



Sol Price School of Public Policy

## PPD 504 Essential Statistics for Public Management

Summer 2024 Mon 6:00pm – 8:30pm PST

Course Location: online

**Instructor:** Emma Aguila, Ph.D.

**Biography:** <http://priceschool.usc.edu/emma-aguila/>

**Office:** by appointment or during office hours.

**Contact Info:** [eaguilav@usc.edu](mailto:eaguilav@usc.edu)

**Office Hours:** Via Zoom. Monday 3pm to 4pm PST

Meeting ID: 950 623 9410 Passcode: 828554

**Teaching Assistant (TA):** Caroline Ghanbary

**Contact Info (TA):** [ghanbary@usc.edu](mailto:ghanbary@usc.edu)

**TA Office Hours and Office:** [Via Zoom](#). Wednesday 4-5pm PST and Thursday 8-9am PST.

Meeting ID: 6109025916 Passcode: 665365

### Course Description

This course is an introduction to statistical methods. The course will provide you with the analytical and quantitative skills required to conduct applied statistical analysis. You will learn about the practical uses of statistics in social science, public policy, management, and everyday life. You will be able to evaluate statistics presented in scholarly journals and prepare yourself for future quantitative research projects and advanced statistical courses. The course focuses on understanding the conditions under which various statistical techniques may be properly used as well as understanding and interpreting the results. Little emphasis will be placed on learning formulas and equations per se. Since virtually all of the computation of statistics is done with computers, we will be devoting time for you to become familiar with statistical software. On examinations, some manual calculations will be required. You will need a hand calculator having a square-root function. One set of computer-based exercises will be required using Microsoft Excel. Homework will be assigned as needed to supplement each week's lecture. At the end of this course, you will be familiar with several types of statistics and be able to interpret statistical findings. We will end the course by learning Ordinary Least Squares (OLS) models.

### Learning Objectives

The specific objectives of this first course in statistical analysis are:

- To develop an understanding of the basic statistical techniques
- To learn to choose a statistic appropriate for a particular analytical task
- To be able to translate the results of statistical analyses into a conclusion regarding the questions posed

- To introduce students to statistical software
- To show students the importance of statistics for their future work/school experience(s)
- To show how statistical techniques are used in scholarly journals
- Conduct basic data analysis using MS Excel

## Prerequisites

No previous background in statistics is assumed or necessary for successful completion of the course.

## Course Notes

The course utilizes Brightspace (<https://www.brightspacehelp.usc.edu/students/>) for posting lecture slides, assignments, syllabus, and readings.

## Brightspace

### *How to Log In*

To access Brightspace today, follow these steps:

1. Go to <https://brightspace.usc.edu/d2l/login> to login. You can also find Brightspace on myUSC.
2. Enter your USC Net ID to access
3. Begin navigating through Brightspace

I also encourage you to download the mobile app, Brightspace Pulse, available in both the [Apple App Store](#) and [Google Play](#).

### *What to Expect*

Brightspace provides an enhanced learning experience with detailed class progress reports. With Brightspace, you can easily see all assignment due dates in one place. Upon opening Brightspace, you will find the following:

- **The PPD 504 Essential Statistics for Public Management Course:** We will use this course to complete work for this course throughout the semester.

### *Support Resources*

Do you want to learn more about Brightspace? Check out training and resources in the [Brightspace Student Tutorials](#). For office hour support, [please sign up here](#). Find technical support information below:

- **Student Guides:** [Brightspace Student Guides](#)
- **Brightspace Technical Support Line:** 888-895-2812
- **Brightspace Email Support:** [usc@d2l.com](mailto:usc@d2l.com)

## Technological Proficiency and Hardware/Software Required

In-class activities will require a student to use a computer for data analysis. Excel software is required for in-class data analysis, excel labs, and some problem sets. It is required to bring a laptop with Excel installed to Excel Labs to be able to do Excel Lab Exercises. If you do not have Excel, you can download it for free with your USC student account at the following link: <https://itservices.usc.edu/officestudents/>

## Class and Office Hour Meetings in Zoom

Classes and office hours are held via Zoom. For security purposes, you will be placed in a waiting room if you do not sign on with USC credentials, in which case will have to wait for me to release you from waiting.

