

Tentative Course Plan for STAT 412/612

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2019-02-14

- 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
 - Midterm exam covering weeks 1 through 4.
- Week 7: 02/27
 - Chapter 12 of [RDS](#)
 - Tidying data
 - [tidyr](#)
- Week 8: 03/06
 - Chapter 13 of [RDS](#)
 - Relational Data
 - SQL?
- NO CLASS ON 03/13 (Spring Break)
- Week 9: 03/20
 - [Git Appendix in r-pkgs](#)
 - [Happy git with R](#)
 - [Setting up GitHub Classroom](#)
 - Git and GitHub.
- Week 10: 03/27
 - Chapter 14 of [RDS](#)
 - Strings and regular expressions
- Week 11: 04/03

- Midterm exam covering weeks 5, 7, 8, 9, and 10.
- Week 12: 04/10
 - Chapters 15 and 16 of [RDS](#)
 - Factors (forcats)
 - Dates/Times (lubridate)
- Week 13: 04/17
 - TBD. Possible topics:
 - * Make your own website (personal/project) in R (Chapter 10 of [R Markdown Book](#)).
 - * Making presentations using R Markdown (Chapter 4 or [R Markdown Book](#)).
 - * Plotting spatial data in R (Chapter 9 of [Case Studies Book](#)).
 - * Linear/Logistic Regression in R.
- Week 14: 04/24
 - Project Presentations
- FINAL EXAM ON 05/01