

USP 440: Critical Analysis of Community Data

Winter Quarter 2026

Class location and time: In-person only unless announced in advance, Tuesdays and Thursdays 1:30 to 3:10pm.
Room: Fariborz Maseeh Hall (FMH) B152 (Basement level)

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

Office Hours: **Online** office hours are offered several times during the week arranged directly through my [appointment scheduler \[Link\]](#) – just click and reserve a spot – no need to email me. The scheduler will make an appointment and place it in your calendar with the meeting link in the invite. We can also speak right after class.

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
- Be able to use Excel and SPSS for basic statistical analysis and graphing analytics
- Be proficient in understanding, developing and answering 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

COURSE RESOURCES:

A CANVAS site 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:

REQUIRED: D'ignazio and Klein (2020) **Data Feminism**. MIT press. (ISBN-13: 9780262358521) This is made available for free by MIT press [here](#), or you can purchase a copy on your own.

OPTIONAL: Ewing and Park, eds. (2020) **Basic Quantitative Research Methods for Urban Planners**. Routledge and American Planning Association. (ISBN-13: 9780367343248) Available at the PSU bookstore – [link here](#).

ASSESSMENT AND GRADING

Assignments will be judged for their accuracy, coherence, clarity in writing, and the clarity of documentation (citing the sources you used). Make sure you cite all references and sources of data; include a list of references at the end of your assignments if necessary. Each assignment will have a more specific grading rubric. All assignments should be uploaded as a Word or PDF file into the dropbox on the CANVAS website for the class.

The final grade will be calculated from weighting the assignments by their individual point values. There are around 1000 total points in the term, so that can indicate the relative value of each assignment.

Assignments: There will be around 7 written assignments based around what we are reading and learning in class. These assignments will be posted on the CANVAS website and reviewed in class. All assignments are individual, except for one related to the *Data Feminism* group discussion. However, at any time you can work together, sharing your knowledge and understanding, if that helps you learn.

Assessment deadlines: Assignment due dates are firm and late assignments with no excuse (family, medical, personal emergency) will be marked down 1% per day late.

Final Grading Scale:

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

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, remote logins, 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.hightspeedinternet.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 Maureen 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	Num	Date	Content Area
Introduction to quantitative analysis	1	1/6/2026	Overview of the course / Intro to quantitative methods for community development and planning
	2	1/8/2026	Intro to quantitative methods for CD and planning
	3	1/13/2026	Intro to quantitative data (Class online/recorded)
	4	1/15/2026	No Class - Pre-recorded lecture: Tabular and graphical display of quantitative information
	5	1/20/2026	A1 work session
Census and ACS review	6	1/22/2026	Census and ACS
	7	1/27/2026	Census and ACS and A2 work session
Quantitative analysis and statistics	8	1/29/2026	Introduction to statistics, probabilities, distributions
	9	2/3/2026	Hypothesis testing introduction
	10	2/5/2026	Chi square tests
	11	2/10/2026	Z-test of two proportions / Data Feminism discussion 1
	12	2/12/2026	A3 work session
	13	2/17/2026	Intro to SPSS, Comparing Means (Difference tests and ANOVA)
	14	2/19/2026	A4 work session
	15	2/24/2026	Correlation
	16	2/26/2026	A5 work session
	17	3/3/2026	Correlation and Regression
	18	3/5/2026	Regression
	19	3/10/2026	A6 work session
	20	3/12/2026	Data Feminism discussion 2