- **Attendance and Recordings:** There is no class attendance requirement for the course but I encourage you

to attend our live sessions so that you can ask questions, comment, and interact in other ways. That being said, I understand that you may not always be able to attend; therefore, I will record all of our sessions and post a link on Brightspace.

- **Video:** When you enter the virtual classroom, please **turn on your video** so that I can see you. Online delivery and electronic interaction can feel impersonal; I hope that seeing one another helps decrease that feeling. Feel free to turn off your camera if you need privacy, but please turn it back on when possible. You can toggle your video on and off by clicking the camera icon near the bottom left corner of the window. (Other video- related options are accessed by clicking on the adjacent ^ symbol.)
- **Audio:** When you enter the virtual classroom, you will automatically be muted. Please **leave yourself on mute** until you have a question or comment, but do not forget to re- mute once you finish speaking. To unmute and mute yourself, click on the microphone icon in the bottom left corner of the window. (Other audio-related options are accessed by clicking on the adjacent ^ symbol.) You can also unmute by holding down the spacebar while you speak; once you release the space bar you will return to mute.
- **Speaking in Class:** If you would like to ask a question or make a comment, you can:
  - 1) Type your question in the group chat. You can access this by clicking on the “Chat” icon at the bottom of the window. I will read your question aloud and respond when I reach a good breaking point. This option may only be good for relatively simple, succinct questions.
  - 2) Use the “raise hand” function. You will find this by clicking on the “Participants” icon at the bottom of the window. I will call on you when I reach a good breaking point, and then you can unmute and ask your question aloud. You can also “lower your hand” if I answer your question before calling on you.
  - 3) Type “raise hand” (or something akin to that) in the group chat. I will then call on you when I reach a good breaking point.
- **Additional Zoom resources:**
  - How to “raise your hand” in Zoom: <https://support.zoom.us/hc/en-us/articles/205566129-Raise-Hand-In-Webinar>
  - Attendee controls in a meeting (including mute and unmute): <https://support.zoom.us/hc/en-us/articles/200941109-Attendee-Controls-in-a-Meeting>
  - My video/camera isn’t working: <https://support.zoom.us/hc/en-us/articles/202952568-My-Video-Camera-Isn-t-Working>
  - Testing computer or device audio: <https://support.zoom.us/hc/en-us/articles/201362283-Testing-computer-or-device-audio>
  - Audio echo in a meeting: <https://support.zoom.us/hc/en-us/articles/202050538-Audio-Echo-In-A-Meeting>

## Required Readings and Supplementary Materials

### REQUIRED:

The course has one required textbook: *Applied Statistics for Public and Nonprofit Administration (Ninth Edition)* by Kenneth J. Meier, Jeffrey L. Brudney, and John Bohte.

There are many free online resources for learning how to use Excel that you may find to be helpful. For example, Microsoft Office website: <https://support.office.com/en-us/article/Excel-2013-videos-and-tutorials-aaae974d-3f47-41d9-895e-97a71c2e8a4a>

### Grading Breakdown

Category	% of Grade
Problem Sets (15% each)	30
Excel Lab Exercises (10% each)	20
Midterm Exam	25
Final Exam	25
TOTAL	100

### Grade Requirements

All students registered in the MHA, MNLM, MPP, and MPPDS programs must earn a grade of C or higher in order for the course to satisfy the degree program statistics prerequisite requirement. All other USC graduate students require a grade of C or higher to earn unit/grade credit.

