SOCIOLOGY 593 QUANTITATIVE METHODS
Winter Quarter, 2022
Class meetings: Tuesdays, 2:00-4:50 PM
Location: FMH (formerly Neuberger Hall), Room B157
Canvas: https://canvas.pdx.edu/courses/14179

Instructor

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Professor of Sociology
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Office Hours: Via Zoom (https://pdx.zoom.us/j/84888918488), phone, or email: 2:00pm-4:00pm on Wednesdays, or by appointment

Course Description

Sociology 593 is a four-credit course that introduces graduate-level statistics and quantitative data methodology, with an emphasis on the applied statistical analysis of data focused on social issues. The course progresses from univariate and bivariate analyses through linear and logistic regression. Students will also build research and writing skills as they connect their analyses to theory and learn to accurately and concisely report quantitative results. Additional advanced statistics courses are recommended for students planning to complete a quantitative thesis/dissertation. The Sociology Department offers SOC 695 (Advanced Methods in Sociology) in the spring term. Recommended prerequisites: graduate status and introductory level statistics course(s).

Course Objectives

- Learn basic techniques for analyzing quantitative data.
- Learn the statistical packages *SPSS* and/or *Stata*.
- Gain experience writing a quantitative research paper.
- Understand published quantitative research.
- Develop a literature review that will help you write your thesis/dissertation/other project.
- Sharpen your critical thinking skills.

Course Materials

Required:
1. *Data Analysis with SPSS: A First Course in Applied Statistics*, by Stephen A. Sweet and Karen Grace-Martin (2012, 4th edition), available at the PSU bookstore.
2. Several peer-reviewed articles will provide examples of how to present and discuss data analysis results. These articles are available on Canvas.
3. A data set (in SPSS or Stata) that is of theoretical interest to you.

Optional:
1. If you do not find a data set of interest, the default will be the GSS (General Social Survey).

2. *Discovering Statistics using SPSS for Windows*[1], 5th edition by Andy Field (2018). **Or**
3. *A Gentle Introduction to Stata*[1], 6th edition by Alan C. Acock (2018).

Other web resources:
1. Stata's YouTube Channel: https://www.youtube.com/user/statacorp
2. UCLA's Institute for Digital Research & Education, Statistical Consulting Data Analysis:
   a. SPSS: https://stats.idre.ucla.edu/spss/
   b. Stata: https://stats.idre.ucla.edu/stata/
   c. Data analysis examples (for each software package): https://stats.idre.ucla.edu/other/dae/
   d. Choosing the correct statistical test: https://stats.idre.ucla.edu/other/mult-pkg/whatstat/

Course Policies, Procedures, and Resources

Class Sessions: Most class sessions will have the following structure:

a. [approximately 10 minutes] Announcements and discussion of the homework from the previous week.
b. [approximately 60-90 minutes] Presentation of the week's materials. Examples, discussion of the week's readings, important concepts to know and apply.
c. [remainder of class time] Students work on the week's homework assignment and their final paper projects. I will be circulating throughout the room, available to answer any questions you may have.

Classroom Etiquette: The following behaviors are disruptive to the class, and you are asked to refrain from them:

a. Arriving late/leaving early
   ▪ Once the "homework" portion of the class commences, that is considered an informal work period. Hence, you are free to step out for brief bathroom/water/leg-stretching breaks as you desire. Other than the homework period, you are expected to be in the classroom, ready to work and pay attention.
b. Using the computers (or your own personal devices) for anything other than class-related work.
c. Talking over someone else/excessive chattiness not related to the class.

Note: You are also asked to be aware that OIT has a food and drink policy that requires all lab users to place their food and drink in the red bin by the door, to protect the student-funded hardware and furniture.

Weekly Readings: For each week, you have assigned readings. You are expected to come to class each week, having completed all required readings. The amount of reading is relatively light

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[1] I recommend one or both of these books if you are planning on analyzing quantitative data for your thesis/dissertation or if you would like to learn more advanced statistics/SPSS/Stata functions on your own.

(especially for a graduate class). This is intentional; you should take these readings seriously, and completely understand what they have to say, and the examples provided, before attending class. My recommendation—to help you fully understand the SPSS examples provided in the textbook— is that you run through the examples yourself, actually trying to get your SPSS output to match that in the textbook. If you come to class without understanding the reading, you will fall behind. Because this class is meant to build on material learned in previous weeks, falling behind will cause difficultly throughout the entire quarter.

Writing Tips: All assignments for this course should use double-spacing, 12-point font, and 1-inch margins. Please follow ASA style guidelines when you cite references. Here are resources that will help with your written assignments:

- Quick Tips for ASA Style: https://www.asanet.org/sites/default/files/savvy/documents/teaching/pdfs/Quick_Tips_for_ASA _Style.pdf
- Plagiarism Resources: https://www.slideshare.net/peter1t/an-introduction-to-plagiarism
- How to Avoid Plagiarism: https://guides.library.pdx.edu/c.php?g=271259&p=2613696

PSU's Virtual Computer Lab (VLAB): For remote access to SPSS and/or Stata, visit PSU's virtual computer lab (VLAB) at https://rdweb.wvd.microsoft.com/arm/webclient/index.html (or you can go to vlab.pdx.edu) and follow the instructions (ODIN required).

