		Readings	Lecture	Quiz	Where?	Lab
Week 1						
T	24-Jan		Intro to the class, What is data, data structures		LO1322	R and Rstudio refresher/ data structures
R	26-Jan	Broman and Woo (2017)	Collecting and recording data in a reproducible way, metadata		LO1322	Making Data sheets for the field versus analysis
Week 2						
T	31-Jan	Lowndes et al. 2017 (Nature Eco Evo)	What is reproducible research and why is it important?		LO1322	Tools for reproducible research (Github)
R	2-Feb	R4DS Ch4, Ch6	Reproducible scripts and workflow/importing data	1	LO1322	Set up your file structure and make a script
Week 3						
T	7-Feb	Healy Ch 1, R4DS Ch 3	What makes a good visual?		LO1322	Practice with ggplot
R	9-Feb	Wilke Ch 1-5	Visuals part 2		On Zoom	More ggplot
Week 4						
T	14-Feb	R4DS Ch 5, Ch 11	Data Wrangling part 1 (group_by, filter, select, summarise, mutate)		LO1322	Practice with dplyr
R	16-Feb	R4DS Ch 12, 18	Data Wrangling part 2 (tidyr - pivots, separate, unite)	2	LO1322	Practice with tidyr
Week 5						
T	21-Feb	R4DS Ch 13	Relational data		LO1322	Practice different types of joins
R	23-Feb	R4DS Ch 16	Dates and times (lubridate)		LO1322	Practice with dates and times
Week 6						
T	28-Feb	R4DS 27,29	Intro to Rmarkdown		LO1322	Practice with Rmarkdown
R	2-Mar		Rmarkdown part II	3	LO1322	Practice with Rmarkdown
Week 7						
T	7-Mar	Wilke Ch 15, Healy Ch 7	Working with spatial data and making maps		LO1322	Make a map/ final project proposal due
R	9-Mar		Working with spatial data and making maps part II		LO1322	Good plot/Bad plot lab Directions
Week 8						
T	14-Mar		Intro to group R package presentations		On Zoom	Work on group project (select and present a package)

R	16-Mar		Work on group project	4	LO1322	Work on group project
T	21-Mar	No class - Spring Break				
R	23-Mar	No class - Spring Break				
Week 9						
T	28-Mar		Fun advanced plotting (gganimate, etc)		LO1322	
R	30-Mar		**Goodplot/Badplot presentations**		LO1322	
Week 10						
T	4-Apr	R4DS 19	Functional programing		LO1322	Learn to write a function
R	6-Apr	Mastering Shiny Ch1	Intro Shiny apps	5	LO1322	Shiny apps
Week 11						
T	11-Apr		How to ask for help (googling, stack overflow, and Reprex)		LO1322	Make a reprex
R	13-Apr		**Present group projects**		LO1322	**Present group projects**
Week 12						
T	18-Apr	R4DS Ch 14	Strings and regular expressions		LO1322	Working with words
R	20-Apr	R4DS Ch 15	Working with factors	6	LO1322	Practice with factors
Week 13						
T	25-Apr	R4DS Ch 21	Iterative data (for loops and map functions)		LO1322	Practice loops, etc
R	27-Apr		Models Part 1 (stats, lmer)		LO1322	simple lms and lmer
Week 14						
T	2-May		Models part 2 (many models with broom)		LO1322	practice with lots of models
R	4-May		Work on Final project	7	LO1322	Work on Final project
Week 15						
T	9-May		**Final project presentations**		LO1322	**Final project presentations**
R	11-May		**Final project presentations**		LO1322	**Final project presentations**