

USP 440 - Critical Analysis of Community Data

Winter 2025

CRN 43796

Class location and time: In-person only unless announced in advance, Tuesdays and Thursdays, 2:00 to 3:50pm. Fariborz Maseeh Hall (FMH) B157

Professor: Dr. Aaron Golub, Email: agolub@pdx.edu

Office Hours: *Several times during the week arranged directly through my appointment scheduler – just click and reserve a spot – no need to email me.* . <https://calendar.app.google/Qyt245JmWdWwaxrE6>

Course Description

USP 440 is a capstone applied research methods course that provides students with the essential skills for performing quantitative analyses related to urban communities. The beginning section of the course introduces students to the research design process, with a critical view of methods and data. The course then explores data sources, focused on the U.S. census, for analyzing communities along a variety of social, environmental and geographic dimensions. We then transition to learning how to use quantitative data and analysis for understanding communities. This approach provides students with an appreciation for underlying theoretical and practical research methods for identifying, measuring, and conceptualizing trends, challenges and solutions specific to urban communities and places.

Course Objectives

Students completing this course will:

- Understand the strengths and limitations of secondary quantitative data sources (e.g. Census)
- Be able to choose appropriate analytical and basic statistical techniques for evaluating social, economic, and demographic issues across a variety of spatial contexts
- Be able to use Excel and SPSS for basic statistical analysis and graphing analytics
- Be proficient in understanding and developing research questions (overlap with USP430)
- Understand how ideas are operationalized into measurable data
- Be proficient at performing both a basic literature review and cross-checking that review with an AI-produced review
- Understand the meaning and use of correlation, regression, frequency analysis (chi-square) and difference tests in statistical analysis
- Gain a critical understanding of the limitations of quantitative representations of complex community issues and characteristics and understand there are injustices embedded in our mainstream data collection systems

ASSESSMENT AND GRADING

The course will include **two required in-class meetings per week**, required and optional readings, short discussion posts due before class, in-class lab assignments, and one quarter-long multi-step project. It is imperative that everyone does the readings and the discussion posts, as these will inspire more detailed discussion during class and everyone will be asked to contribute. It is essential to attend every meeting in this course.

Discussion Posts (150 points)

There will be around five discussion posts, totaling around 150 points (20 points each). These are typically reflections on a short reading or video and should only take a few minutes. Generally, discussion posts will be

graded for its relevance to the reading or video. Discussions will only be open before the class they are for, and won't be available to turn in late.

In-class “lab” work (300 points)

During the later half of the quarter, we will work together in class on step-by-step SPSS analyses presented in our textbook (Fields). These short analyses will be graded, and total around 300 points. It will be challenging and more time consuming if you miss class and are forced to do the exercises on your own, so attendance will be essential. Turning in assignments late will incur a 3% per day penalty.

Book discussion: Data Feminism (150 points)

During some weeks we will have groups discussions (in class) about chapters from the book *Data Feminism*.

Mini research proposal (200 points)

Working in pairs, you will develop a research proposal, including defining research questions, performing a short literature review, and sketching the data analysis needed to answer the research questions. Pairs will share these with the class at two points during the term.

Mid-term and final concepts quizzes (100 points each)

These short quizzes will cover key concepts covered in the course (this won't involve any quantitative analysis).

You will upload all assignments and research proposal documents as a Word or PDF files into the appropriate dropbox on the Canvas website. Please also have access to the documents in class (on your computer, phone, hard-copy – whatever you prefer) as they may be discussed.

The **final class grade** will be calculated in the following manner:

1. Discussion posts based on videos or readings	15%
2. Participation in Data Feminism discussions	15%
3. In-class quantitative analysis exercises	30%
4. Mini research proposal	20%
5. Mid-term and final quizzes	20%

Roughly speaking, each point on whatever assignment is worth around 0.1% of your final grade, so if you want to skip an assignment or discussion post, you can calculate the impact on your final grade and make an informed decision.

Grading Scale:

A 93.0 % and above ; A- 90.0 % ; B+ 87.0 % ; B 83.0 % ; B- 80.0 % , etc.

