## **Updates**

• None at this time.

## **Deadlines (Quick Reference)**

- Problem Sets due prior to the start of live session
  - o Assignment 1 (LMS 1, 4, & 7) Feb 14, 2022
  - o Assignment 1 (LMS 2 & 3) Feb 28, 2022
  - o Assignment 1 (LMS 5 & 6) Mar 21, 2022
  - o Assignment 1 (LMS 8) Apr 4, 2022
  - o Assignment 1 (LMS 9 & 10) Apr 25, 2022
- Final Project Deadlines
  - o Progress Report 1 Feb 21, 2022
  - o Progress Report 2 Mar 28, 2022
  - o Progress Report 3 Apr 11, 2022
  - o Final report May 2, 2022 (by 11:59p Pacific Time)

## **Detailed Schedule (Subject to Change)**

Date	Module	Readings	Assignments Due	Additional Resources
Week 0 Prior to Jan 17, 2022	R bootcamp (Optional)	.Rmd File  • 00_Getting Started		Recording available <u>here</u> .
Week 1 Jan 24, 2022	Welcome to Data Science: Tools of the Trade	Wickham  Welcome: Introduction  Explore  Introduction  Workflow: basics  Workflow: projects  Silver  Chapter 1		

Week 2 Jan 31, 2022	Getting Data: Flat Files and "Tidy Data"	Wickham  • Wrangle  • Data import  • Tidy Data  Silver  • Chapter 2		Data input and output
Week 3 Feb 7, 2022	Getting Data: Web Sources	Silver  • Chapter 3	Group Project breakouts (inclass)	Reed College rvest Introduction  Data input and output
Week 4 Feb 14, 2022	Analyzing Data: Conditional Means	<ul><li>Wickham</li><li>Explore: Data transformation</li><li>Silver</li><li>Chapter 4</li></ul>	Assignment 1 due  • LMS modules 1, 4,& 7	
Week 5 Feb 21, 2022	Presenting Data: Descriptive Plots	Wickham  • Explore  • Data visualization  • Data transformation  Silver  • Chapter 5	Group project  ● Progress Report 1	ggplot2 - Bar and line graphs ggplot2 - Plotting distributions
Week 6 Feb 28, 2022	Analyzing Data: Linear Regression	Wickham  Model  Introduction  Model Basics  Model Building  Silver  Chapter 6	Assignment 2 due  • LMS modules 2 & 3	Statistical analysis

## **Spring Break (no class)**

Week 7 Mar 14, 2022	Presenting Data: Scatterplots	Wickham  • Explore  • Data visualization  • Communicate  • Graphics for  Communication  Silver  • Chapter 7		Statistical analysis
Week 8 Mar 21, 2022	Analyzing Data: Classification (pt1)	Wickham  Model  Introduction  Model Basics  Model Building  Silver  Chapter 8	Assignment 3 due  • LMS modules 5 & 6	James, G., Witten, D., Hastie, T., &  Tibshirani, R. (2013). An introduction to statistical learning (Vol. 6). New York, NY: Springer. Chapter 4, Chapter 4 Lab R Code  Althoff, T., Danescu-Niculescu-Mizil, C., & Jurafsky, D. (2014, May). How to ask for a favor: A case study on the success of altruistic requests. In ICWSM.
Week 9 Mar 28, 2022	Analyzing Data: Classification (pt2)	Wickham  Model  Introduction  Model Basics  Model Building  Silver  Chapter 9	Group project  • Progress Report 2	Same as above
Week 10 Apr 4, 2022	Presenting Data: Plots and Tables for Classification	Wickham  • Explore  • Data visualization  • Data transformation  Silver  • Chapter 10	Assignment 4 due  • LMS modules 8	

Week 11	Cross Validation	Wickham	Group project
Apr 11, 2022		<ul> <li>Model</li> </ul>	Progress Report 3
		<ul> <li>Many Models</li> </ul>	
		Silver	
		Chapter 11	
Week 12 Apr 18, 2022	GROUP PROJECT (DRAFT) PRESENTATIONS – Week 1 (3 to 4 groups will present)		
Week 13 Apr 25, 2022	GROUP PROJECT (DRAFT) PRESENTATIONS – Week 2 (3 to 4 groups will present)		Assignment 5 due  • LMS modules 9 & 10
Week 14 May 2, 2022	FINAL	PRESENTATIONS and FINAL REPORTS	DUE: Monday, May 2 <sup>nd</sup> , 2022 (by 11:59p, Pacific Time)