PAD 5351: Applied Statistics for Public Administration

Spring 2018 Course Syllabus
University of Texas at El Paso
Master of Public Administration Program

Time: M or W 17:00 - 20:00 (Hybrid) USASMA

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Office Phone: 915-747-6268
Office: Kelly 407
Office Hours: Bliss (Subway Commons Area) (M W: 15:00 - 17:00); and by appointment.

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 computer software. Basic hypothesis testing, sampling, and univariate/bivariate analysis are some of the statistical topics covered in this course. Regression analysis is the main 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 tools course that gives students access to concepts important for analysis in the government and nonprofit workplaces.

We meet in class 7 times during the semester. During this time, I will lecture about the week’s material and review last week’s homework. Each week also has a hybrid section. At some point before the next formal class meeting, you should do the material listed under “Hybrid Portion.” Most of the time, hybrid portions will be used for you to read about and practice basic statistics with computer software.

Learning Objectives - Course Specific
By the end of this course, students will be able to:
-Understand and conduct statistical analyses by hand and by using SPSS.
-Use the appropriate statistical means to test hypotheses.
-Present research findings in written form.

Learning Objectives - NASPAA Specific
PAD 5351 addresses the following NASPAA core competencies:
-To analyze, synthesize, think critically, solve problems, and make decisions.
-Through the analysis of data.
-Through developing and testing hypotheses of empirically-based research questions.
-To participate in and contribute to the public policy process.
-By offering policy solutions and recommendations to common public problems through data analysis and interpretation.
-To articulate and apply a public service perspective.
-By ethically analyzing and reporting statistical findings.
Required Texts

Required Software
We will be using SPSS in this course. Various labs across UTEP’s main campus have SPSS with varying hours of operation. It is also available via MyDesktop using your my.utep.edu login or directly accessing my.apps.utep.edu. We will go over how to install the necessary software if you decide to use the MyDesktop option. 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.

Course Requirements

1. Homework (210 pts.): Homework assignments will be due nearly every week of the semester. Each homework assignment will be worth 35 points. There are a total of 6 assignments. The first part of the assignment will be statistics problems that you should complete by hand (not with SPSS). The second half of the homework will sometimes be SPSS problems. You will be graded upon completing this portion of the assignment and interpreting results correctly.

2. Methods Critique (70 pts.): I will give you a paper that uses statistics we have covered in class towards the end of the semester. In a 2-3 page essay, you should critique the methods and statistics used. You should find “holes” in the author’s argument and methods and offer potential solutions.

Grade Components

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<th>Component</th>
<th>Points</th>
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<tbody>
<tr>
<td>Homework (6 @ 35 pts.)</td>
<td>210</td>
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<tr>
<td>Methods Critique</td>
<td>70</td>
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<tr>
<td>Total</td>
<td>280</td>
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Grading Scale

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<tr>
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<tbody>
<tr>
<td>A</td>
<td>90% - 100%</td>
<td>252 - 280</td>
</tr>
<tr>
<td>B</td>
<td>80% - 89.99%</td>
<td>224 - 251</td>
</tr>
<tr>
<td>C</td>
<td>70% - 79.99%</td>
<td>196 - 223</td>
</tr>
<tr>
<td>D</td>
<td>60% - 69.99%</td>
<td>168 - 195</td>
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<tr>
<td>F</td>
<td>&lt;60%</td>
<td>(&lt;168)</td>
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Students taking the course with the S/U option must earn a B to earn a Satisfactory grade.

Course Expectations & Policies

Courtsey
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 employers do not allow late arrivals to work. If your employer does allow late arrivals, then we’ll consider the class training for the worst-case scenario. Most weeks will have an assignment due. Being late to class will result in late penalties on assignments and paper components as outlined below. They are fairly strict, so please make note. In exchange, I will start class on time and not keep you past 8:00.

