

Readings			Lecture	Quiz	Assignment
Week 1					
T	26-Aug		Intro to the class, What is data, data structures		R and Rstudio refresher/ data structures
At Home		Broman and Woo (2018)	Collecting and recording data in a reproducible way, metadata		Making Data sheets for the field versus analysis
Week 2					
T	2-Sep	Lowndes et al. 2017 (Nature Eco Evo); Jennings et al. (2023)	What is reproducible research and why is it important?	1	Tools for reproducible research (Github)
At Home		R4DS Ch2, Ch6	Reproducible scripts and workflow/importing data		Set up your file structure and make a script
Week 3					
T	9-Sep	Healy Ch 1, R4DS Ch9-11	What makes a good visual?	2	Practice with ggplot
At Home		Wilke Ch 1-5	Visuals part 2		More ggplot
Week 4					
T	16-Sep	R4DS Ch 3	Data Wrangling part 1 (group_by, filter, select, summarise, mutate)	3	Practice with dplyr
At Home		R4DS Ch 5	Data Wrangling part 2 (tidyr - pivots, separate, unite)		Practice with tidyr
Week 5					
T	23-Sep	R4DS Ch 19	Relational data	4	Practice different types of joins
At Home		R4DS Ch 17	Dates and times (lubridate)		Practice with dates and times
Week 6					
T	30-Sep	R4DS 28, 29/ Intro to quarto	Intro to Quarto	5	Practice with Quarto/ Good plot/Bad plot lab Directions
At Home			Quarto part II		Practice with Quarto
Week 7					
T	7-Oct	Wilke Ch 15, Healy Ch 7	Working with spatial data and making maps	6	Make a map
At Home			Working with spatial data and making maps part II		
Week 8					
T	14-Oct	R4DS Ch 14,15	Working with strings and regex	7	Working with words

At Home			Fun advanced plotting (gganimate, etc)		
T	21-Oct		Goodplot/Badplot presentations	8	Final project proposal due
At Home			Working with factors		
Week 9					
T	28-Oct	R4DS 25	Functional programing	9	write a function
At Home		R4DS 8	How to ask for help (googling, stack overflow, and Reprex)		Make a reпреx
Week 10					
T	4-Nov	Mastering Shiny Ch1	Intro Shiny apps	10	Shiny apps
At Home			TidyTuesday Plot		
Week 11					
T	11-Nov	- veterans day no class			Work on independent project
At Home			TidyTuesday Plot		
Week 12					
T	18-Nov	R4DS 26	Iterative data (for loops and map functions)	11	Practice loops, etc
At Home			TidyTuesday Plot		
T	25-Nov	Tidy Modeling	Models part 1 and 2 (many models with broom	12	No in person class, Thanksgiving week - online only
At Home			TidyTuesday Plot		
Week 13					
T	2-Dec		Final presentations (8 students)	13	
At Home			TidyTuesday Plot		
Week 14					
T	9-Dec		Final project presentations (7 students)	14	practice with lots of models
			TidyTuesday Plot		