Policy on Academic Dishonesty: Students who violate PSU rules on academic dishonesty are subject to disciplinary penalties, including the possibility of failing the course and/or dismissal from the university. Since such dishonesty harms the individual, all students, and the integrity of PSU, policies on scholastic dishonesty will be strictly enforced. For more information on PSU policies and definitions of academic misconduct, see: https://www.pdx.edu/dean-student-life/academic-misconduct.

Late Work: Unless a student has received prior approval from me, late work will not be accepted. You are expected to submit all homework, paper drafts, and final papers by the stated deadline. Any late submissions will not be graded, and the student will receive a 0 for the assignment.

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 discuss with 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.

During the pandemic, DRC is performing all essential functions of the work of the DRC remotely, including initial appointments and meetings. Call 503-725-4150, email drc@pdx.edu or visit the

virtual front desk via [Zoom](#) Monday - Friday 9 a.m. to 5 p.m. The DRC is currently open for in-person visits 2pm-5pm Monday-Friday. The DRC is located in 116 Smith Memorial Student Union, and they are monitoring voice mail and email messages closely and will respond as soon as possible.

- If you already have accommodations through DRC, please contact me to make sure I have received the faculty notification letter and to ensure that all accommodations are being provided.

Title IX Reporting Obligations: 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 harassment, know that help and support are available. PSU has staff members trained to support survivors in navigating campus life, accessing health and counseling services, providing academic and on-housing accommodations, helping with legal protective orders, and more. 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.

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 the student code of conduct, I must share the information with my supervisor or the University's Title IX Coordinator or the Office of Affirmative Action. For more information about Title IX please complete the required student module Creating a Safe Campus on D2L.

Student Support Services: Services to help you thrive in this class and at PSU more generally, including information about the writing center, financial services, and technology support can be found here: https://www.pdx.edu/student-life/support-services.

Classroom Requirements for All Students and Faculty Due to Covid-19: The University has established rules and policies to make the return to the classroom as safe as possible. It is required for everyone to follow all the Return to Campus rules and policies. To participate in this class, PSU requires students to comply with the following.

Masks Required at all Times in Classroom

- [Wear a mask or face covering indoors](#) at all times. Your mask or face covering must be properly worn (fully covering nose and mouth and tight fitting). Mesh masks, face shields, or face covering that incorporates a valve designed to facilitate easy exhalation are not acceptable. **Because a mask must be worn in the classroom, there should be no eating or drinking in the classroom.** If you have a medical condition or a disability that prevents you from wearing a mask or cloth face covering, you must obtain an

accommodation from the [Disability Resource Center (DRC)](#) to be exempt from this requirement.

- CDC, State, and County guidance does not limit class size for in-person instruction or require physical distancing.

Vaccination

- Be vaccinated against COVID-19 and complete the [COVID-19 vaccination attestation](#) form. Those students with medical or nonmedical exemptions or who will not be on campus at all must complete the process described on "COVID-19 Vaccine Exemption Request Form" to establish those exemptions.

Health Check, Illness, Exposure or Positive Test for COVID-19

- Complete the [required self-check for COVID-19 symptoms before coming to campus each day.](#)

- If you are feeling sick or have been exposed to COVID-19, do not come to campus. Call SHAC to discuss your symptoms and situation (503.725.2800). They will advise you on testing, quarantine, and when you can return to campus.

- If you test positive for COVID-19, [report your result to SHAC](#) and do not come to campus. SHAC will advise you on quarantine, notification of close contacts and when you can return to campus.

- Please notify me should you need to miss a class period for any of these reasons so that we can discuss strategies to support your learning during this time.

- If I become ill or need to quarantine during the term, either I or the department chair will notify you via PSU email about my absence and how course instruction will continue.

Failure to Comply with Any of these Rules

As the instructor of this course, the University has given me the authority to require your compliance with these policies. If you do not comply with these requirements, I may ask you to leave the classroom or I may need to cancel the class session entirely.

In addition, failure to comply with these requirements may result in a referral to the Office of the Dean of Student Life to consider charges under PSU's Code of Conduct. A student found to have violated a university rule (or rules) through the due process of student conduct might face disciplinary and educational sanctions (or consequences). For a complete list of sanctions, see Section 14 of the [Student Code of Conduct & Responsibility](#)

Guidance May Change

Please note that the University rules, policies, and guidance may change at any time at the

direction of the CDC, State, or County requirements. Please review the University's main [COVID-19 Response](#) webpage and look for emails from the University on these topics.

Grading

1. **Weekly Homework Assignments** (30%)
   Each week you will be given an assignment that will be based on the weekly readings and the lab lecture. This assignment will be posted on Canvas. Submit completed assignments on Canvas in two files: the homework in Word and relevant SPSS output (the output can also be copied and pasted into Word) by Mondays at 9:00am (earlier submission is always welcome). *Note:* To allow for adequate grading time, late homework submissions will not be accepted without prior approval.