### Grading Scale

93-100	A	73-76	C
90-92	A-	70-72	C-
87-89	B+	67-69	D+
83-86	B	63-66	D
80-82	B-	60-62	D-
77-79	C+	< 60	F

## Description and Assessment of Assignments

### **PROBLEM SETS (30%)**

Students will be asked to complete 2 problem sets that will be made available on Brightspace (<https://www.brightspacehelp.usc.edu/students/>). You are encouraged to work on problem sets in groups of 2 or 3, but each of you is required to complete your own problem set and to describe results in your own words. **Copying answers from someone else's problem set is plagiarism and will be treated as such.**

#### Problem Sets Submission and Late Assignment Policy:

Due dates for problem sets are given in the syllabus. Problem sets must be turned in at the beginning of the class on the due date or the due date specified on the course schedule (see page 5) and will not be accepted late. Short of a written doctor's excuse, there is no reason to be late with the assigned work. Students submit problem sets via Brightspace.

### **EXCEL LAB EXERCISES (20%)**

Students will be asked to complete 2 Excel Lab exercises. You are encouraged to work on the excel exercises in groups, but each of you is required to complete your own excel exercise. **Copying answers from someone else's excel exercise is plagiarism and will be treated as such.**

#### Excel Exercises Submission Policy:

Excel Exercises are submitted via Brightspace at the latest on the due date specified in the syllabus and will not be accepted late. It is required students use a Laptop with Excel during the Excel Labs.

### **EXAMS (50%)**

Exams are cumulative but new material has more weight.

### **Attendance Policy**

As students are attending from different time zones and continents, there is no class attendance requirement for the course, but you must submit exams and problem sets on time whether or not you attend class.

## Course Schedule: A Weekly Breakdown

June 3-August 5	Topics/Daily Activities	Readings from textbook	Deliverable/ Due Dates
<b>Week 1 - Mon</b> 06/03/24	Statistical Reasoning, Sampling, Observation Data vs Experiments, Data Ethics	Meier, Brudney, and Bohte Chapters 1, 2, 3	
<b>Week 2 - Mon</b> 06/10/24	Displays of Data, Measures of Central Tendency and dispersion	Meier, Brudney, and Bohte Chapters 4, 5, 6	
<b>Week 3 - Mon</b> 06/17/24	Correlation and Regression Intro	Meier, Brudney, and Bohte Chapters 2 (pg. 20), 17	
<b>Week 4 - Mon</b> 06/24/24	Excel Lab: Intro Excel, Descriptive Statistics, Plots, Correlation, and Regression	Meier, Brudney, and Bohte 4, 5, 6, 17	Excel Lab Exercises Due by THURSDAY midnight PST 06/27/24
<b>Week 5 - Mon</b> 07/01/24	Midterm Review Class		Problem Set 1 Due TODAY by 6pm PST (Before class)
<b>Week 6 - Mon</b> 07/08/24	<b>Midterm Examination</b>		
<b>Week 7 - Mon</b> 07/15/24	Distributions, Confidence Intervals, Hypothesis Testing, Statistical Significance	Meier, Brudney, and Bohte Chapter 7, 10, 11	
<b>Week 8 - Mon</b> 07/22/24	Regression and Excel Lab regression continued	Meier, Brudney, and Bohte Chapters 17, 20, 21	
<b>Week 9 - Mon</b> 07/29/24	Excel Lab: Regression in Practice	Meier, Brudney, and Bohte Chapters 20, 21	<u>Excel Lab</u> Exercises Due by WEDNESDAY midnight PST 07/31/24  <u>Problem Set 2</u> Due by THURSDAY midnight PST 08/01/24
<b>Week 10 - Mon</b> 08/05/24	<b>FINAL EXAMINATION</b>		

## ***Statement on University Academic and Support Systems***

### **Students and Disability Accommodations:**

USC welcomes students with disabilities into all of the University's educational programs. [The Office of Student Accessibility Services \(OSAS\)](#) is responsible for the determination of appropriate accommodations for students who encounter disability-related barriers. Once a student has completed the OSAS process (registration, initial appointment, and submitted documentation) and accommodations are determined to be reasonable and appropriate, a Letter of Accommodation (LOA) will be available to generate for each course. The LOA must be given to each course instructor by the student and followed up with a discussion. This should be done as early in the semester as possible as accommodations are not retroactive. More information can be found at [osas.usc.edu](http://osas.usc.edu). You may contact OSAS at (213) 740-0776 or via email at [osasfrontdesk@usc.edu](mailto:osasfrontdesk@usc.edu).

