

PAD 5351: Applied Statistics for Public Administration

Spring 2020 Course Syllabus
University of Texas at El Paso
Master of Public Administration Program
Time: W: 17:00 to 20:00

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Office Hours: By appointment only

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Course Description

PAD 5351 is a course that focuses on how to conduct theoretically and methodologically sound quantitative research for students in public administration. Quantitative analysis is the main component of the course. Students will learn how to conduct statistical analyses by hand and with the statistical software SPSS. Basic hypothesis testing, sampling, and univariate/bivariate analysis are some of the statistical topics covered in this course. Regression analysis is the focus of the course as it is the main statistical method in academic and applied studies to examine the effects of independent variables on dependent variables. Ultimately, PAD 5351 is a course that gives tools to students access to perform policy analysis and program evaluation in the government and nonprofit workplaces.

Learning Objectives

By the end of this course, students will be able to:

- Understand and conduct statistical analyses by hand and by using statistical software.
- Use the appropriate statistical means to test hypotheses.
- Present research findings in written and oral form.

Required Texts

Meier, Kenneth J., Jeffrey L. Brudney, and John Bohte. 2015. Applied Statistics for Public and Nonprofit Administration. 9th ed. Thomson-Wadsworth.

Software

We will be using SPSS in this course. Various labs across UTEP campus have SPSS with varying hours of operation. It is also available via <https://my.apps.utep.edu/Citrix/MyAppsWeb/> using your my.utep.edu login. If you would like to rent SPSS for your personal computer, the following website offers it: <http://www.onthehub.com/spss/>. Should you choose this option, you will need the Standard GradPak. JASP statistical software can be downloaded at the following link <https://jasp-stats.org/download/>

Data set

We will be using a variety of data sets that will be available through the course shell at Blackboard. Also, Blackboard will be the channel to stay in touch, so check it regularly.

Course Requirements

- 1. Homework (180 points):** Homework assignments will be due often throughout the semester. Each homework assignment will be worth 30 points. There are a total of 9 assignments.
- 2. Exams (200 points):** Two non-cumulative exams will be given in the semester. Each exam is worth 100 points. You will have two hours to complete the exams. Both exams are open-book, open-note, & open-computer. The only source you may not use is another student
- 3. Participation (20 points):** Participation will be based off of attendance, arriving on time and not leaving early, and answering class questions.

Grade Components

Homework (6 @ 30 pts.)	180
Exams (2 @ 100 pts.)	200
Participation	20
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Total	400

Grading Scale

A = 90% - 100% (360-400)
B = 80% - 89.99% (320-359)
C = 70% - 79.99% (280-319)
D = 60% - 69.99% (240-279)
F = <60% (<240)

Students taking the course with the S/U option must earn a B to earn a Satisfactory grade.

Course Expectations & Policies

Courtesy

Comments and language in class should be professional and courteous. Cell phones are annoying and distracting. Please put them away or have them on vibrate for emergencies. Please arrive on time and refrain from leaving class early. These actions are distracting to the instructor and students. Part of being in an MPA program is learning professional skills for the workplace. Most weeks will have an assignment due. Being late to class will result in late penalties on assignments and paper components.

Student Privacy

Per regulations outlined in the Family Educational Rights and Privacy Act (FERPA), I will not discuss your grades, class performance, or any issues dealing with your personal circumstances as they relate to this course with another party that cannot legally access your collegiate records or legally obtain such information. I will not field phone calls from your parents concerning your performance or circumstances related to this course. Your performance may be discussed with other members of the faculty as it pertains to your progress in the program, consideration for awards/funding, and as it is relevant to other university and department-related considerations. 3

Student Disability Services

The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you believe you have a disability requiring an accommodation, please contact the university regarding services for students with disabilities.

Academic Misconduct

Any student found guilty of academic misconduct shall be subject to disciplinary action. Academic misconduct includes, but is not limited to, the following actions: 1. Cheating or knowingly assisting another student in committing an act of cheating or other forms of academic dishonesty. 2. Plagiarism is using another person's work without acknowledgment, making it appear to be one's own. Any ideas, words, pictures, or other source must be acknowledged in a citation that gives credit to the source. This is true no matter where the material comes from, including the internet, other student's work, unpublished materials, or oral sources. Intentional and unintentional instances of plagiarism are considered instances of academic misconduct. It is the responsibility of the student submitting the work in question to know, understand, and comply with this policy. If no citation is given, then borrowing any of the following would be an example of plagiarism: a) An idea or opinion, even when put into one's own words (paraphrase); b) A few well-said words, if these are a unique insight; c) Many words, even if one changes most of them; d) Materials assembled by others, for instance quotes or a bibliography; e) An argument; f) A pattern of idea; g) Graphs, pictures, or other illustrations; h) Facts; i) All or part of an existing paper or other resource.

3. Unauthorized possession of examinations, reserve library materials, laboratory materials, or other course-related materials.

4. Unauthorized changing of grades on an examination, in an instructor's grade book, or on a grade report; or unauthorized access to academic computer records.

5. Nondisclosure or misrepresentation in filling out applications or other University records in, or for, academic departments or colleges.

The current Student Code of Conduct definition of plagiarism can be found at:

<https://www.utep.edu/student-affairs/osccr/student-conduct/academic-integrity.html>

Syllabus Change Policy

The contents of this course syllabus are subject to change in the event of extenuating circumstances.

Course schedule

Date	Topic	Readings	Assignment
Jan 22	Introduction to course & review Types and levels of measurement		
Jan 29	Descriptive statistics <ul style="list-style-type: none">• Frequency distribution• Measures of central tendency• Measures of dispersion	MBB Ch, 4-6	
Feb 5	Probability and hypothesis testing <ul style="list-style-type: none">• Normal distribution• Z-scores• Differences between groups• Confidence Intervals	MBB Ch, 7, 11 & 12	Homework 1 Due
Feb 12 EXAM 1 (2 hours)	Analysis of ordinal and nominal data <ul style="list-style-type: none">• Contingency tables• Chi square test	MBB Ch. 14 & 15	Homework 2 due
Feb 19	Introduction to regression analysis <ul style="list-style-type: none">• Correlation analysis• Bivariate regression & Curve estimation• OLS assumptions and BLUE	MBB Ch. 17 & 18	Homework 3 is due
Feb 26	Multivariate regression analysis I <ul style="list-style-type: none">• Assumptions• Parameter estimation• Model evaluation• Interpreting outputs• Predicting	MBB Ch. 20 & 21	Homework 4 is due
Mar 4	Multivariate regression analysis II <ul style="list-style-type: none">• Dummy variables• Interaction effects• Quadratic terms	MBB Ch. 20 & 21	Homework 5 is due
Mar 11	FINAL EXAM		Homework 6 is due

