

PPHA 30536

Data and Programming for Public Policy II — R

Harris School of Public Policy
University of Chicago
PPHA 30536
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Professor Maggie Shi
Office: Keller 3043
Office hours: [By appointment](#)
Email: m.shi@uchicago.edu

Teaching Assistant:
Michael Mckelligott
Office hours: Thursday 3:30-4:50PM, Keller 2112
Email: mckelligott@uchicago.edu

Information about this course

Background and Goals

This is the second course in the “Data and Programming for Public Policy” R sequence, which works towards the [Certificate in Data Analytics](#). In this course, students will expand the programming skills developed in PPHA 30535 and move towards using R in practical applications. The goals of this course are: (1) go from applying R to structured questions with clearly-defined answers to using R to solve broad questions; (2) deepen existing skills; (3) broaden into new skills that require a higher level of R proficiency; (4) introduce students to basic Python skills; and (5) prepare for the post-graduation job market.

Prerequisites

The prerequisite for this course is PPHA 30535, “Data and Programming for Public Policy I – R Programming.”

Schedule

Lecture will meet Tuesdays and Thursdays from 9:30AM-10:40AM in Keller 0010. Each class will typically consist of two parts: a lecture and a live lab where we will work through examples in groups. Discussion section will be held on Thursdays 3:30-4:50PM in Keller 2112.

Software and Resources:

There are three pieces of software that are required for this class, all of which are free:

- The [R Studio](#) platform
- The [GitHub Desktop](#) application
- The [Anaconda Python](#) distribution (for the two lectures on Python)

Additional References:

Topics

1. Generalization
2. Messy data
3. Spatial data
4. Shiny
5. Text data
6. R to Python

Grading policies and procedures

Your final grade will be calculated as 40% assignments, 40% final project, and 20% in-class live labs (graded for completion). This class requires a 60% or above to pass, and is not curved.

Assignments All code must be turned in as plain R files (R-Markdown is not accepted) using GitHub Classrooms and Gradescope, no exceptions. Due dates below are listed as *date given – date due*.

1. Coding and Data: *Due dates TBD*
2. Shiny + Spatial Data: *Due dates TBD*
3. Text Processing: *Due dates TBD*
4. Python Basics: *Due dates TBD*
5. Final Project (due dates):
 - a. Submit list of group members and project proposal: *TBD*
 - b. In-class presentations: *TBD*
 - c. Code and writeup: *TBD*

Assignments are due **before midnight** on the date listed.

All passing grades will use the following intervals: **A** [96% - 100%] **A-** [91% - 96%) **B+** [86% - 91%) **B** [81% - 86%) **B-** [60% - 81%).

Late Submissions Every student has two 12-hour extensions for problem sets. Those extensions will be *automatically applied* to any late work, and require no excuse to be given. To turn in late work, simply upload it to Gradescope as usual. Extensions are used in complete blocks of time - e.g. turning an assignment in 12 hours and 30 minutes late will use two extensions. Late tokens may not be used for the final project or for live labs. Once your extensions are used up for the quarter, all assignments will be penalized at a rate of 5% per 12-hour block. Only issues of sufficient magnitude that academic affairs is involved in the discussion can qualify for exceptions.

In-Class Labs The live lab serves both as an opportunity to practice your coding skills and as a participation grade. The live lab assignment will be posted during the class and must be uploaded to Gradescope *before the end of the class period*. The labs will be graded based on completion, and students will receive full points if they demonstrate that they have made a good-faith attempt at the assignment.

Regrade Requests Regrade requests must be made within one week (7 days) of when the student has received the graded assignment or exam and must be accompanied by a written statement documenting the reason for the request. The grading team reserves the right to regrade the entire assignment, with the student's understanding that the final score after regarding could lower the student's grade.

Classroom environment and accessibility

In-class attendance is expected, as the live labs will be graded for completion. Lecture notes and slides will be uploaded to the Canvas throughout the quarter. If you require any accommodations for this course, you are encouraged to contact Student Disability Services as soon as possible. To receive reasonable accommodation, you must be appropriately registered with Student Disability Services and provide the instructor with a copy of your Accommodation Determination Letter so that we may discuss with how your accommodations may be implemented in this course.

Academic integrity

My general policy on academic integrity is that *all code you turn in must be your own*. However, it is often useful to learn from others or through resources online like StackOverflow or ChatGPT. When it comes to working with others, you may share pseudo code, discuss concepts and theory, and share output (e.g., plots or error messages). You may not, however, directly share code from the graded assignment together. When it comes to using online resources, you can use it to draw inspiration, outline concepts with pseudo code, or for help with debugging. You may not, however, directly copy problem set solutions from online. It is your responsibility to ensure that your answers are correct and meet the submission guidelines.

It is very important that you use proper citations. If you turn in an assignment that the grader deems to be too unoriginal (e.g. your solutions too closely follow a solution found online, or another classmate's), but you have cited all the sources, then you may be allowed a chance to redo your work. If the same thing happens but you have not cited the sources, you will receive a failing grade and possibly be subject to other sanctions under the university's [Academic Integrity](#) guide.

General Resources Available to Students

- [Harris Academic Support Programs and Handbook](#)
- [Student Wellness](#)
- [University Learning Resources](#)

Harris School and University of Chicago Policies

- [Harris School Policies](#)
- [University General Policies](#)
- [University Academic Policies](#)
- Policies on audio and video [recordings](#) and [deletion](#).