

POSC 230 Methods of Political Research Winter 2022

Locations and Times: WCC 235-- T/TH 1:15-3pm

Instructor Greg Marfleet, Office: Willis 406, x4116

Office hours: In Person M 2:30-4:30pm T/TH 3:30-4:30 pm,

Evening Zoom Office Hours: Thursday 8:00 to 9:00pm

Course Description (see link below), See moodle page sidebar for college resources and policies

Texts and Tools

Paul M. Kellstedt and Guy D Whitten. 2018. "The Fundamentals of Political Science Research" 3rd Edition. Cambridge Press.

APSA Style Manual for Political Science (link -- the file is also linked below if this url fails)

A base workspace with dataset and scripts is set up in R Studio Cloud.

The following Web resources are going to be essential for work with R.

Rstudio Cloud - I'm going to require all students to work in R via Rstudio Cloud served via a web-based platform. This situation while not ideal (since it requires an internet connection to do your work) is much more efficient for interactive feedback when not in a F2F setting. You may have already used this application in MATH 215.

You will find the online guide handy guide to RStudio Cloud here: <https://rstudio.cloud/learn/guide>

LINK FOR OUR POSC230 SHARED RStudio Cloud Space [LINK HERE]

Follow this link and create a new project (you should eventually be able to see all of the members of the class in the projects and members list). Your project space is private unless you share it. As Admin and Moderator, the prof and prefect do have access to your project space so they can help you solve issues during the term.

Other Sites and Sources

QUICK-R: <http://www.statmethods.net/index.html>

This site essentially serves as an alternative to an R-based methods textbook.

The Quick-R site has some great copy and paste code (all you need to do is use your own data frames and variables) to perform most of the things we'll do in class. They have a very simple diagnostic chapter too!

A Cookbook for R

The goal of the cookbook is to provide solutions to common tasks and problems in analyzing data. Most of the code in these pages can be copied and pasted into the R command window if you want to see them in action.

Lynda Videos in particular R Statistics Essential Training

Carleton Subscribes to some on-line course materials.

For us the useful one is an introduction to R and R-Studio called "R Statistics Essential Training". The video includes steps for installation and use of R and R studio and covers basic stats (a great refresher for the stuff you did in 215 or if you skipped 215 with AP stats.

Cyclismo, R Tutorial <http://www.cyclismo.org/tutorial/R/>

This is a tutorial put together by a faculty member at University of Georgia's Math Department. It has many of the procedures we encounter in this course.

Handy table of R commands: [Link to PDF](#)

Grading

Research Elements Weekly Short Papers X 9 (5 pts each) -- 45 point total

R-Labs x 9 (5pts Each) - 45 points total

Final Research Paper with Data Analysis -- 40 points

Final Week Short Presentation -- 10 points

Participation & In-Class Quiz Engagement - 10 points

Final Grade is total score is out of 150 points as a percentage

Weekly Course Plan

Asynchronous Elements - Watch Lecture Videos, Read Text Chapters

Synchronous In-Class Activities

Tuesdays

RESP from Previous Week Due BEFORE class on TUESDAY

Group Quiz - lecture and reading content & discussion

RESP follow-up discussion

In-class activities for new Research Elements Paper (due next Tuesday)

Thursdays

R Lab from prior week due BEFORE class

R Lab Discussion

New R Lab Assignment Workshop (due next Thursday)

2 January - 8 January

Weekly Topic and Readings: The Scientific Study of Politics, Asking Research Questions

K&W chapter 1 & 2

Marsh, David and Gerry Stoker. 2010. Theory and Methods in Political Science. Chapter 9. "A Skin not a Sweater: Ontology and Epistemology in Political Science".

