

PAD 6701
Quantitative Applications in Public Administration
Spring 2017

Instructor: Alexander Kroll, Ph.D.

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Office Hours: Tuesday and Thursday
5:00 – 6:00 PM, PCA 351B
or by appointment

Time: Thursday, 6:25 – 9:05PM

Location: Charles Perry (PC) 411

Teaching Assistant: S. Lorenzo Benaine

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Tuesday (Tutoring)

5:00 – 6:00 PM, PCA 254

Course Objectives

Quantitative data play an important role in public administration. In order to make well informed decisions, public administrators analyze trends, benchmark similar units, or examine whether an expensive program has made a significant difference. For these purposes, they make use of quantitative data, analyze them descriptively or try to draw inferences from a study sample to a population. They need to understand whether certain events correlate with each other or whether a policy intervention has had the intended effect. This course will provide students with basic statistics which will be helpful when managing public programs and services.

The course's critical objectives are:

- Being able to analyze data descriptively, needed to understand characteristics of distributions and time trends.
- Having a working knowledge of quantitative applications that will help to make sense of the basic statistics you will be confronted with in your daily work.
- Being able to examine causalities in the context of public administration, test hypotheses, and write about the results.
- Being able to use MS Excel for several types of statistical analyses.
- Being able to understand research articles that are based on quantitative applications, which will help you to better make sense of readings required for other classes in the MPA program.

MPA Program Objectives

More broadly, the course will also help you to achieve the following MPA program learning outcomes. Students will...

- Analyze and solve policy problems with both quantitative and qualitative approaches in the public sector.
- Communicate persuasively with multiple and diverse publics in written form
- Communicate persuasively with multiple and diverse publics in verbal form
- Understand the challenges and opportunities created in the international context of public management and policy making

Class Format and Communication

Every class will begin with a **lecture** by me. During this talk I might ask you a couple of questions or start a discussion on a certain topic, and you should be able to participate with ease, assuming you have done the assigned readings. This will be followed by group work or **practice sessions** using MS Excel.

Most communication outside of class will happen through email. Please regularly check your FIU emails and sign on to **Blackboard**. However, when you want to get in touch with me, don't use Blackboard, but send an email to my address which is listed at the top of this syllabus. Please always mention the class prefix "PAD 6701: ..." in the subject line of your email.

Tips How to Do Well in this Class

Based on past experiences, I want to make three suggestions:

- 1) **Keep up with the class.** Do the weekly assignments (reading, study questions, Excel homework) and try to do them well. Approaching the material step by step will make it easier to follow. There is nothing worse than beginning to study for the class only two days before the midterm.
- 2) **Allocate enough time for this class.** Many students think that doing well in a stats class is more difficult than doing well in other PA classes because the material is less intuitive and more difficult to comprehend. Readings and homework for this course might take longer than what you are used to from other classes, so schedule enough time.
- 3) **Make use of tutoring.** Since statistics can be a difficult subject, we offer tutoring. Lorenzo Benaine, the classes' TA, will hold office hours on Tuesdays between 5:00 – 6:00 PM. If you have any questions or you need further explanation of the material, go and see him. Of course, he cannot do the homework for you, but he can help enable you to do well in this class.

Readings

Berman, Evan and XiaoHu Wang. 2011. Essential Statistics for Public Managers and Policy Analysts. 3rd Edition. Washington, D.C.: CQ Press. ISBN: 9781608716777

Though there is a great deal of overlap between the book by Berman and Wang (hereafter "B&W") and my lectures, I will not go through this book "page by page." Thus, doing the

readings and attending the lectures will complement rather than substitute for each other. Not every detail in this book will be relevant for the class, which is why I suggest focusing on every week's **study questions** which will be posted on Blackboard and to take notes while reading. Don't get frustrated when you cannot make sense of every detail during the first reading – this is why we will discuss and elaborate on what you have read in class.

I have worked with different books before but selected B&W because it does a good job explaining statistical concepts in understandable ways and uses examples relevant for public administration. All additional readings will be provide through Blackboard. Hearing several explanations of a statistical concept using different media helps to improve our understanding. This is why I have also put up a couple of useful **videos** on Blackboard.

Software and Data

We will use **MS Excel** as our statistics software for this class. The idea to teach you doing all relevant types of statistical analyses using a program most of you are already familiar with and will have access to in most public and nonprofit organizations, rather than spending much time on learning a new and less common software like SPSS or Stata. However, using the Excel spreadsheet will not necessarily be always easier than using other software, especially when dealing with many variables and observations or doing multivariate analysis. Nevertheless, my experience shows that the benefits of the “Excel approach” outweigh its costs, and I know from prior classes that students generally liked working with Excel.

