Harris School of Public Policy
University of Chicago
PPHA 30538

Winter 2026
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Winter 2026: PPHA 30538

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Information about this course

Background and Goals

This course is the third of a three-quarter sequence for the Harris Data Analytics certificate. Although the course is designed for MPPs, undergraduates are welcome to enroll as well. In this course, students will expand the programming skills developed in PPHA 30537 and PPHA 30545 and move towards using Python in practical applications. The goals of this course are to teach:

1. analyzing real-world, messy data
2. data visualization (static and dynamic)
3. extracting data from diverse sources
4. develop a project you can include in your portfolio

This course will differ in two ways from the typical Harris course. Learning Python, just like learning a foreign language, is hard and requires lots of repetition.

1. The best way to learn to write good code is to write lots of code. As a result, this course will have approximately one problem set per week.
2. It is easiest to learn to write code if you set aside time to work on just this and have help available. In addition to lecture, the course will have dedicated lab periods and office hours where you can work on your problem sets with TAs available for help.

Prerequisites

PPHA 30537: Data and Programming for Public Policy I

PPHA 30545: Machine Learning for Public Policy

Relationship to other programs

This is the third course in the "Data and Programming for Public Policy" Python sequence, which works towards the Certificate in Data Analytics.

How this class will work

Lecture: This course has 4 lecture sections and 4 lab sections.

Lab: Students must be enrolled in and attend one lab. You will enroll in one of the two labs which occurs on the day of the lecture you are enrolled in: M/W lectures attend Monday lab, and T/Thu lectures attend Tuesday lab. Lab sections will be used for in-lab assessments, mini-lessons to teach topics that complement what is covered in lecture, to work on problem sets and the final project with classmates, to ask questions to the instructors, and to get help on troubleshooting your code.

> **In-Lab Assessment**: The in-lab assessments will be 30 minute Canvas assessments based on the most recent problem set. These assessments are written so that students who have completed the problem set, compared their answers to the answer key, and attended lecture should be sufficiently prepared.

Office hours: We have reserved time for four sets of optional office hours for getting help from TAs on the problem sets and final project.

Lecture (Shi)	M/W: 9:00-10:20 AM and 10:30-11:50 AM in Kell 0021
Lecture (Ganong)	T/Th: 9:30-10:50 AM and 11:00-12:20 PM in Kell 0021
Lab	M: 1:30-2:50 PM and 3:00-4:20 PM in Kell 2112 Tu: 2:00-3:20 PM and 5:00-6:20PM in Kell 0010
Office hours	W: 3:00-4:20 PM in Kell 0021 Th: 2:00-3:20 PM in Kell 0010 F: 10:30-11:50 AM and 3:00-4:20 PM in Kell 0021

Student assignments

The assignments and respective grading weights are:

1. Problem set completion (6 total) – 15%. These are graded for completion as: {missing (0%); ✓- (largely incomplete, 60%); ✓ (mostly complete, 80%); ✓+ (complete, 100%)}.
2. Final group project – 30%. You will be graded on your presentation, final project repository, and writeup.
3. In-lab assessments (6 total) – 30%. These occur at the start of each lab and are based on the most recent problem set.
4. In-class final exam – 20%. These will be similar to the lab assessments.
5. Lecture attendance – 5%.
6. Extra credit
    a. Answering peers' content questions on Ed – up to 2%
    b. Being acknowledged by many peers as someone who helped them with their problem set – up to 1%

Schedule

- Week 1: introduction to class and Git
- Weeks 2-4: data visualization

- Weeks 5: scraping
- Week 6: spatial
- Week 7: dashboards
- Week 8: soft skills (1 lecture); in-class final
- Week 9: project presentations

Due Dates

- Problem sets will be due on Saturdays at 5PM and must be submitted using Github Classrooms and Gradescope.
- The final exam will take place in-lecture in week 8.
- The final project will be presented in the last week of class. The final repository and writeup is due during the reading period.

Getting help

- Ask in the second half of lab
- Come to office hours
- Post in Ed
    - The teaching staff will respond to questions 9AM-5PM Monday-Friday and 9AM-12PM Saturday.
- Send us a private message in Ed
    - We discourage the use of email since it's easy for messages to get lost in our inboxes. Most emails will generate a response "please send a message in Ed". However, if you have a sensitive matter which cannot be shared with the teaching staff, then please email your instructor (ganong@uchicago.edu or m.shi@uchicago.edu) with subject line "30538 confidential".
- Tutoring

Grading policies and procedures

Passing You need a grade of 60% to pass this course.

Grade Cutoffs A: 100 – 95%, A-: 90% – 94.9%, B+: 85% – 89.9%, B: 80% – 84.9%, B-: 60% - 79.9%. There is no curve.

Grading of Assignments and Assessments

Late Submissions Since problem sets are graded for completion, late submissions of problem sets will not be accepted. Only issues of sufficient magnitude that academic affairs is involved in the discussion can qualify for exceptions.

Lab Assessments We will drop your lowest lab assessment grade with the exception of the assessment for the last problem set. We cannot accommodate requests to reschedule when you take the lab assessment or to take the lab assessment virtually. If you have an accommodation from Student Disability Services for extra time on exams, please post a private message in Ed tagged as "Accommodation" (we also need confirmation from SDS about extra time, but we

don't usually get that until week 3); mini lessons will be recorded for students who miss lab or have an accommodation for extra time on exams.

Regrade Requests We will not accept regrade requests on problem sets or the final project. Regrade requests for in-lab assessments or the final exam must be made within one week (7 days) of when the student has received the graded assignment or exam and must be sent via a private message in Ed with the tag "Regrade request." Your message must have the following components:

- Reproduce the question
- Reproduce the course's solution
- Reproduce your solution

Explain why your solution should have received a different number of points than it did. 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.

Attendance Grades
We will take in-person attendance in each lecture via Canvas. You will have two excused absences. If you need to request a link to the Zoom lecture and/or lecture recording (note that this will *not* count for attendance), please send a message in Ed before class tagged "recording request." If you plan to take a long-term absence, please get in touch with your advisor in student affairs so we can work with them to adjust your attendance score.

Instructor Office Hours

Professor Ganong will be present at labs on Tuesdays. If it is not possible to meet during lab, feel free to schedule office hours by appointment. Sign-ups for Professor Shi's office hours are linked here.

Teaching assistant(s) and/or graders

Head TA	Richard Chen
Head TA	Alex Lan
TA	TBD

Teaching and learning in person, dual-modality, and/or remote environments

In-class attendance to lectures and lab is required. Lecture notes and slides will be uploaded to the class repository throughout the quarter.

We highly encourage you to take handwritten notes, either with pen and paper or on a notetaking tablet. Research has repeatedly shown that handwritten notes are associated with better achievement. Outside of in-class exercises, laptop use in lecture will be restricted to the back row only.

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 you how your accommodations may be implemented in this course.

Academic Integrity has a consistent policy for the whole DAP sequence. The policy is here.

Schedule Idiosyncrasies

- MLK schedule: For M/W lectures on the week of MLK day, lectures will take place on W/F instead of M/W, and Monday lab will move to Friday afternoon. The lab assessment will move to be in-class Wednesday during lecture, and remainder of lecture material will be covered during Friday lab.
- Thu 1/29: Professor Shi will cover Professor Ganong's lectures.
- M 2/9: Professor Ganong will cover Professor Shi's lectures.

General Resources Available to Students

- Harris Academic Support Programs and Handbook
- Student Wellness
- UChicagoGRAD

Harris School and University of Chicago Policies

- Harris School Policies
- University General Policies
- University Academic Polices
- Policy on audio and video recordings