Lecture 1 Ontology and Epistemology [URL](#)

Week 1 Lecture Slides PDF

R Lab Files Week 1 Folder

Week 1 Research Elements Short Paper: Questions and Approaches Assignment

R Lab #1 Using R, Variable Labels and Descriptions Assignment

9 January - 15 January

Weekly Topic and Readings: Theory and Causality

K&W chapter 3 & 4

Lecture 2 Causality [URL](#)

Week 2 Lecture Slides PDF

R Lab #2 File

R Lab 2b Merging Dataset

This isn't something you need to do for the lab, but I wanted you to check out how it's done

Week 2 Research Elements Short Paper - Finding and Evaluating Literature Assignment

R Lab #2 Recoding Variables and Subsetting Data Assignment

16 January - 22 January

Weekly Topic and Readings: Measurement: Levels, Validity, Reliability

K&W chapter 5 & 6

Lecture 3 Hypotheses and Measurement [URL](#)

Lecture 3 PDF

Data Sources Page: A list of websites with links to major data sources for RESP #3
Week 3 Research Elements Short Paper - Considering Data and Research Design Assignment
R Lab #3 Evaluating data with simple analytics Assignment

23 January - 29 January

Weekly Topic and Readings: Sampling and Hypothesis Testing

K&W chapter 7 & 8

Lecture 4a Sampling URL

Lecture 4b Bivariate Analysis URL

Lecture 4a Sampling PDF

Lecture 4b Bivariate PDF

RScript Extra for LAB 4 Indexes and Aggregate

Week 4 Research Elements Short Paper - Project Proposal Assignment

R Lab #4 Bi-variate analysis tables and figures Assignment

30 January - 5 February

Weekly Topic and Readings: OLS regression

K&W chapter 9

Lecture 5 OLS Regression URL

Lecture 5 OLS PDF

Week 5 Research Elements Short Paper - Revised Proposal Assignment

R Lab #5 OLS Regression Assignment

6 February - 12 February

Weekly Topic and Readings: Multiple OLS regression

K&W chapter 10

Lecture 6 Multiple Regression URL

Lecture 6 Multiple Regression PDF

Granato, J., Inglehart, R. and Leblang, D., 1996. The effect of cultural values on economic development: theory, hypotheses, and some empirical tests. American journal of political science, pp.607-631. File

Week 6 Research Elements Short Paper - Presenting Model Components Assignment

R Lab #6 Multiple OLS Regression Assignment

13 February - 19 February

Weekly Topic and Readings: Logistic Regression Maximum Likelihood Estimation and Post-estimation Analysis

K&W chapter 12

Lecture 7a Logistic Regression MLE Estimation URL

Lecture 7b Logistic Regression Interpretation URL

Lecture 7 Logistic Regression PDF File

Week 7 Research Elements Short Paper - Table and Equation Assignment

R Lab #7 Logistic Regression Assignment

20 February - 26 February

Weekly Topic and Readings: Regression Diagnostics

K&W chapter 11

Lecture 8 Regression Diagnostics and Postestimation URL

Lecture 9 Regression Diagnostics PDF

Week 8 Research Elements Short Paper Assignment

R Lab #8 OLS Regression Diagnostics and Logit post-estimation Assignment

R Lab # 8 Script for Logistic Regression Simulation

27 February - 5 March

Weekly Topic and Readings: Qualitative Methods - Triangulation: Integrating Stats and Cases

Seawright, J. and Gerring, J., 2008. Case selection techniques in case study research: A menu of qualitative and quantitative options. *Political research quarterly*, 61(2), pp.294-308.

Kaarbo, J. and Beasley, R.K., 1999. A practical guide to the comparative case study method in political psychology. *Political psychology*, 20(2), pp.369-391.

Week 9 Research Elements Short Paper - Considering Alternate Approaches or Mixed Methods Assignment

R Lab #9 Finalizing your R Script Assignment

6 March - 12 March

Presentations

The plan for the Final Week of the term is for every student to provide a little 'show and tell' of your project focused on your main model table and giving us a taste of your research project,

In the 105 minute class time, to get through this process for every student we'll need to keep it to about 10 minutes. Prepare the following elements. You have 6 Slides! Max!

Final Week Short Presentation Assignment Upload

Final Research Paper with Data Analysis Assignment Upload Due: Final day of Exams