SCHOOL OF PUBLIC ADMINISTRATION

PADM 596 **Data Analysis for Decision Making**

Credits hours: 3

Professor Agustin Leon Moreta
Fall 2025
Class Meeting: 6 to 8:45 pm on Tuesday at Dane Smith Hall (DSH) 132
Office Hours: 4 to 6 pm on Friday, and Zoom calls available by appointment
Address: Social Sciences 3006
Email: Email is best to get in touch. ***Allow* 24 *hours for a response to emails***.
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Phone: Call (505) 277-1092 if you need immediate assistance.

EXPECTED BACKGROUND

- STAT 145 Introduction to Statistics or equivalent coursework

COURSE DESCRIPTION

Welcome to PADM 596 *Research Methods for Public Managers: Data Analysis*. This course introduces students to basic statistical methods and their application to public management, policy, and decision-making. It covers the essential elements of descriptive statistics, univariate and bivariate statistical inference, and an advanced introduction to multivariate analysis. While discussing the foundations of statistical theory, the course emphasizes applied statistics and data analysis using the software package SPSS.

The course provides MPA students with fundamental tools for applied research and analysis in public and nonprofit organizations. It develops the knowledge and skills you will need to understand and effectively use statistical methods of research. We'll begin the course by reviewing fundamental concepts and techniques of descriptive statistics and then concentrate on methods of inferential statistics, emphasizing data analysis and reporting for applied public management and policy research. We'll study a variety of methods, including measures of central tendency, measures of dispersion, normal distribution theory, analysis of variance (ANOVA), chi-square, correlation, and multiple regression.

COURSE GOALS

This course presents methods for inquiry and analysis by public managers and students of public administration. It covers strategies for the design of quantitative research and the analysis of statistical data in institutional and field settings.

Students who complete the course are expected to leave with the ability to:

- Propose research questions for empirical analysis
- Design research strategies to test research hypotheses
- Understand the different types of data used by public managers, policy analysts, and researchers in public administration, policy, and applied social science
- Learn when and how to use alternative methodological techniques
- Appreciate the importance of using plain language to report data analyses and findings
- Use SPSS to analyze statistical data

STUDENT LEARNING OUTCOMES

The following MPA core outcomes of learning are addressed in this course. Students will be able to analyze:

1. Policies and programs by applying appropriate information technology and data management techniques
2. Policies and programs by applying appropriate quantitative methods of data analysis and reporting

COURSE POLICIES

Punctual Attendance Required: Attendance will be taken at the start of a class meeting. Per the UNM Student Handbook, a student may be dropped from the course as a consequence of absences from class. This attendance requirement applies equally to main-campus students and distance/online students. Online students must use a computer, a camera, and cable internet or a high-speed connection to participate in class. Your camera **must be *on*** during class meetings—students invisible to the professor won't be considered in attendance.

No Late/Makeup Assignments: Late or makeup assignments won't be accepted. Under exceptional circumstances, I reserve the right to consider a late submission for partial credit.

Workload/Credit Hours: This is a three-credit-hour class of the MPA program that requires **independent work and study**. To learn the course material successfully, graduate **students should commit at least 10 hours per week** to the course outside of class.

Electronic Devices: **Turn off cell phones** during class. A laptop is only permitted for class-related work, such as participating in class or taking notes. **Don't use your computer for other purposes**.

Student Feedback: Your feedback on the course will be welcome and appreciated. We'll ask for your feedback through various channels, formal and informal, throughout the semester.

Email Communication: Using your UNM email account is encouraged for electronic communication.

Syllabus Changes: This **syllabus will be updated** as needed at any time. I reserve the right to change any content of the syllabus including the grading rubrics, re-weighting, and assignments. Assignments may be changed or added at any point. I'll announce any significant change during class or update the syllabus. **Use the most recent syllabus posted on Canvas**.