### **Student Financial Aid and Satisfactory Academic Progress:**

To be eligible for certain kinds of financial aid, students are required to maintain Satisfactory Academic Progress (SAP) toward their degree objectives. Visit the [Financial Aid Office webpage](#) for [undergraduate-](#) and [graduate-level](#) SAP eligibility requirements and the appeals process.

### **Support Systems:**

[Counseling and Mental Health](#) - (213) 740-9355 – 24/7 on call

Free and confidential mental health treatment for students, including short-term psychotherapy, group counseling, stress fitness workshops, and crisis intervention.

[988 Suicide and Crisis Lifeline](#) - 988 for both calls and text messages – 24/7 on call

The 988 Suicide and Crisis Lifeline (formerly known as the National Suicide Prevention Lifeline) provides free and confidential emotional support to people in suicidal crisis or emotional distress 24 hours a day, 7 days a week, across the United States. The Lifeline consists of a national network of over 200 local crisis centers, combining custom local care and resources with national standards and best practices. The new, shorter phone number makes it easier for people to remember and access mental health crisis services (though the previous 1 (800) 273-8255 number will continue to function indefinitely) and represents a continued commitment to those in crisis.

[Relationship and Sexual Violence Prevention Services \(RSVP\)](#) - (213) 740-9355(WELL) – 24/7 on call

Free and confidential therapy services, workshops, and training for situations related to gender- and power-based harm (including sexual assault, intimate partner violence, and stalking).

[Office for Equity, Equal Opportunity, and Title IX \(EEO-TIX\)](#) - (213) 740-5086

Information about how to get help or help someone affected by harassment or discrimination, rights of protected classes, reporting options, and additional resources for students, faculty, staff, visitors, and applicants.

[Reporting Incidents of Bias or Harassment](#) - (213) 740-2500

Avenue to report incidents of bias, hate crimes, and microaggressions to the Office for Equity, Equal Opportunity, and Title for appropriate investigation, supportive measures, and response.

[The Office of Student Accessibility Services \(OSAS\)](#) - (213) 740-0776

OSAS ensures equal access for students with disabilities through providing academic accommodations and auxiliary aids in accordance with federal laws and university policy.

[USC Campus Support and Intervention](#) - (213) 740-0411

Assists students and families in resolving complex personal, financial, and academic issues adversely affecting their success as a student.

[Diversity, Equity and Inclusion](#) - (213) 740-2101

Information on events, programs and training, the Provost's Diversity and Inclusion Council, Diversity Liaisons for each academic school, chronology, participation, and various resources for students.

[USC Emergency](#) - UPC: (213) 740-4321, HSC: (323) 442-1000 – 24/7 on call

Emergency assistance and avenue to report a crime. Latest updates regarding safety, including ways in which instruction will be continued if an officially declared emergency makes travel to campus infeasible.

[USC Department of Public Safety](#) - UPC: (213) 740-6000, HSC: (323) 442-1200 – 24/7 on call

Non-emergency assistance or information.

[Office of the Ombuds](#) - (213) 821-9556 (UPC) / (323-442-0382 (HSC)

A safe and confidential place to share your USC-related issues with a University Ombuds who will work with you to explore options or paths to manage your concern.

[Occupational Therapy Faculty Practice](#) - (323) 442-2850 or [otfp@med.usc.edu](mailto:otfp@med.usc.edu)

Confidential Lifestyle Redesign services for USC students to support health promoting habits and routines that enhance quality of life and academic performance.



## APPENDIX

### ACADEMIC RESPONSIBILITY

Students, faculty, and administrative officials at the University of Southern California, as members of the academic community fulfill a purpose and a responsibility.

