

Sociology

Course Title	SOC 396.001, Social Statistics
CRN	62989
Credits	4
Course Location	online
Course Meeting Schedule	n/a
Instructor information	Professor Melissa Thompson, Ph.D.
Office Location	Cramer Hall 217N
Office Hours	Mondays 4-5pm (in-person or via zoom) or by appointment
Instructor Zoom for office hours	https://pdx.zoom.us/j/88337005751
Phone	503-725-3956
Email	mthomp@pdx.edu
Teaching Assistant (TA) information	Cameron Arnold
TA Office Location	Cramer Hall 217W
TA Office Hours	Tuesdays 12-1 (in-person or via Zoom) or by appointment
TA Zoom for Office Hours	https://pdx.zoom.us/j/4396290817
TA Email	arnold27@pdx.edu

Instructor Contact Information

The best way to reach me is via email at mthomp@pdx.edu. You can expect to receive a response within 24 hours during the week (M-F). Response times may be longer on evenings and weekends. Students may come in anytime during office hours, connect with me via zoom, or may schedule virtual or in-person office visits by appointment.

Course Description

This course is designed to promote understanding and knowledge of statistical methods used in the social sciences. Students will be introduced to a wide range of techniques for analyzing social science data. Students will learn how, when, and why statistics are used and why it is necessary to understand them. The topics to be studied are conceptualization, operationalization, and measurement of socially based phenomena. Students will learn how to summarize data with graphs and numbers, generalize about populations based on samples of the population, and describe the relationships between variables. We will discuss some theory, though most of the class is dedicated to the application and interpretation of statistics.

This course provides the knowledge necessary to understand statistics as well as apply them in a meaningful way. Upon completion of this course, students will be prepared to move on to more advanced statistics courses and SOC 397/398.

This course will serve as a substitution for STAT 243 for SOC majors (other majors consult advisors).

****Important note: SOC 396 will not meet the 100-level MATH requirement as per the university guidelines. Students must meet the 100-level MATH requirement separately.**

Course Outcomes/Learning Objectives

- Calculate basic statistics
- Understand fundamental concepts such as mean, probability, and frequency
- Develop basic skills in statistical reasoning
- Develop skills necessary to move on to more advanced research methods courses
- Promote the knowledge and use of software for statistical analysis (such as SPSS or Excel)
- To create intelligent consumers of statistical findings presented in various outlets

Required Materials

1. ****required text (previous editions are acceptable)**** Anna Leon-Guerrero, Chava Frankfort-Nachmias, and Georgiann Davis. 2021. *Essentials of Social Statistics for a Diverse Society* (4th edition.) Sage Publications, Inc.
 - A copy of this textbook is available on Course Reserve at the PSU library.
2. ****required skills/equipment**** ability to access videos and slides and use standard computing skills (you must have access to a computer or tablet that can access/download/upload Canvas course materials and has a word processing software)
3. **** required software: SPSS**** Using the VLAB (virtual computer lab) is the simplest way to access SPSS. If you are unable to access the VLAB, you can work in computer labs on campus or rent SPSS software to complete homework assignments.
 - **Virtual Computer Lab** www.vlab.pdx.edu (or <https://rdweb.wvd.microsoft.com/arm/webclient/index.html>)
 - **IBM SPSS Statistics Standard Grad Pack** (for Windows or Mac) <https://www.hearne.software/Software/SPSS-Grad-Packs-for-Students-by-IBM/Editions>
**you can purchase 6 month or 12 month access to the software with this link.* This option provides access to the full version of SPSS and might be preferable if you are working from home.

Major Assignments

Grades are determined based on a combination of weekly participation activities, homework (HW) assignments, small group check-ins, and exams. All materials must be submitted online via Canvas. Grades/feedback will be provided in Canvas.

- Weekly Participation Activities (due Mondays at 11pm) – cover learning objectives and represent your participation in the class. These account for 15% of the overall grade and are graded as pass/no pass (full credit will be received if a participation activity is completed in full and submitted on time).
- Homework (HW) Assignments – 4 HW assignments will be due throughout the term and represent 48% of your overall grade. These HWs will each contain several questions and incorporate various skills from activities and lecture as well as the use of SPSS. Dates/deadlines are provided below. These HW assignments are graded based on the number of correct responses.
- Small group check-ins – weekly check-ins with a randomly assigned small group. Group assignments will be the same throughout the quarter. These group check-ins are meant to provide low-risk opportunities to ask classmates questions about participation activities, HW assignments, and to help each other prepare for exams. Small group work represents 12% of the overall course grade and these are graded as pass/no pass (full credit will be received if you

appropriately participate in each week's discussion); an end-of-the term self- and peer-evaluation will also assign an overall grade on group work for the quarter.

