

UEP 305 and 305A: Urban Data Analysis

Fall 2023 This course fulfills Coe Program requirement CEMS

Lecture Tuesdays and Thursdays 1:30-2:50pm PST in HSC 202
Lab Tuesday or Thursday 3:15-4:40pm PST in HSC 208

Professor James Sadd jsadd@oxy.edu and Professor Maya Aboudinayababoud@gmail.com
Office hours Prof. Sadd Tues 10-11 am and 4:30-5:30pm, Wed 6:15-7:15PM HSC 105
Office hours Prof. Aboud Monday 6-7pm

Course Description In this course, you will learn how to document and analyze urban and environmental problems and public policies using quantitative data. Quantitative data provide a compelling means by which we can understand the magnitude of urban problems and make comparisons on who is impacted by these problems across demographic groups, neighborhoods, cities, and countries. Quantitative data can also help identify solutions, including public policies, and then evaluate the effectiveness of those solutions. Ultimately, our task is to develop quantitative reasoning skills in order to mobilize facts in the pursuit of a more just and equitable urban society. In the words of urban geographer Elvin Wyly: "Get mad. Get data. Get to work." Or, as David Patrick Moryn has said: "You can't solve a problem until you first learn how to measure it."

Data is all around us. Using, interpreting, and understanding where it comes from is the core of numerous professions and pursuits in both the urban and environmental policy realms. This course reviews the basic foundations of statistics for social science applications. This will enable you to better understand and consume data and statistical information as well as producing statistical analyses yourself. Tools such as Microsoft Excel and Stata will be used to manage and analyze data. Through the group research project, you will put your ideas into action. UEP 305 will prepare you to conduct your senior comprehensive research projects and act as a stepping stone toward other courses focused on quantitative analysis.

Student Learning Outcomes

- 1. Critically think about quantitative data, how it is used, and where it comes from.**
- 2. Develop technical and statistical skills using Excel and Stata.**
- 3. Understand the research design process from a social science perspective.**
- 4. Carry out a research project focusing on topics in urban and environmental policy.**

Course Structure

You may be absent from a class – ‘lecture’ or ‘lab’ session- twice without any explanation required. Being late to a class is counted as 1/2 of a class absence- see ‘Class Attendance’ below

If you have a 3rd or 4th absence, you will lose credit at the rate of 2% of your final course grade per absence. If you miss more than 4 class meetings, you likely will not pass the course- serious aspiring to graduate take note

About attendance (‘Eighty percent of success is showing up’ quote attributed to Woody Allen) You do see an explanation of my rationale on attendance and its role in the course. The content of each class and lab meeting is essential to the learning goals and mastery of the subject; missed classes/activities cannot ‘make up’ in a way that that is comparable to being present. Reliable and on time attendance is not only crucial for success in this class, it will be for the rest of your professional life; don’t expect me to be flexible on this aspect of your grade. On time attendance in a class is expected- ‘on time’ means you are at your desk, ready to begin class at the required time, not walking in at that time or slightly after. This class meets just over 30 times during the semester; and if you miss more than 10% of those times you cannot pass the class.

We understand that things come up- a health or medical issue, family emergency, or a similar situation, and we recognize

in order to receive credit for completing these quizzes are announced in the "Upcoming Dates" to his

All assignments should be posted to Moodle in a timely manner and no letter grade period that they are late. For example, an assignment due at 1:30 PM on Sept 16 that is submitted at 1:30 on Sept 17 is late and marked down no letter grade. An assignment due at 1:32 PM on Sept 16 that is submitted at 1:32 PM on Sept 17 is late and marked down no letter grade.

Class Topics by Week

See Moodle "Reading Schedule"

Week	Date	Lecture Topic	Assignments
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6	5 Oct	Designing ethical research projects & where to access data	Hand out Assignment 3
6	Lab	Excel Data Management	
7	10 Oct	NO CLASS - FALL BREAK	
7	12 Oct	Midterm Review	Assignment 3 due Midterm assigned
7	Lab	Work on your midterm	
8	17 Oct	Introduction to geospatial analysis and GIS	
8	19 Oct	Practical examples of GIS	Midterm due
8	Lab	Accessing and analyzing spatial data	
9ad	24 Oct	Binary and Count dependent variables	
ad9	26 Oct	Statistical Tests and Hypotheses: z-test	Hand out Assignment 4
9ad	Lab	Stata Intro	
10	31-Oct	Statistical Tests and Hypotheses: t-test	
			Group Project Descriptive analysis due

11	7 Nov	Two sample T statistics	Assignment 4 due
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23 Nov

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Lab

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they actually do, and this is a way to discover what you need to review. In that context, the quizzes learn as much as the quizzed, so it is in everyone's interest to do this.

Check your Oxy email account at least twice a day, preferably before lecture or lab begins, as important information and assignments will be delivered this way and email is an official mode of course work communications at this College— use your “@oxy.edu” account for all class purposes.

If you need help with a writing assignment, the Writing Center <https://www.oxy.edu/academics/student-success/writing-center> has advisors and faculty writing specialists that can help you in person or via web conference. You have the option of one-on-one meetings, and tutoring feedback where you submit an essay draft and it is returned within 48 hours.

Peer writing advisor appointments are available Sun-Thurs 10AM-5PM PST

Faculty writing specialists are available Mon-Fri 12:30PM to 7PM PST

