PAD 5351: Applied Statistics for Public Administration

Fall 2015 Course Syllabus
University of Texas at El Paso
Master of Public Administration Program

Time: M 17:00 - 20:00 (Hybrid)

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Office Phone: 915-747-6268

Office: Kelly 407
Office Hours: Bliss (M: 14:45 - 16:45);
UTEP (T 16:15-17:45; W 16:15-17:45),
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 Excel. 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 8 times during the week. During this time, I will lecture about the week’s material and review last week’s homework. We will also have a short multiple-choice/short answer quiz. Each week also has a hybrid section. At some point before the next formal class meeting, you should do the material listed under “Hybrid Day.” Most of the time, hybrid days will be used for you to read about and practice basic statistics with Excel.

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

Required Texts

All readings, exams, and assignments will be based upon the indicated edition of this text. There is no guarantee that older or newer editions will contain the same information. Other readings will also be made available on Blackboard.

Course Requirements
1. Homework (300 pts.): Homework assignments will be due nearly every week of the semester. Each homework assignment will be worth 50 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 Excel or SPSS). This will comprise 30 points and you will be graded on whether or not your answers are correct. The second half of the homework will be Excel problems. You will be graded upon completing this portion of the assignment and making a good faith effort to answer all the Excel problems.

2. Quizzes (70 pts.): Seven 10-point quizzes will be given at the beginning of class each week. Quizzes will be multiple-choice and short answer, covering topics from the previous week’s lecture and homework. They will not cover Excel.

3. Participation (30 pts.): Participation will be graded based upon coming to class prepared and able to answer questions posed. Coming to class on time and staying for the duration will be considered.

Grade Components

<table>
<thead>
<tr>
<th>Component</th>
<th>Points</th>
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<tbody>
<tr>
<td>Homework (6 @ 50 pts.)</td>
<td>300</td>
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<tr>
<td>Quizzes (7 @ 10 pts.)</td>
<td>70</td>
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<tr>
<td>Participation</td>
<td>30</td>
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<tr>
<td><strong>Total</strong></td>
<td>400</td>
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Grading Scale

<table>
<thead>
<tr>
<th>Grade</th>
<th>Range</th>
<th>Score Range</th>
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<tbody>
<tr>
<td>A</td>
<td>90% - 100%</td>
<td>360 - 400</td>
</tr>
<tr>
<td>B</td>
<td>80% - 89.99%</td>
<td>320 - 359</td>
</tr>
<tr>
<td>C</td>
<td>70% - 79.99%</td>
<td>280 - 319</td>
</tr>
<tr>
<td>D</td>
<td>60% - 69.99%</td>
<td>240 - 279</td>
</tr>
<tr>
<td>F</td>
<td>&lt;60%</td>
<td>&lt;240</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

**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 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 8:50. If we need to start class at a later time so that everybody can arrive on
time, we should discuss it now, during the beginning of the semester.

**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 (6:00 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 Excel.

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.

The current Student Code of Conduct definition of plagiarism can be found at: http://studentaffairs.utep.edu/Default.aspx?tabid=4386

**Syllabus Change Policy**

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

- Excel readings are located in Blackboard.

Oct. 26: Introduction to Course & Review of Mean, Median, Standard Deviation

Hybrid Day: Calculating mean, median, mode, and standard deviation in Excel
- Excel reading, pp. 84-87.

Nov. 2: Z-Scores
- Homework 1 Due.
- Quiz 1.
- MBB. Ch. 8, pp. 131-143.

Hybrid Day: Charts, Frequency Distributions, and Histograms in Excel
- Excel reading, pp. 43-52.

Nov. 9: Inference & Hypothesis Testing
- Homework 2 Due.
- Quiz 2.
- MBB. Ch. 11.
- MBB. Ch. 12, pp. 188-197.

Hybrid Day: More on Data Set Up in Excel
- Handout given in class on Nov. 9.

Nov. 16: Hypothesis Testing and Differences Between Groups
- Homework 3 Due.
- Quiz 3.
- MBB. Ch. 14.

Hybrid Day: T-Test in Excel
- Excel Reading, pp. 243-252.

Nov. 23 Hybrid Week: ANOVA and Chi-Square
- Homework 4 Due.
- Quiz 4.
- Read notes in Blackboard on ANOVA and Chi-Square.
- Do HOMEWORK 4 & 5
- MBB. Ch. 15
Hybrid Day: ANOVA and Chi-Square in Excel
- Excel Reading, pp. 282-284, 309-316.

Nov. 30: Bivariate Regression
- Homework 4 & 5 Due.
- Quiz 5.
- MBB. Ch. 18.

Hybrid Day: Bivariate Regression
- Excel Reading, pp. 343-345.

Dec. 7: Regression Assumptions and Multivariate Regression
- Homework 6 Due.
- Quiz 6.
- MBB. Ch. 19.
- MBB. Ch. 21.

Hybrid Day: Multivariate Regression
- Excel handout given in class Dec. 7.

Dec. 14: Multivariate Regression
- Homework 7.6 Due.
- Quiz 7.
- MBB. Ch. 23.