The University must, therefore, provide an optimal learning environment, and all members of the University community have a responsibility to provide and maintain an atmosphere of free inquiry and expression. The relationship of the individual to this community involves these principles: Each member has an obligation to respect:

1. THE FUNDAMENTAL HUMAN RIGHTS OF OTHERS
2. THE RIGHTS OF OTHERS BASED UPON THE NATURE OF THE EDUCATIONAL PROCESS
3. THE RIGHTS OF THE INSTITUTION

### ACADEMIC DISHONESTY

The following statements and examples explain specific acts of academic dishonesty.

1. Examination Behavior: Any use of external assistance during an exam is considered academically dishonest unless expressly permitted.
  - a. Communicating in any way with another student during the examination.
  - b. Copying material from another student's exam.
  - c. Using unauthorized notes, calculators or other devices.
2. Fabrication: Any intentional falsification or invention of data or citation in an academic exercise will be considered a violation of academic integrity.
  - a. Inventing or altering data for a laboratory experiment or field project.
  - b. Resubmitting returned and corrected academic work under the pretense of grader evaluation error, when, in fact, the work has been altered from its original state.
3. Plagiarism: Plagiarism is the theft and subsequent passing off of another's ideas or words as one's own. If the words or ideas of another are used, acknowledgement of the original source must be made through recognized referencing practice.
  - a. Direct Quotation: Any use of a direct quotation should be acknowledged by footnote citation and by either quotation marks or appropriate indentation and spacing.
  - b. Paraphrase: If another's ideas are borrowed in whole or in part and are merely recast in the student's own words, proper acknowledgement must, nonetheless, be made. A footnote or proper internal citation must follow the paraphrase material.
4. Other Types of Academic Dishonesty:

- a. Submitting a paper written by another;
- b. Using a paper or essay in more than one class without the instructor's express permission;
- c. Obtaining an advance exam copy without the knowledge or consent of the instructor;
- d. Changing academic records outside of normal procedures;
- e. Using another person to complete homework assignment or take-home exam without the knowledge and consent of the instructor.

The above information is taken directly from *SCampus* and the Academic Affairs Unit of the Student Senate in conjunction with the Academic Standards Committee.

**ACADEMIC DISHONESTY**  
**SANCTION GUIDELINES**

<b>VIOLATION</b>	<b>RECOMMENDED SANCTION</b> (Assuming first offense)
Copying answers from other students on exam.	F for course.
One person allowing another to cheat from his/her exam or assignment.	F for course for both persons.
Possessing or using extra material during exam (crib sheets, notes, books, etc.)	F for course.
Continuing to write after exam has ended.	F or zero on exam.
Taking exam from room and later claiming that the instructor lost it.	F for course and recommendation for further disciplinary action (possible suspension).
Changing answers after exam has been returned.	F for course and recommendation for disciplinary action (possible suspension).
Fraudulent possession of exam prior administration.	F for course and recommendation for suspension.
Obtaining a copy of an exam or answer key prior to administration.	Suspension or expulsion from the university; F for course.
Having someone else take an exam for oneself.	Suspension or expulsion from the University for both students; F for course.
Plagiarism.	F for the course.

Submission of purchased term papers or papers  
recommendation done by others.

F for the course and  
for further disciplinary action.  
(possible suspension)

Submission of the same term papers to more than  
one instructor where no previous approval has been given.

F for both courses.

Unauthorized collaboration on an assignment.

F for the course for both students.

Falsification of information in admission application  
(including supporting documentation).

Revocation of university admission  
without opportunity to apply.

Documentary falsification (e.g., petitions and  
supporting materials medical documentation).

Suspension or expulsion from the  
university; F for course when related  
to a specific course.

Plagiarism in a graduate thesis or dissertation.

Expulsion from the university when  
discovered prior to graduation;  
revocation of degree when  
discovered subsequent to graduation.

Please refer to *Trojan Integrity: A Faculty Desk Reference*, for more information on assessing sanctions.  
You may also consult with members of the Office of Student Judicial Affairs and Community Standards at  
any point in the process, (213) 740-6666