UNIVERSITY POLICIES

Academic Integrity and Consequences: The University of New Mexico believes that academic honesty is a foundation principle for personal and academic development. All University policies regarding academic honesty apply to this course. Academic dishonesty includes, but is not limited to, cheating or copying, plagiarism (claiming credit for the words or works of another from any type of sources such as print, internet or electronic database, or failing to cite the source), fabricating information or citations, facilitating acts of academic dishonesty by others, having unauthorized possession of tests and exams, submitting work of another person or work

previously used without informing the professor, or tampering with the academic work of other students. **All course assignments are independent, individual work**. Student assignments will be checked for originality through the UNM Turnitin system. The University's statement on academic honesty and the consequences for failure to comply are available in the Catalog and the Pathfinder.

Accommodations: UNM is committed to providing equitable access to learning opportunities for students with documented disabilities. As your instructor, it is my objective to facilitate an inclusive classroom setting in which students have full access and opportunity to participate. To engage in a confidential conversation about the process for requesting reasonable accommodations for this class and/or program, please contact the Accessibility Resource Center (https://arc.unm.edu/) at arcsrvs@unm.edu or by phone at 505-277-3506.

Title IX: The University of New Mexico and its faculty are committed to supporting our students and providing an environment that is free of bias, discrimination, and harassment. The University's programs and activities, including the classroom, should always provide a space of mutual respect, kindness, and support without fear of harassment, violence, or discrimination. Discrimination on the basis of sex includes discrimination on the basis of assigned sex at birth, sex characteristics, pregnancy and pregnancy-related conditions, sexual orientation and gender identity. If you have encountered any form of discrimination on the basis of sex, including sexual harassment, sexual assault, stalking, domestic or dating violence, we encourage you to report this to the University. You can access the confidential resources available on campus at the LoboRESPECT Advocacy Center (https://loborespect.unm.edu), the Women's Resource Center (https://women.unm.edu), and the LGBTQ Resource Center (https://lgbtqrc.unm.edu). If you speak with an instructor (including a TA or a GA) regarding an incident connected to discrimination on the basis of sex, they must notify UNM's Title IX Coordinator that you shared an experience relating to Title IX, even if you ask the instructor not to disclose it. The Title IX Coordinator is available to assist you in understanding your options and in connecting you with all possible resources on and off campus. For more information on the campus policy regarding sexual misconduct and reporting, please see https://policy.unm.edu/university-policies/2000/2740.html and CEEO's website. If you are pregnant or experiencing a pregnancy-related condition, you may contact UNM's Office of Compliance, Ethics, and Equal Opportunity at ceeo@unm.edu. The CEEO staff will provide you with access to available resources and supportive measures and assist you in understanding your rights.

COURSE REQUIREMENTS

Participation: This will be worth 10 points out of 100 points. **Punctual attendance is required for every class** meeting of the semester. Active participation in class is expected. In class, please feel free to interrupt me with questions or comments. Please thoroughly study the weekly material in preparation for class participation. Participation includes asking questions, commenting on the class material, answering the instructor's questions, and exhibiting citizenship behavior in class. This participation requirement applies equally to main-campus students and distance/online students.

Problem Sets: Weekly problem sets will be worth 10 points out of 100 total points. They will be applied exercises regarding the weekly material. The problem sets are a key component of the

course because they give an opportunity for practical applications. The problem set will be announced on Canvas. I'm happy to take a look at working drafts of your work. If you'd like early feedback, feel free to send me draft versions at least twenty-four hours before the deadline. Weekly problem sets must be submitted on Canvas by Tuesday at 9 am.

Tests: These will be worth 20 points out of 100 total points. They will assess weekly reading assignments. **Readings must be completed before class** meetings when those readings will be discussed. Weekly readings will be based on the textbooks, but additional readings may be assigned during the semester. Weekly tests will be open on Canvas after class and are due by Tuesday at 9 am. Tests may include a variety of questions. Tests are a key component of this course because they give you opportunities for skill application and practice toward the final exam. To ensure the highest possible grade, each test offers three attempts for you to take.

Final Exam: The final exam will be worth 30 points out of 100 total points. The exam format will be similar to the tests but comprehensive of all course materials. This final examination will be open from November 30 after noon through December 2.

