

Schedule

Course Schedule

subject to change

Week	Topic	Tools
	Preliminaries	
1	Course Introduction	Scripts; R and RStudio
2	Reproducible Data Analyses	Markup Languages; Quarto
3	File Management & Version Control	Filesystems; git; GitHub
4	A Field Guide to Data	Data Formats; surveys, readr; tidyr
5	Structural Data Manipulation	dplyr; srvyr
6	Data Visualization I	Grammar of Graphics; ggplot2
7	Data Visualization II	ggplot2
8	Core Exam (Thursday, October 16)	
9	Workflow & Data Retrieval	database access, APIs, SQL overview
10	Social Networks & Network Data	iGraph; statnet
11	Cartography	tidyverse mapping; color scales; projection
12	Geographic Data	tidycensus; sf; tigris; mapgl; mapbox; osm
13	TBD	TBD
14	Project Work	
15	Project Presentations	
F	Finals Week (Project Due)	

Advanced Topics (if we have time)

Week	Topic	Tools
	Text Data & Data Scraping	
	Missing Data	
	Web Apps & Visualization	quarto, shiny
	AI Pair Programming & “Vibe Coding”	github copilot
	Local LLMs	