Harris School of Public Policy
University of Chicago
PPHA 30538

Fall 2024
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# Fall 2024: PPHA 30538

Last update: 2024-09-30

## Information about this course

### Background and Goals

This course is the second 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 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 where you will work on your problem sets. In-person attendance is mandatory.

### Prerequisites

PPHA 30537: Data and Programming for Public Policy I

### Relationship to other programs

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

### How this class will work

This course has 4 lecture sections and 3 lab sections. Students must be enrolled in and attend one lab. You will enroll in a lab which occurs after the lecture you are enrolled in. So don't enroll in a Monday lab if you are in a Tuesday lecture. Lab sections will be used for mini-lessons to go

further in depth than 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.

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|---|---|
| Lecture (Ganong) | M/W: 9:00-10:20 AM and 10:30-11:50 AM in Kell 0023 |
| Lecture (Shi) | T/Th: 11:00-12:20 PM and 3:30-4:50 PM in Kell 0021 |
| Lab | W: 1:30-2:50 PM and 3:00-4:20 PM in Kell 0023<br>Th: 5:00-6:20 PM |

**Student assignments**

The assignments and respective grading weights are:

1. 6 problem sets (paired and solo) – 40%. We will drop the lowest problem set grade such that your total problem set score is maximized. Problem sets 1 and 3 will be worth half of problem sets 2, 4, 5, and 6.
2. Final group project – 20%
3. Quizzes – 5%. These occur at the start of each lab. We will drop the two lowest quiz grades.
4. In-person final exam – 30%
5. 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%

Problem sets will be due on Saturdays at 5PM and must be submitted using Github Classrooms and Gradescope. The final project will be presented in the last week of class and will be due during the reading period. The final exam will be held during the exam period.

**Schedule**

- Weeks 1-3: data visualization and plots
- Week 4-5: collaboration and debugging tools, spatial data
- Weeks 5-6: dashboards
- Week 7: web scraping
- Week 8: natural language processing
- Week 9: project presentations

**Getting help**

- Come to lab
- 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 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.

Problem Set Grades

***Late Submissions*** For late problem sets, you have four late coins. A late coin enables you (and your partner, if appropriate) to turn a problem set in one day late. The maximum number of late coins per assignment is one. After 24 hours if your problem set is not turned in you will receive a zero for the assignment. Only issues of sufficient magnitude that academic affairs is involved in the discussion can qualify for exceptions.

***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 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 attendance via a sign-in sheet in each lecture + lab, in addition to TA audits at a random subset of lectures and labs based on name cards. You will have two excused absences. We will weight lecture attendance and lab attendance equally. 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's office hours are by appointment. Sign-ups for Professor Shi's office hours are linked here.

**Teaching assistant(s) and/or graders**

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|---|---|
| Head TA | Ozzy Houck |
| TA | Fatima Irfan |
| TA | Andre Mendoza |
| TA | Akbar Saputra |
| TA | Vitor Da Silveria |
| TA | Dema Palatingal |

**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 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 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**

The week of October 28-October 31, Professor Ganong will be out and Professor Shi will cover all lectures. The week of November 18-November 21, Professor Shi will be out and Professor Ganong will cover all 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