- **Exams** are administered online and represent 25% of the overall grade (2 exams @ 12.5%). No special software is required. Students must log in to Canvas during the specified period and take the exams (see schedule and Canvas for dates and details). Grades will be determined based on the number of correct responses.

Grading Criteria

Examinations	2 @ 12.5%	25%
Homework	4 @ 12%	48%
Participation (Activities)	10 @ 1.5% each	15%
Group work (weekly check-ins + end of quarter self- and peer-evaluations)	10 @ 1% each + end of quarter evaluation @ 2%	12%
TOTAL	100%	100%

Grading Scale

A	91.5-100	B+	87.5-89.4	C+	77.5-79.4	D+	67.5-69.4	F	≤ 59.4
A-	89.5-91.4	B	81.5-87.4	C	71.5-77.4	D	61.5-67.4		
		B-	79.5-81.4	C-	69.5-71.4	D-	59.5-61.4		

Course Attendance and Make-up Policies

We will not meet in person and attendance will be assessed via submission of Activities on Canvas. You should access Canvas at least once weekly; keeping up with the posted schedule is highly important to your grade in this course.

Participation activities and group discussions must be submitted by the deadline and will receive full credit if they are completed in full. Unless you have an instructor-approved extension, late participation activities and group discussions will not be accepted for credit.

Homework assignments are due by the specified deadline in Canvas. Any homework turned in after the deadline is considered late and will be assessed with the following deductions: (-10%) if submission is within 48 hours of deadline; (-20%) if submission is 48 hours to 1 week late. After 1 week the assignment will be accepted for 50% credit.

Exams must be taken during the specified access period. Students who miss the access period may take a make-up exam within one week of the access period but will be assessed a 30% deduction. Please contact the instructor to schedule.

*If a student has an emergency, they may contact Professor Thompson for a no-penalty extension of any deadline. This extension requires advance notice (as much as is possible) and should be obtained via email. Please notify the instructor as soon as possible to make arrangements for submission of late work or to schedule a make-up exam.

Academics

PSU Grading System

Undergraduate: <http://pdx.smartcatalogiq.com/en/2022-2023/Bulletin/Undergraduate-Studies/Grading-System-for-Undergraduates>

Graduate: <http://pdx.smartcatalogiq.com/2022-2023/Bulletin/Graduate-School/Enrollment/Graduate-grading-system>

Drop/Withdraw Deadline

In the event that a student is no longer able to complete the course, they must withdraw from the class in order to receive a "W" rather than an "F". Please refer to the student handbook for more information.

<http://pdx.smartcatalogiq.com/en/2022-2023/Bulletin/Undergraduate-Studies/Grading-System-for-Undergraduates/Drops-and-withdrawals>

Academic Integrity

Academic integrity is a vital part of the educational experience at PSU. The [Student Code of Conduct](#) is the university's policy on academic dishonesty. A confirmed violation of that code in this course may result in failure of the course.

Incomplete Grades Policy

Students do not have a right to receive or demand an Incomplete grade. The option of assigning an Incomplete grade is at the discretion of the instructor when these criteria are met:

- Required satisfactory course completion/participation
- Reasonable justification for the request
- Not sought as a substitute for a poor grade
- Presence of a written agreement (such as the [Incomplete Contract](#))
- A plan in place to resolve Incomplete status

The Office of the Registrar's website has [the full Incomplete Grades policy](#).

Student Services

The Center for Student Health & Counseling (SHAC)

Think SHAC First! The Center for Student Health & Counseling (SHAC) provides high quality, accessible, medical, counseling, dental, and health promotion services to all PSU students taking 5+ credit hours, regardless of the type of insurance coverage. Office visits at SHAC are FREE!

Students taking 1+ credit hours can access SHAC Dental Services. SHAC has an incredible staff of health care professionals who are dedicated to keeping you healthy so you can stay in the classroom and focus on learning. For a full list of services and more information visit pdx.edu/health-counseling.

