# Department of Political Science Graduate Student Introduction to Statistical Programming Software

University of Colorado Boulder

Summer 2018

**Time:** August 20-23, 1:00-3:30

**Location:** KTCH 1B31

**Instructor:** Dr. Andrew Q. Philips

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**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. 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, or 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, library access, datasets...)

The two most common statistical packages are Stata and R. They are typically used for data management and statistics. We will also cover 上下X, a typesetting program, as well as Beamer, a way to typeset presentations in 上下X. 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 and Stata prior to coming to class. The department should 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.

**GRADES AND 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.

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

# Day 1:

- · Computer access, accounts
- Google Scholar
- Dropbox, Google Drive
- Start introduction to Stata

# Day 2:

· Stata (continued)

# Day 3:

· Start introduction to R

# Day 4:

- R (continued)
- LATEX and Beamer
- · Importance of a website
- CVs
- Mac- and Windows-specific text editors

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To best accommodate students who may require alternative services, it is crucial that you contact me *early in the semester* if you need such accommodations.

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