Department of Political Science
Graduate Student Introduction to Statistical Programming Software

University of Colorado Boulder

Summer 2023

Time:	August 17, 18 and 23, 1:00-4:30
Location:	KTCH 1B41
Instructor:	Dr. Andrew Q. Philips
Office:	KTCH 131
Email:	andrew.philips@colorado.edu
Office hours:	By appointment

COURSE DESCRIPTION: The goal of this short summer programming "bootcamp" is to get all incoming graduate students to parity in their ability to use statistical and programming software. This course is designed to be a compliment to Dr. Anand Sokhey's morning session.

Some students may not have any experience with the most common statistical software used in political science. Others may have some experience, yet have not been exposed to the full capabilities. Still some may simply need a refresher. It is extremely likely you will use most—if not all—of these programs throughout graduate school. We will covering the following in detail:

- Stata

- R

- LaTeX and Beamer

- Other important things to know (Dropbox, Google Scholar, datasets, Quarto, AI, other programming languages...)

The two most common statistical packages are Stata and R. They are typically used for data management and statistics. We will also cover LaTeX, a typesetting program, as well as Beamer, a way to typeset presentations in LaTeX. Finally, we will cover a few other things such as data storage and on- and off-campus resources.

By the end of this course, students should be familiar with these programs. They should also be aware of the tools and resources available for troubleshooting. While the provided course materials should allow for a solid foundation, there is much more information available online.

PREREQUISITES AND SOFTWARE: There are no prerequisites required, other than having a copy of R, Stata, and TeX prior to coming to class, and signing up for Dropbox.

- The department will be providing you with a copy of Stata.

- For R, please download both R (https://cran.r-project.org/) and RStudio (https://www.rstudio.com/) before the first class session. Both of those programs are free.

- Please download the TeX distribution—for Mac users (https://www.tug.org/mactex/). For Windows users you can use either MiKTeX: (https://miktex.org/download) or TeX Live (https://tug.org/texlive/). It is also free but it is a fairly large file ($\approx$ 3-5GB).

- You should also sign up for Dropbox: https://www.dropbox.com/, which will give you access to all the files for this course. A basic account is free.

- Please download Zoom before the first day of class: https://zoom.us/.

GRADES, PARTICIPATION: There are no grades in this course. Rather, students should arrive ready to learn and participate. Readings, if any, should be done before coming to class. Students are expected to attend every class.

TENTATIVE SCHEDULE: Note that this schedule is subject to change.

Day 1:

- Introduction to Stata

Day 2:

- Introduction to R

Day 3:

- Getting efficient at coding; AI assistance
- Google Scholar
- Other coding languages, markdown, etc.
- Dropbox, Google Drive
- LaTeX and Beamer
- Importance of a website
- CVs
- Mac- and Windows-specific text editors

Last updated: July 28, 2023

University-Mandated Statements

Accommodation for disabilities

If you qualify for accommodations because of a disability, please submit your accommodation letter from Disability Services to your faculty member in a timely manner so that your needs can be addressed. Disability Services determines accommodations based on documented disabilities in the academic environment. Information on requesting accommodations is located on the Disability Services website. Contact Disability Services at 303-492-8671 or dsinfo@colorado.edu for further assistance. If you have a temporary medical condition or injury, see Temporary Medical Conditions under the Students tab on the Disability Services website.

Classroom behavior

Students and faculty each have responsibility for maintaining an appropriate learning environment. Those who fail to adhere to such behavioral standards may be subject to discipline. Professional courtesy and sensitivity are especially important with respect to individuals and topics dealing with race, color, national origin, sex, pregnancy, age, disability, creed, religion, sexual orientation, gender identity, gender expression, veteran's status, political affiliation or political philosophy. Class rosters are provided to the instructor with the student's legal name. I will gladly honor your request to address you by an alternate name or gender pronoun. Please advise me of this preference early in the semester so that I may make appropriate changes to my records. For more information, see the policies on classroom behavior and the Student Code of Conduct.

Honor code

All students enrolled in a University of Colorado Boulder course are responsible for knowing and adhering to the Honor Code. Violations of the policy may include: plagiarism, cheating, fabrication, lying, bribery, threat, unauthorized access to academic materials, clicker fraud, submitting the same or similar work in more than one course without permission from all course instructors involved, and aiding academic dishonesty. All incidents of academic misconduct will be reported to the Honor Code (honor@colorado.edu; 303-492-5550). Students who are found responsible for violating the academic integrity policy will be subject to nonacademic sanctions from the Honor Code as well as academic sanctions from the faculty member. Additional information regarding the Honor Code academic integrity policy can be found at the Honor Code Office website.

Sexual misconduct, discrimination, harassment and/or related retaliation

The University of Colorado Boulder (CU Boulder) is committed to fostering a positive and welcoming learning, working, and living environment. CU Boulder will not tolerate acts of sexual misconduct (including sexual assault, exploitation, harassment, dating or domestic violence, and stalking), discrimination, and harassment by members of our community. Individuals who believe they have been subject to misconduct or retaliatory actions for reporting a concern should contact the Office of Institutional Equity and Compliance (OIEC) at 303-492-2127 or cureport@colorado.edu. Information about the OIEC, university policies, anonymous reporting, and the campus resources can be found on the OIEC website. Please know that faculty and instructors have a responsibility to inform OIEC when made aware of incidents of sexual misconduct, discrimination, harassment and/or related retaliation, to ensure that individuals impacted receive information about options for reporting and support resources.

Religious holidays

Campus policy regarding religious observances requires that faculty make every effort to deal reasonably and fairly with all students who, because of religious obligations, have conflicts with scheduled exams, assignments or required attendance. In this class, I will try to accommodate your requests, but you must contact me early in the semester. See the campus policy regarding religious observances for full details.