Medical Excuse Notes: The Center for Student Health and Counseling (SHAC) does not provide medical excuse notes for absences from classes, labs, studios or exams, or for missed deadlines due to short-term illness, injury, or other clinical appointments. Visit the SHAC Medical Excuse Policy at pdx.edu/health-counseling/our-policies for more information.

Mental Health Emergencies: If you are having a mental health emergency and need to speak with someone immediately, come in to SHAC at ANY time during SHAC hours of operation. After hours and weekends call the Multnomah County Crisis Line 503.988.4888 or use the 24/7 mySSP mental health support resource 866.743.7732.

503.725.2800 | 1880 SW 6th Ave. Portland UCB Suite 200 | pdx.edu/health-counseling

Disability Access Statement

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 at 116 Smith Memorial Student Union, 1825 SW Broadway; 503-725-4150; drc@pdx.edu.

Student Food Security

Any student who has difficulty affording groceries or accessing sufficient food to eat every day, or who lacks a safe and stable place to live, and believes this may affect their performance in the course, is urged to contact the Committee for Improving Student Food Security for support at foodhelp@pdx.edu. Please notify me for additional support if you feel comfortable doing so.

Understanding Sexual Misconduct

PSU desires to create a safe campus. As part of that mission, PSU requires all students to take the [Understanding Sexual Misconduct and Resources learning module](#). If you or someone you know has been harassed or assaulted, you can find the appropriate resources on PSU's [Sexual Misconduct Response website](#).

Title IX Reporting

Students frequently come to me for assistance in matters not related to the course material. Please be aware that PSU's policies require instructors to report any instance of sexual harassment, sexual and relationship violence and/or other forms of prohibited discrimination to university officials, who will keep the information private. If you would rather share information about these matters with a PSU staff member who does not have these reporting responsibilities and can keep the information confidential, please use these campus resources:

- Confidential Advocates: 503-894-7982 or [schedule online](#) (for matters regarding sexual harassment and sexual and relationship violence)
- Center for Student Health and Counseling: 1880 SW 6th Avenue #200; 503-725-2800

Discrimination and Bias Incidents

[The Office of Equity and Compliance](#) (OEC) addresses complaints of discrimination, discriminatory Harassment, and sexual harassment against employees (faculty and staff). If you or someone you know believes they have been discriminated against, you may file a complaint. Someone from the OEC will contact you to discuss how to best address your complaint.

[The Bias Review Team](#) (BRT) gathers information on bias incidents that happen on and around campus, and gives resources and support to individuals who experience them. You can report a bias incident you experienced or learned about. A member of the BRT will contact you if you indicate you would like to be contacted.

Religious Accommodations

If you would like to obtain religious accommodations, such as flexibility in attending evening courses or extension on assignments, please contact your instructors. If you need additional assistance, please contact the Office of the Dean of Student Life (DOSL) by emailing askdos@pdx.edu.

Cultural Resource Centers

Cultural Resource Centers (CRCs) create a student-centered inclusive environment that enriches the university experience. They honor diversity, explore social justice issues, celebrate cultural traditions, and foster student identities, success, and leadership. They provide opportunities for student leadership, employment, and volunteering; student resources such as computer labs, event, lounge, and study spaces; and extensive programming. All are welcome!

- Multicultural Student Center
- La Casa Latina Student Center
- Native American Student and Community Center
- Pan African Commons
- Pacific Islander, Asian, and Asian American Student Center
- Middle East, North Africa, South Asia Initiative

Course Calendar/Schedule

This is a fully online course, meaning that instruction will come solely from video segments, lecture slides, and other materials made available on Canvas. To access Canvas, go to www.canvas.pdx.edu. To login, enter your odin ID and your odin password. If you do not have an odin account, or are not sure what your odin ID or password is, go to <https://www.pdx.edu/technology/> or contact the Help Desk at help@pdx.edu or 725-HELP.

Course materials are organized online in weekly modules. To find learning modules, look for the Modules tab on the left side of the Canvas homepage, then choose the Week's Module. Each weekly summary will include complete instructions and assignments for the week. Please be sure to start with the Weekly Summary ("Weekly Overview") at the beginning of each week. Students must keep up with the lectures, assigned readings, and assignments to successfully complete the course.