2. **Research paper** (60%)
   The majority of your grade is based on your final research paper. This paper will be 15-30 pages in length and will be based on analysis of the data set that you have acquired (GSS is the default data set if you can't find one that interests you). Chapter 9 of *Data Analysis with SPSS* discusses the main parts of the paper. This paper is due by midnight on Sunday, March 13.

   Each week you should work on your research paper, however, you will not be turning it in to me unless otherwise notified. For more information on the research paper, see the notes at the end of each week's homework assignment and the document "Timetable for Writing a Research Paper." After the lecture part of the weekly class (approximately 1-1.5 hours), students and the instructor will stay in the computer lab until approximately 4:50 p.m. during which time students can work on their homework assignment or seek guidance from the instructor regarding their research paper. If you finish your homework early, you are expected to use that time to work on your final research paper.

   Students are encouraged to seek the help of the Social Sciences Librarian, <u>Kimberly Pendell</u>: kpendell@pdx.edu, (503.725.4501). She can help you develop a research strategy for the literature review (in which you will be developing your hypotheses) for your research paper. The <u>Writing Center</u> is also a valuable resource to help you develop your technical writing skills (phone: 503.725.3570).

3. **Oral presentation** (10%)
   During weeks 9 and 10 students will present their research findings. The feedback you receive from the instructor and fellow students will help you revise your findings before you submit your final paper draft.

Course Schedule (subject to change with reasonable notice)

Week/date of class meeting	Topic	Readings/Tasks (readings must be completed before class)	Homework	Deadlines
Week 1 (January 4)	Introduction, Univariate Analysis, Levels of Measurement	• Sweet & Grace-Martin, Chapter 1-3 • Uggen, Manza, and Thompson, 2006, especially Table 3 and its discussion on pages 291-296	Problems from Chapters 1 and 3.	Monday, January 10 at 9:00am
Week 2 (January 11)	Indexes/Scales	• Sweet & Grace-Martin, Chapter 4 • Sweet & Grace-Martin, Chapter 9 • Moon et al. 2011, especially the scales (indexes) discussed under "*The Association with Delinquent Peers and the Legitimacy of Violence*" and "*Strain and Negative Emotions (Anger and Depression)*" (pp. 858-861)	Problems from Chapter 4.	Monday, January 17 at 9:00am
Week 3 (January 18)	Crosstabs	• Sweet & Grace-Martin, Chapter 5, pages 105-116 (up through the end of the "Bar Charts" section) • Sobolewski and Amato, 2007, especially "Descriptive Results" crosstabs discussion on pages 1112-1113 • Meet with social sciences librarian; work on the first draft of introduction, literature review, data and methodology, and references (due in January 25 class meeting)	Problems from Chapter 5. Research paper draft	Monday, January 24 at 9:00am Paper draft due January 25
Week 4 (January 25)	Correlation and ANOVA	**Due** at the beginning of the January 25 class meeting: First draft of introduction, literature review, data and methodology, and references, plus an abbreviated draft of this document. Readings for this class: • Rest of Sweet & Grace-Martin, Chapter 5, starting on page 116 (starting with "Analyzing Bivariate Relationships Between Two Scale Variables") • Sweet & Grace-Martin, Chapter 6 • Ng and Burke, 2004 (see correlation and ANOVA examples)	Problems from Chapters 5 and 6. Feedback on another student's first draft	Monday, January 31 at 9:00am Feedback on peer's paper due February 1

Week/date of class meeting	Topic	Readings/Tasks (readings must be completed before class)	Homework	Deadlines
Week 5 (February 1)	Simple Regression	• **Due** at the beginning of the February 1 class: Feedback on another student's first draft (and meet with them face-to-face in our February 1 class). • Sweet & Grace-Martin, Chapter 7, pages 161-170 • Kwon and Baack, 2005	Problems from Chapter 7. Find article that uses OLS regression	Monday, February 7 at 9:00am Read & bring article to class on February 8
Week 6 (February 8)	Multiple Linear Regression	• Sweet & Grace-Martin, Chapter 7, pages 171-182 • Within your own area of interest, find and read a peer-reviewed article that uses linear (a.k.a. OLS [ordinary least squares]) regression, bring to class on February 8	Problems from Chapter 7.	Monday, February 14 at 9:00am
Week 7 (February 15)	Logistic Regression	• Sweet & Grace-Martin, Chapter 8 • Thompson 2010, especially the description of Table 2 results, the discussion, and conclusion (pp. 110-118)	Problems from Chapter 8.	Monday, February 21 at 9:00am
Week 8 (February 22)	Final thoughts on Regression	• No reading; No homework assignment • Work on your oral presentation and research paper		
Week 9 (March 1)	Oral presentations and individual work on final papers	• No reading; No homework assignment • Based on oral presentation feedback, revise and finalize your research paper		
Week 10 (March 8)	Oral presentations and individual work on final papers	• No reading; No homework assignment • Based on oral presentation feedback, revise and finalize your research paper		

** Final papers are due by **11:59pm (midnight) on Sunday, March 13**.