COURSE RESOURCES:

A **Canvas website** is set up for the class. The site contains all assignments, discussion boards, required and optional readings, and is where your completed assignments should be uploaded.

Textbooks: There is a *no* physical textbook for the course. I have obtained PDFs of our three main textbooks:

Babbie (2009) **The Practice of Social Research** (12th Edition). Wadsworth. (ISBN-13: 9780495598411)
Field (2009) **Discovering Statistics using SPSS** (3rd Edition). Sage. (ISBN-13: 9781847879073)
D'ignazio and Klein (2020) **Data Feminism**. MIT press. (ISBN-13: 9780262358521)

If you wish to order the books for yourself, there are e-reader versions and hard and paperback versions available new and used on various sites such as Powell's, Ebay and Amazon. Used copies are sometimes available for under 10 dollars.

Note on submitting work online

Proficiency in the use of Canvas, PSU email, and other computer tools such as ZOOM or parts of Google suite is required for this course. We will also be using SPSS in part of the course, and you will learn how to access that on campus or your own computers. This course requires consistent access to functioning computer equipment and Internet access throughout the length of the course. Reliance on a cellular connection may not provide reliable and fast access to online learning resources. Here are some broadband programs that are free or low-cost:

<https://www.highspeedinternet.com/resources/are-there-government-programs-to-help-me-get-internet-service>

ACADEMIC INTEGRITY

Students are expected to be ethical not only in the classroom, but also outside the classroom. It is in all students' interest to avoid committing acts of academic dishonesty and to discourage others from committing such acts. Academic dishonesty includes, but is not limited to, the following examples: engages in any form of academic deceit; refers to materials or sources or uses devices not authorized by the instructor for use during any quiz or assignment; provides inappropriate aid to another person in connection with any quiz or assignment; engages in Plagiarism. Plagiarism is the act of claiming someone's work as your own through copying it without giving the creator of the work credit. Plagiarism can also include using another person's theories, ideas, or phrases without proper attribution. The simplest way to avoid plagiarizing is to always cite the sources from which you gather information or develop arguments – just cite anything you use from someone else (it actually makes your work stronger!). Plagiarism is a serious issue and is a violation of the PSU Student Conduct Code

http://www.ess.pdx.edu/OSA/osa_b.htm. University policy requires instructors to report all instances of plagiarism and penalize the perpetrator(s) according to guidelines set. Please see me if you ever have any questions about how to cite your work.

CAMPUS SUPPORT FOR RESPONDING TO HARASSMENT OR DISCRIMINATION

Portland State is committed to providing an environment free of all forms of prohibited discrimination and sexual harassment (sexual assault, domestic and dating violence, and gender or sex-based harassment and stalking). If you have experienced any form of gender or sex-based discrimination or sexual harassment, know that help and support are available. Information about PSU's support services on campus, including confidential services and reporting options, can be found on PSU's Sexual Misconduct Prevention and Response website at: <http://www.pdx.edu/sexual-assault/get-help> or you may call a confidential IPV Advocate at 503-725-5672 or schedule online at <https://psuwrc.youcanbook.me>. You may report any incident of discrimination or discriminatory harassment, including sexual harassment, to:

Albert Roberson, Title IX Coordinator - titleixcoordinator@pdx.edu

Richard and Maurene Neuberger Center (RMNC), 1600 SW 4th Ave., Suite 830

Taylor Burke, Deputy Title IX Coordinator and Dean of Students - 503.725.4422 - askdos@pdx.edu
Smith Memorial Student Union (SMSU), 825 SW Broadway, Suite 433

Please be aware that all PSU faculty members and instructors are required to report information of an incident that may constitute prohibited discrimination, including sexual harassment and sexual violence. This means that if you tell me about a situation of sexual harassment or sexual violence that may have violated university policy or student code of conduct, I have to share the information with my supervisor, the University's Title IX Coordinator or the Office of the Dean of Student Life. However, the Title IX Coordinators will keep the information confidential and refer you to a confidential advocate. For more information about Title IX please complete the required student module *Creating a Safe Campus* in your CANVAS.