Course Schedule		
Week 1 (April 3-April 9)		Canvas Location
April 3-9	<p>Introduction and Overview of Course</p> <p>Readings:</p> <ol style="list-style-type: none"> 1. Leon-Guerrero et al., Ch. 1 (pp. 1-9) "The What and Why of Statistics." 2. National Academies of Sciences, Engineering, and Medicine. 2022. "Measuring Sex, Gender, Identity and Sexual Orientation: Measuring Gender Identity and Transgender Experience" (pp. 1-4). <i>Consensus Study Report. Issue Brief.</i> 3. <i>Video Lecture/PowerPoints 1</i> <p><u>Things to do by the end of the week:</u></p> <ol style="list-style-type: none"> 1. <i>Watch class info/welcome clip</i> 2. <i>Read syllabus and take syllabus quiz</i> 3. <i>Review weekly summary (overview), readings, and watch Lecture 1</i> 4. Participate in Group Discussion–Week 1 5. Complete Activity – Variables 	Modules > Week 1
Due by 11p (4/10)	<ul style="list-style-type: none"> • Complete Syllabus Quiz • Participate in the Week 1 Group Check-In • Submit Activity 1 	Assignments> Syllabus Quiz Discussion 1 Activity 1
Week 2 (April 10-16)		
April 10-16	<p>Conceptualization and Operationalization</p> <p>Readings: Leon-Guerrero et al., Ch. 1 (pp. 10-25) "The What and Why of Statistics"; <i>Video Lecture/PowerPoint Notes 2</i></p> <p><u>Things to do by the end of the week:</u></p> <ol style="list-style-type: none"> 1. <i>Review weekly summary (overview), readings, and watch Lecture 2</i> 2. Participate in Group Discussion–Week 2 3. Complete Activity – Levels of Measurement 4. <i>Review Using SPSS slides (for your review)</i> 5. Download HW 1 and begin working on it 	Modules > Week 2
Due by 11p (4/17)	<ul style="list-style-type: none"> • Participate in the Week 2 Group Check-In • Submit Activity 2 	Assignments> Discussion 2 Activity 2
Week 3 (April 17-23)		
April 17-23	<p>Descriptive Statistics</p> <p>Readings: Leon-Guerrero et al., Ch. 2 "The Organization and Graphic Presentation of Data"; <i>Video Lecture/PowerPoint Notes 3</i></p> <p><u>Things to do by the end of the week:</u></p> <ol style="list-style-type: none"> 1. <i>Review weekly summary (overview), readings, and watch lecture 3</i> 	Modules > Week 3

	<p>2. Participate in Group Discussion–Week 3</p> <p>3. Complete first part of Activity 3 – Freq. Dist.</p>	
Due by 11p (4/24)	<ul style="list-style-type: none"> • Participate in the Week 3 Group Check-In • Submit Activity 3 (part 1) • Submit Homework 1 	Assignments > Discussion 3 Activity 3 HW 1
Week 4 (April 24-30)		
April 24-30	<p>Central Tendency</p> <p>Readings: Leon-Guerrero et al., Ch. 3 “Measures of Central Tendency and Variability”; <i>Video Lecture/PowerPoint Notes 4</i></p> <p><u>Things to do by the end of the week:</u></p> <ol style="list-style-type: none"> 1. <i>Review weekly summary (overview), readings, and watch lecture 4</i> 2. Participate in Group Discussion–Week 4 3. Complete Activity 3 (part 2) – Central Tendency 4. <i>Download Exam 1 Review</i> 5. Download HW 2 and begin working on it 	Modules > Week 4
Due by 11p (5/1)	<ul style="list-style-type: none"> • Participate in the Week 4 Group Check-In • Submit Activity 4 	Assignments > Discussion 4 Activity 4
Week 5 (May 1-7)		
May 1-7	<p>Dispersion & Spread</p> <p>Readings: Leon-Guerrero et al., Ch. 3 “Measures of Central Tendency and Variability”; <i>Video Lecture/PowerPoint Notes 5</i></p> <p><u>Things to do by the end of the week:</u></p> <ol style="list-style-type: none"> 1. <i>Review weekly summary (overview), readings, and watch lecture 5</i> 2. Participate in Group Discussion–Week 5 3. Complete Activity 5 – S.D. 4. <i>Review and prepare for Exam 1</i> 	Modules > Week 5
Due by 11p (5/8)	<ul style="list-style-type: none"> • Participate in the Week 5 Group Check-In • Submit Activity 5 	Assignments> Discussion 5 Activity 5
May 7-9	<ul style="list-style-type: none"> • Take Exam 1 online – Available Sun, May 7 (must be completed by Tue, May 9 at 11pm) 	Quizzes > Exam 1
Week 6 (May 8-14)		
May 8-14	<p>Probability & The Normal Distribution</p> <p>Readings: Leon-Guerrero et al., Ch. 4 “The Normal Distribution” and Ch. 6 “Estimation”; <i>Video Lecture/PowerPoint Notes 6</i></p> <p><u>Things to do by the end of the week:</u></p> <ol style="list-style-type: none"> 1. <i>Review weekly summary (overview), readings, and watch lecture 6</i> 2. Participate in Group Discussion–Week 6 3. Complete Activity 6 – z scores 	Modules > Week 6