We will use different data sets which are all related to the context of public administration. One of the data sets we use is the **NASP-II survey**. Please note that the use of the data set is for in-class use only. Any other uses would require the owner's permission. I suggest that you bring a **flash drive** to every class and that you reserve the drive for this course only. As you will see, this is the easiest way to transfer data and work files from home to school and vice versa.

Deliverables and Grading

Deliverables	Weight	(Due) Dates
Midterm	35%	March 9
Take-Home Final	30%	April 20
Study Questions*	20%	Every week on the Wednesday (11:59PM) before class via Blackboard
Article Discussion	5%	April 13
Excel Homework Presentation (in Groups)	5%	Once in the semester; date and groups determined by lottery
Participation	5%	---

* 3% extra credit possible

If you miss the submission deadline for the take-home final, your score will be drastically reduced. Every day (the submission day ends at 11:59PM) of **tardiness** will decrease your score by one grade level (e.g., an A- will become a B- etc.). If the **study-questions** homework is submitted late, it will not be counted.

The lowest unrounded scores for the following letter grades are:

Exceeds expectations: **A** 95 **A-** 90

Meets expectations: **B+** 87 **B** 84 **B-** 80

Below expectations: **C+** 77 **C** 74

Schedule an appointment to see me: **D** 65 **F** below 65

Midterm

The in-class, closed-book midterm will consist of three parts – multiple choice, short answers, and comprehensive exercises which require to apply your knowledge of statistics. I reserved one class for the midterm preparation, including the discussion of a “mock midterm” as well as all your questions.

Take-Home Final

For the final you will have to conduct your own statistical analyses and write a **research paper** which explains your hypotheses, methods, and findings. Please be aware that this final is time consuming, so it will not be a good idea to start working on it only a couple of days before it is due. Though there will be some time in class to work on this final, it will also require additional work outside of the course. The paper needs to be submitted via Blackboard as a MS Word document which has your last name (e.g. “Hernandez.docx”) and as a printed hard copy **by April 20** (leave hardcopy in my mailbox in PCA).

Study Questions

You will find the study questions for every week on Blackboard. First of all, they will help to guide your reading by pointing out what you should focus on. Secondly, you will have to submit your answers to these questions **every week on the Wednesday before** class or earlier. You are expected to write a few **paragraphs** (not just bullet points) which altogether should be about **400-600 words**. Please submit your write-up as a MS Word file which has your last name (“Hernandez.docx”) through **Blackboard**.

Submissions which meet the formal requirements and do a good job in answering the questions will be granted **2 points**. Excellent submission will be awarded an additional **extra credit point** (you will be able to get up to 3 points of extra credit). Submissions which are too late, too short, too long, or of poor quality will receive **zero points**. Study questions will be posted for ten classes, which is why you can get 20 points altogether. Note that these 20 points are equal to 20% of your final grade. That is, every time you **miss out** on one “study-question homework,” your final score will be subsequently reduced by **2%**. Therefore, you should always submit your homework.

Please note that the homework you submit has to be **your own work**. Students are not allowed to submit identical write-ups (so if you work in groups, make sure that the writing is done individually) and not supposed to directly quote from the book chapters. Instead, you should provide your own examples and summarize the content of the chapters using your own words. If you make use of literature beyond the suggested readings, list your sources, but do not copy-and-paste from those. Take the statement on **plagiarism** (see below) seriously and note that **all submissions** will be run through **Turnitin.com**. If you want more information on how to cite and avoid plagiarism, have a look at this website: <https://owl.english.purdue.edu/>.

MS Excel Homework Presentations

After we will have begun to work with Excel, every class will end with Excel-related homework which you can begin in class and finish at home. Every student has to present his/her homework results **once** during the semester. The presentations are supposed to be done in **groups** (most likely consisting of 3 students) and will happen during the first **15 minutes** of every class. The composition of the groups will be determined by a **lottery** at the beginning of the semester.

Send your **Power Point** presentation to akroll@fiu.edu on the **day before class**. The homework presentation is worth **5 points**. If it turns out that a group member has put much less effort into the homework than the other members, the student will be scored **one grade level below** other members. If a student has not participated whatsoever, he or she will get **zero points** for this homework. If a group encounters free-rider problems, please get in touch with me.