Research Paper: A research paper will be worth 30 points out of 100 total points. This project will include the submission of a paper. The paper should be written in APA style. In this research, you'll follow and complete projects 1 and 4 from Appendix E of the text (plus project 2 from page 393), using data from the General Social Survey (GSS) of 2012. You'll provide reports of your research over the semester and an oral presentation. Students' submitted work will be checked for originality through the Turnitin system. Your research paper should effectively apply methodological techniques learned from the course. I'll provide, in class or by email, further information regarding this research paper. Turn in your research paper by December 13.

GRADING

Participation	10
Problem sets	10
Tests	20
Research Project	30
Final exam	30
Total grade	**100 points**

Grading Rubric

(A+) Excellent: Outstanding work for a graduate student. Work at this level is unusually thorough, comprehensive, creative, innovative, methodologically sophisticated, and well written. Work is of the highest professional quality.

(A/A-) Very good: Strong work for a graduate student. Work at this level shows signs of creativity, is thorough and well-reasoned, indicates a strong understanding of appropriate methodological or analytical approaches, and meets professional standards.

(B+) Good: Good work for a graduate student; well-reasoned and methodologically sound. This is the graduate student grade that indicates the student has accomplished the basic objectives of the course.

(B) Adequate: Competent work for a graduate student even though some weaknesses are evident. Demonstrates competency in the key course objectives but shows some indication that understanding of some critical issues is less than complete. Methodological or analytical approaches used are adequate, but the student has not been thorough or has shown other weaknesses or limitations.

(B-) Borderline: Weak work for a graduate student; it barely meets the minimal expectations for a graduate student in the course. Understanding of salient issues is incomplete. Methodological or analytical work performed in the course is minimally adequate. Overall performance, if consistent in graduate courses, would not suffice to sustain graduate status in good standing.

(C/-/+) Deficient: Inadequate work for a graduate student; doesn't meet the minimal expectations for a graduate student in the course. Work is inadequately developed or flawed by numerous errors and misunderstandings of important issues. Methodological or analytical work performed is weak and fails to demonstrate the knowledge or technical competence expected of graduate students.

(F) Fail: Work fails to meet even minimal expectations for course credit for a graduate student. Performance is consistently weak in methodology and understanding, with severe limits in many areas. Weaknesses or limitations are pervasive.

TEXTBOOK AND SUPPLIES

***Required software to rent**:* SPSS Base Grad Pack 30.0: StudentDiscounts.com – SPSS Student and Teacher Discounts on Gradpack. Alternatively, SPSS is available for free at UNM computer labs: https://it.unm.edu/map/index.php

Your Canvas page is automatically loaded with the textbook by RedShelf. The bookstore will charge the cost of the ebook to your bursar account. If you want a print book or more information, check out https://bookstore.unm.edu/t-1unm_inclusiveaccess.aspx or contact inclusiveaccess@unm.edu. **Opt out before the deadline** if you prefer to buy the book from another vendor. Healey, Joseph. 2016. *The Essentials of Statistics: A Tool for Social Research*, 4th edition (posted on Canvas)

- Additional materials posted on Canvas

SCHEDULE OF ACTIVITIES

Week	Read	Test-Set by
I	Ch. 1 introduction	Aug 19
II	Ch. 2 basic descriptive statistics	Aug 26
III	Ch. 3 measures of central tendency	Sep 02
IV	Ch. 4 measures of dispersion	Sep 09
V	Ch. 5 the normal curve	Sep 16

VI	Ch. 6 introduction to inferential statistics	Sep 23
VII	Ch. 7 hypothesis testing I	Sep 30
VIII	Ch. 8 hypothesis testing II	Oct 07
IX	Ch. 9 hypothesis testing III	Oct 14
X	Ch. 10 hypothesis testing IV	Oct 21
XI	Ch. 11 association for nominal variables	Oct 28
XII	Ch. 12 bivariate correlation and regression	Nov 04
XIII	Ch. 13 partial correlation and multiple regression	Nov 11
	In-class presentations	Nov 18
	Thanksgiving—no class	Nov 25
	Final exam	Dec 02