		Readings	Homeworks always due Monday at 9am Lecture		Lab
Week 1					
M	25-Jan		Intro to the class, What is data , data structures		R and Rstudio refresher/ data structures
W	27-Jan	Broman and Woo (2017)	Collecting and recording data in a reproducible way, metadata		Making Data sheets for the field versus analysis
Week 2					
M	1-Feb	Lowndes et al. 2017 (Nature Eco Evo)	What is reproducible research and why is it important?		Tools for reproducible research (Github)
W	3-Feb	R4DS Ch4, Ch6, Silbiger *Getting Started*	Reproducible scripts and workflow/importing data		Set up your file structure and make a script
Week 3					
M	8-Feb	Healy Ch 1, R4DS Ch 3	What makes a good visual?		Practice with ggplot
W	10-Feb	Wilke Ch 1-5	Visuals part 2		More ggplot
Week 4					
M	15-Feb	R4DS Ch 5, Ch 11	Data Wrangling part 1 (group_by, filter, select, summarise, mutate)		Practice with dplyr
W	17-Feb	R4DS Ch 12	Data Wrangling part 2 (tidyr - pivots, separate, unite)		Practice with tidyr
Week 5					
M	22-Feb	R4DS Ch 13	Relational data		Practice different types of joins
W	24-Feb	R4DS Ch 16	Dates and times (lubridate)		Practice with dates and times
Week 6					
M	1-Mar	R4DS 27,29	Intro to Rmarkdown		Practice with Rmarkdown
W	3-Mar		Rmarkdown part II		Practice with Rmarkdown
Week 7					
M	8-Mar	Wilke Ch 15, Healy Ch 7	Working with spatial data and making maps		Make a map
W	10-Mar		Working with spatial data and making maps part II		Good plot/Bad plot lab
M	15-Mar	No class - Spring Break			
W	17-Mar	No class - Spring Break			

Week 8					
M	22-Mar		Fun advanced plotting (gganimate, etc)		Goodplot/Badplot presentations
W	24-Mar	R4DS 18,19	Functional programing		Learn to write a function
Week 9					
M	29-Mar		Intro to group R package presentations		Work on group project (select and present a package)
W	31-Mar	Cesar Chavez Day No class			
Week 10					
M	5-Apr		How to ask for help (googling, stack overflow, and Reprex)		Make a reprex
W	7-Apr		Intro Shiny apps		Shiny apps
Week 11					
M	12-Apr		Work on group project		Work on group project
W	14-Apr		Present group projects		Present group projects
Week 12					
M	19-Apr	R4DS Ch 14	Strings and regular expressions		Working with words
W	21-Apr	R4DS Ch 15	Working with factors		Practice with factors
Week 13					
M	26-Apr	R4DS Ch 21	Iterative data (for loops and map functions)		Practice loops, etc
W	28-Apr		Models Part 1 (stats, lmer)		simple lms and lmer
Week 14					
M	3-May		Models part 2 (many models with broom)		practice with lots of models
W	5-May		Work on Final project		Work on Final project
Week 15					
M	10-May		Final project presentations		Final project presentations
W	12-May		Final project presentations		Final project presentations