: 04/03
    - Presentations using R Markdown.
    - Stringr Lab.
- Week 12: 04/10
    - Midterm exam covering chapters 7, 11, 12, 13, and 14.
- Week 13: 04/17
    - Chapter 15 of RDS
    - Factors (forcats)
    - If we have time: Dates/Times (lubridate). Chapter 16 of RDS
- Week 14: 04/24
    - Project Presentations
- FINAL EXAM ON 05/01