Attendance, Classroom, and Academic Conduct

I understand that one unexpected work- or family-related emergency may require an absence during the course of the semester. **More than one unexcused absences will warrant an F**. Do not come late to class. Enrolling in the MPA program at MMC means that you are able to attend classes between 6:25PM and 9:05PM. If this does not work for you, you should enroll in our weekend or online programs. I do understand that traffic can be difficult around campus but showing up late should be the exception. I will not accept **patterns of tardiness** and may count **two late arrivals** as **one missed full class**. Please mute your cell phones and tablets and limit eating to before class or during break.

Statement on Plagiarism

Plagiarism is the representation of another person's words, ideas, and creative work in general as one's own. This misrepresentation is a breach of ethics that seriously compromises a person's reputation. Professional **careers have been ruined** by revelations of plagiarism. To avoid plagiarism, researchers and professionals in public, private, or

nonprofit organizations must scrupulously give credit whenever they use another person's idea, opinion, theory, written or spoken words, as well as any facts, statistics, graphs, drawings- any pieces of information- that are not common knowledge. The following rules should be observed to make sure that the distinction between one's own words, ideas or work, and those of others is justly maintained.

1. Put in **quotations** everything that comes directly from the text of another's work, especially when taking notes.
2. Alternatively, you can **paraphrase** another person's work, but be sure you are not just rearranging or replacing a few words. A good strategy is to (1) read over what you want to paraphrase carefully, (2) cover up the text with your hand, (3) write out the idea in your own words without peeking, and (4) check your paraphrase against the original text to be sure you have not accidentally used the same phrases or words, and that the information is accurate.
3. Whether you quote, paraphrase or otherwise borrow another's work, always **cite** or indicate the source of the information, and provide references following one of the many accepted styles or formats.
4. Common knowledge such as George Washington's date of birth or meaning of OLS regression need not be quoted, cited, or referenced. However, borrowing another's original or creative presentation of common knowledge should follow the above mentioned rules. **When in doubt, follow the rules.**

Of course, submitting a paper that is completely the work of another person is plagiarism in its most extreme form. A student who plagiarizes all or part of an assignment can expect severe cumulative penalties, ranging from **failure in the course** to **expulsion from the university**, with an annotation of the sanction received on the student's transcript.

It should be kept in mind that, although it is not as egregious an offense as copying someone else's work, **the extensive copying of a paper that one has prepared for one course** for subsequent use and submission in another course is totally inappropriate. Especially at the graduate level, students may wish to prepare more than one paper in the same area. However, these must be substantially different papers which, while they may be in the same general area, represent a substantively different focus and do not significantly overlap in written text.

Incompletes and Make-Up Exams

In the absence of a dire, documented emergency, **I am opposed to the granting of incomplete grades.** This is consistent with University policy. Make every effort to complete the course in a timely manner. Please note that enrolling in this class means you agree with the syllabus and are able to take exams and submit papers at the listed dates.

Exceptions will be very rare and only allowed in the case of a documented illness or emergency.

Americans with Disabilities Act

The Americans with Disability 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.

The **Disability Resource Center** collaborates with students, faculty, staff, and community members to create diverse learning environments that are usable, equitable, inclusive and sustainable. The DRC provides FIU students with disabilities the necessary support to successfully complete their education and participate in activities available to all students. If you have a diagnosed disability and plan to utilize academic accommodations, please contact the Center at 305-348-3532 or visit them at the Graham Center GC 190.

Course Schedule

Week	Topic & Reading
#1 – Jan 12	Introduction Read Syllabus
#2 – Jan 19	What We Use Statistics for: Examining Causalities & Theories B&W, Ch. 1 & 2 (until p. 26)
#3 – Jan 26	Quantitative Research Designs B&W, Ch. 2 (from p. 26)
#4 – Feb 2	Measurement & Sampling B&W, Ch. 3 & 5
#5 – Feb 9	Descriptive Statistics B&W, Ch. 6 & 7
#6 – Feb 16	The Concept of Significance Leon-Guerrero & Frankfort-Nachmias (2011), Ch. 7 B&W, Ch. 12
#7 – Feb 23	Measures of Association B&W, Ch. 8 Higgins (2005), Ch. 5

#8 – Mar 2	Recap: Midterm Prep & Questions
#9 – Mar 9	Midterm
#10 – Mar 16	<i>Spring Break</i>
#11 – Mar 23	Bivariate Regression B&W, Ch. 14
#12 – Mar 30	Multiple Regression B&W, Ch. 15 • Take-home final will be handed out
#13 – Apr 6	Writing a Research Paper Kroll (2014) article Moynihan et al. (2012) article
#14 – Apr 13	Discussing Quantitative Research DeHart-Davis & Pandey (2005) article Moynihan & Pandey (2007) article
#15 – Apr 20	No Class: Take-home final is due
