PADM 596 Spring 2024

Data Analysis for Decision Making

Instructor: Young Joo Park, PhD (park@unm.edu)

Course Meetings: Tuesdays 6:00 PM - 8:30 PM

Office Hours: Wednesdays 9:00 AM - 11:00 AM and by appointment

This course introduces students to the use of multiple regression analysis for analyzing data in the social sciences. The main goals of the course are for the students to be able to (a) understand the use of empirical analysis for addressing policy issues as public managers, (b) read and critique empirical analysis in academic and professional publications, and (c) perform such analysis and interpret the results themselves. The course covers the basic multiple regression framework, as well as extensions of that framework that become useful in actual applications of empirical policy analysis and research. Students who complete the course are expected to leave with the ability to use Stata to analyze statistical data.

Prerequisites

A knowledge of statistics at the level of STAT 145 is assumed. Students will take a statistics quiz on the first day of class (see *StatisticsQuiz_Sample.pdf* on UNMLearn).

Mathematics

PADM 596 requires a basic competence in algebra. You need to be able to solve problems of the following sort:

1. $2X = 3X + 10 – 2(X-1)$
2. $3X + 2Y = 7$; $Y = 2X + 14$
3. $3/X = X$

You should be able to graph lines in $Y = a + bX$ form, and to know in a graph what a slope is and what a Y-intercept is.

Required Readings

1. Stata BE 6 months (or faster and larger version of Stata): You should be able to obtain this statistical software online: https://www.stata.com/order/new/edu/profplus/student-pricing/

2. Joseph F. Healey. 2016. The Essentials of Statistics: A Tool for Social Research. 4th Edition. Previous edition works. You should be able to correlate the chapters of the 2nd and 3rd with the chapters in the 4th and obtain this book online (e.g., Amazon) or in the University Bookstore. While textbook rental is available, I highly encourage you to purchase this book as the fundamental concepts of statistical techniques rarely change over time. You will also need the textbook when taking the in-class exams. It is critical that you read assigned material in advance of class.

3. Professional articles: available on UNM Learn, unless otherwise specified.

Grading

Final Exam	150 points
Midterm Exam	150 points
Weekly Quizzes	10 points * 10
Final Project	
• **Assignments**	100 points
• **Presentation**	50 points
• **Research Paper**	100 points
Participation	50 points
Total	700 points

If you feel like an assignment has been graded incorrectly, you can submit **a written request** for a re-grade within one week of the assignment being returned to you. This request should be made in writing and should detail why you believe that the grading is incorrect. I will re-grade the entire assignment, with special attention paid to the areas you noted in your request.

Mid-term and Final Exam: If you have documented, verifiable, and serious reason to miss an exam, you must provide the proof to me within 48 hours of the exam or you will receive a zero for it. Depending on the nature of the absence, a makeup exam will be given, or the weight of the missed midterm will be shifted to the final exam. An excused absence for the final exam will be made up for according to the policy of the college.

Weekly Quizzes: Each class will have some sort of assignment to assess your understanding of the course material. Most of these will be 20-minute quizzes at the end of class. **There is no provision for make-up assessments.**

Final Project: The final project will be completed in stages throughout the semester and will culminate in a research paper which is due on Tuesday May 7 @ 6:00 pm via UNM Canvas. Instructions for each assignment, the research paper, and presentation will be passed out during the semester. The research paper must be uploaded to UNM Canvas. Any research paper turned in after 6:00 pm on May 7 will lose 10 points. **After May 11, late research papers will not be accepted.** The projects will not be returned but I will discuss them with you if you wish.

Problem Sets: There will be two problem sets. It is highly encouraged to master the skills and concepts of the course. However, the problem sets will NOT be turned into the instructor. It will NOT be graded and no points will be earned. A key for each homework assignment will be posted on Learn so that you will be able to check your work.

Responsible Learning and Academic Honesty: We all have shared responsibility for ensuring that learning occurs safely, honestly, and equitably. Submitting material as your own work that has been generated on a website, in a publication, by an artificial intelligence algorithm (AI), by another person, or by breaking the rules of an assignment constitutes academic dishonesty. It is a student code of conduct violation that can lead to a disciplinary procedure. *Please ask me for help in finding the resources you need to be successful in this course. I can help you use study resources responsibly and effectively.* Off-campus paper writing services, problem-checkers and services, websites, and AIs can produce incorrect or misleading results. Learning the course material depends on completing and submitting your own work. UNM preserves and protects the integrity of the academic community through multiple policies including policies on student grievances (Faculty Handbook D175 and D176), academic dishonesty (FH D100), and respectful campus (FH CO9). These are in the Student Pathfinder (https://pathfinder.unm.edu) and the Faculty Handbook (https://handbook.unm.edu).

OTHER CLASS POLICIES

Attendance

Attendance is factored into the participation grade.

Students taking the course have some additional requirements that they must fulfill to receive full credit in the course. These expectations are due to the nature of distance education through a distributed format that relies on internet-based virtual presence rather than physical attendance. Students that do not meet these expectations may be dropped from the class. These expectations include:

• Working Digital Equipment – Students must have access to a computer with a working camera and access the internet. The available internet bandwidth must be robust enough to support both voice and video. For attendance purposes, distance students must be connected to the internet with the computer's camera on for the entire session: **students not visible to the instructor are not in attendance.**

• Appropriate Location – Students must find a suitable and quiet location that is free of noise and interruption when attending class. This location may be in an office or domicile, but other business or engagement may not be conducted during the class session. It is expected that distance students will devote their attention to class while it is in session.

• Appropriate Dress – Students should remember that they will be visible to the instructor and other students during the class session. So they should take care to dress appropriately. Formal or business wear is not required, but lounge or bed wear is discouraged.

Excused Absences: I do appreciate that you may experience truly extenuating circumstances which would prevent attending class or preparing an assignment by the deadline. In these cases, speak with me as soon as possible, provide written documentation, and we will make alternate arrangements. **Out of fairness to the rest of the class, I cannot adjust individual students' deadlines without supporting documentation.**

Class Room Distractions: I do not expect to see class room distractions in a graduate course. If you are a distraction and detract from the course, your actions will have a significant and negative effect on your grade. Please turn off all cell phones, instant messengers, and email.

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 Accessibility Resource Center at arcsrvs@unm.edu or by phone at 505-277-3506.

Citizenship and/or Immigration Status: All students are welcome in this class regardless of citizenship, residency, or immigration status. Your professor will respect your privacy if you choose to disclose your status. As for all students in the class, family emergency-related absences are normally excused with reasonable notice to the professor, as noted in the attendance guidelines above. UNM as an institution has made a core commitment to the success of all our students, including members of our undocumented community. The Administration's welcome is found on our website: http://undocumented.unm.edu/.