	4. Download HW 3 and begin working on it	
Due by 11p (5/15)	<ul style="list-style-type: none"> • Participate in the Week 6 Group Check-In • Submit Activity 6 • Submit HW 2 	Assignments> Discussion 6 Activity 6 HW 2
Week 7 (May 15-21)		
May 15-21	<p>Hypothesis Testing (t-test and z; ANOVA) Readings: Leon-Guerrero et al., Ch. 7 “Testing Hypotheses”; Ch. 9 “Analysis of Variance”; <i>Video Lecture/PowerPoint Notes 7-8</i></p> <p><u>Things to do by the end of the week:</u></p> <ol style="list-style-type: none"> 1. <i>Review weekly summary (overview), readings, and watch lectures 7-8</i> 2. Participate in Group Discussion–Week 7 3. Complete Activity 7 – hypo. tests 	Modules > Week 7
Due by 11p (5/22)	<ul style="list-style-type: none"> • Participate in the Week 7 Group Check-In • Submit Activity 7 	Assignments> Discussion 7 Activity 7
Week 8 (May 22-28)		
May 22-28	<p>Hypothesis Testing (chi-square) Readings: Leon-Guerrero et al., Ch. 8 “The Chi-Square Test and Measures of Association” pp. 237-253; <i>Video Lecture/PowerPoint Notes 9</i></p> <p><u>Things to do by the end of the week:</u></p> <ol style="list-style-type: none"> 1. <i>Review weekly summary (overview), readings, and watch lecture 9</i> 2. Participate in Group Discussion–Week 8 3. Complete Activity 8 – cross tabs 4. <i>Download Exam 2 Review</i> 5. Download HW 4 and begin working on it 	Modules > Week 8
Due by 11p (5/29)	<ul style="list-style-type: none"> • Participate in the Week 8 Group Check-In • Submit Activity 8 • Submit HW 3 to Canvas 	Assignments> Discussion 8 Activity 8 HW 3
Week 9 (May 29-June 4)		
May 29-June 4	<p>Measures of Association Readings: Leon-Guerrero et al., Ch. 8 “The Chi-Square Test and Measures of Association” p. 253-278; <i>Video Lecture/PowerPoint Notes 10</i></p> <p><u>Things to do by the end of the week:</u></p> <ol style="list-style-type: none"> 1. <i>Review weekly summary (overview), readings, and watch lecture 10</i> 2. Participate in Group Discussion–Week 9 3. Complete Activity 9 - MoA 	Modules > Week 9

Due by 11p (6/5)	<ul style="list-style-type: none"> • Participate in the Week 9 Group Check-In • Submit Activity 9 	Assignments> Discussion 9 Activity 9
Week 10 (June 5-11)		
June 5-11	<p>Correlation & Regression Readings: Leon-Guerrero et al., Ch. 10 “Regression and Correlation”; <i>Video Lecture/PowerPoint Notes 11</i></p> <p><i>Things to do by the end of the week:</i></p> <ol style="list-style-type: none"> 1. <i>Review weekly summary (overview), readings, and watch lecture 11</i> 2. Participate in Group Discussion–Week 10 3. Complete Activity 10 - correlation 4. <i>Review for Exam 2</i> 	Modules > Week 10
Due Fri 11p (6/9)	<ul style="list-style-type: none"> • Submit HW 4 to Canvas – due Friday, June 9 by 11pm 	Assignments> HW 4
Due Mon 11p (6/12)	<ul style="list-style-type: none"> • Participate in the Week 10 Group Check-In • Submit Activity 10 • (optional) submit bonus activity for extra credit 	Assignments> Discussion 10 Activity 10 Bonus Activity (opt.)
Jun 11-13	<ul style="list-style-type: none"> • Take Exam 2 online – available Sunday, June 11 (must be completed by Tuesday, June 13 at 11pm) 	Quizzes> Exam 2