**Assignment Submissions**

Homework assignments are a major component of your final grade. Please use the following guidelines when submitting homework:

1. Assignments are not required to be typed. However, you must write legibly. If I cannot read your handwriting, answers will be graded based upon what I can decipher.

2. **All assignments and other course materials must be turned in to me in hard-copy form unless you must miss class. Then, you may turn in your homework through Blackboard.**

3. Assignments are due at the beginning of the class (5:00 PM). Assignments not turned in at this time will be considered late and late penalties as described below will be applied.

4. Some problems on the homework assignments will be computer-based. I will explain in the directions when you should use SPSS.

5. Please bring 2 copies of your homework to class. One copy will be turned in. The other copy will be for you to make notes, since I will go over homework problems at the beginning of class.

**Late Work Policy & Make-Up Exams and Assignments**

Since you have ample notice of the due dates of the assignments, and their requirements, no extensions will be given for assignments, unless there is approved professional, medical, legal (jury duty), or university documentation. Materials turned in after the indicated due date and time will automatically receive a 10% deduction. Late work will receive an additional 15% deduction for each additional 24 hours that pass in which the assignment is not turned in. I make no guarantees that late work submitted to my office mailbox or assignments slid under my door are actually delivered to me. It is your responsibility to ensure that I receive your materials.

**Extra Credit**

No extra credit will be offered in this course.

**Incompletes**

Incompletes will only be given in the most extreme and extenuating circumstances.

**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 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.

**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.


**Syllabus Change Policy**

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

Week 1 - Jan. 15/17: Introduction to Course & Review of Measurement, Mean, Median, Mode
   - MBB, Ch. 1, pp. 3-6.
   - MBB, Ch. 2, pp. 14-17; 23-29.
   - MBB, Ch. 5, pp. 91-98.

Hybrid Portion: Downloading SPSS
   - Notes in Blackboard Lectures tab.

Week 2 - Jan. 22/24: Standard Deviation & Z-Scores
   - Homework 1 Due.
   - MBB, Ch. 6, pp. 109-118.
   - MBB. Ch. 7, pp. 125-137.

Hybrid Portion: Uploading Data & Line Graphs in SPSS
   - Watch YouTube videos located in Blackboard Lectures tab.

Week 3 - Jan. 29/31: Inference & Hypothesis Testing with T-Tests
   - Homework 2 Due.
   - MBB, Ch. 10, pp. 167-176.
   - MBB, Ch. 11, pp. 183-198.

Hybrid Portion: Descriptive Statistics in SPSS & Histograms
   - Watch YouTube videos located in Blackboard Lectures tab.

Week 4 - Feb. 5/7: More Hypothesis Testing & Chi-Square
   - Homework 3 Due.
   - MBB, Ch. 13, pp. 213-217.
   - MBB, Ch. 14, pp. 237-240; 243-250.
   - MBB, Ch. 15, pp. 258-264.

Hybrid Portion: T-Tests & Chi-Square in SPSS
   - Watch YouTube videos located in Blackboard Lectures tab.

Week 5 - Feb. 12/14: Bivariate Regression
   - Homework 4 Due.
   - MBB, Ch. 17, pp. 319-342.
Hybrid Portion: Regression in SPSS
  -MBB, Ch. 18, pp. 350-362.

Week 6 - Feb. 19/21: Regression w/SPSS

Hybrid Portion: Bivariate Regression in SPSS
  -Watch YouTube videos located in Blackboard Lectures tab.

Week 7 - Feb. 26/28: Multivariate Regression
  -Homework 5 Due.
  -MBB, Ch. 20 pp. 390-411.

Hybrid Portion: Multivariate Regression in SPSS
  -MBB, Ch. 21, pp. 421-437.
  -Watch YouTube videos located in Blackboard Lectures tab.

Week 8 - Mar. 5/7: Advanced Topics in Statistics
  -Homework 6 Due.
  -Methods Critique due by 11:59 PM on Friday (for Monday class) and Sunday (for Wednesday class).