ACCESS AND INCLUSION FOR STUDENTS WITH DISABILITIES

PSU values diversity and inclusion; we are committed to fostering mutual respect and full participation for all students. My goal is to create a learning environment that is equitable, useable, inclusive, and welcoming. If any

aspects of instruction or course design result in barriers to your inclusion or learning, please notify me. The Disability Resource Center (DRC) provides reasonable accommodations for students who encounter barriers in the learning environment.

If you have, or think you may have, a disability that may affect your work in this class and feel you need accommodations, contact the Disability Resource Center to schedule an appointment and initiate a conversation about reasonable accommodations. The DRC is located in 116 Smith Memorial Student Union, 503-725-4150, drc@pdx.edu, <https://www.pdx.edu/drc>.

- If you already have accommodations, please contact me to make sure that I have received a faculty notification letter and discuss your accommodations.
- Students who need accommodations for tests and quizzes are expected to schedule their tests to overlap with the time the class is taking the test.
- For information about emergency preparedness, please go to the Fire and Life Safety webpage (<https://www.pdx.edu/environmental-health-safety/fire-and-life-safety>) for information.

DIVERSITY, EQUITY AND INCLUSION

The USP Belonging, Justice and Dignity Committee identifies [a variety of ways for students to give feedback, seek assistance, and report a problem](#) (focused on issues related to Diversity, Equity and Inclusion).

[Portland State University Prohibited Discrimination and Harassment Policy](#) - addresses the definition of discrimination and harassment and provides appropriate contacts for reporting cases.

The Office of the Dean of Student Life hosts the Academic Appeals process. Students who feel they have received a prejudiced or capricious academic evaluation may submit an [Academic Appeal Request](#). Before students submit this request, students must have appealed to the instructor (Aaron Golub), department chair (Greg Schrock) and appropriate dean (Dean Youde). Students should then read the [Academic Appeals Guidelines](#) to see if their grade dispute fits the purview of the Academic Appeal. For more information please visit the [Academic Appeals website](#), email askdos@pdx.edu, or call 503-725-4422.

SYLLABUS DISCLAIMER

All syllabi are subject to minor changes to meet the needs of the instructor, school, or class. Every effort will be made to avoid changing the course schedule but the possibility exists that unforeseen events will make syllabus changes necessary. The instructor reserves the right to make changes to the syllabus as deemed necessary. Students will be notified in a timely manner of any syllabus or schedule changes in class, and through the CANVAS announcements and class email. Please remember to check your PSU email and the CANVAS messages and announcements often.

COURSE CALENDAR

Unit	Week	Date	Topic
Introduction to quantitative research	Week 1	1/7/2025	Introduction and Syllabus / Research Approaches to Observing Our World; Intro to Quantitative research
	Week 1	1/9/2025	Research Approaches to Observing Our World; Framing the Quantitative Research Question
	Week 2	1/14/2025	Research ethics and power
	Week 2	1/16/2025	Research design and data
Community data	Week 3	1/21/2025	Community Data in the Urban Context - Scale, context and geography
	Week 3	1/23/2025	Census and ACS 1
	Week 4	1/28/2025	Census and ACS 2 / other data sets
	Week 4	1/30/2025	Populations and Samples, Inferential/Descriptive Statistics, and Data Measurement Scales
	Week 5	2/4/2025	MIDTERM QUIZ (Take at home - no class, also please finish reading DF)
	Week 5	2/6/2025	Launch Data Feminism (DF) learning circles (DF1)
Quantitative analysis and statistics	Week 6	2/11/2025	SPSS Environment / Hypothesis testing
	Week 6	2/13/2025	Exploring Data w/ Graphs
	Week 7	2/18/2025	Hypothesis testing, statistical significance (DF2)
	Week 7	2/20/2025	Comparing numerical data - T tests and ANOVA
	Week 8	2/25/2025	Correlation (DF3)
	Week 8	2/27/2025	Regression 1
	Week 9	3/3/2025	Regression 2 (DF4)
	Week9	3/5/2025	Comparing categorical data (chi-square)
	Week 10	3/10/2025	Presenting data graphically (DF5)
	Week 10	3/12/2025	Wrap-up and review for quiz
	Finals Week	3/17/2025	FINAL QUIZ (Finals week)