

PAD 5701: QUANTITATIVE ANALYSIS IN PUBLIC ADMINISTRATION

Spring 2016

MONDAYS, 5: 30-8:15 PM Bellamy 0003

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COURSE DESCRIPTION

This course is the second of the 5700-5701 sequence of introductory statistics courses. While the first covered research design, this course covers the utilization and interpretation of basic statistical techniques in the analysis of social science data with emphasis on applications in public administration and public policy. Topics include: descriptive and exploratory data analysis, sampling and the logic of classical statistical inference, the analysis of contingency tables, the statistics of group differences (i.e. t tests) and the statistics of relationships (correlation and regression analysis). We will use Excel and IBM SPSS statistical software for most if not all the exercises in class. Class will consist of lectures, discussions and computer lab time.

COURSE OBJECTIVES

Students who complete the course are expected to be able to :

- Develop research or policy questions that can be addressed using empirical evidence
- Interpret and analyze data relevant to the research or policy question
- Be familiar with primary and secondary sources of data useful for public administration
- Determine the applicability of appropriate statistical tools for specific research problems
- Be competent in the use of basic statistical tools in the conduct of research
- Be able to use statistical software in the analysis of data
- Be knowledgeable about the ethics of social science research

TEXTBOOKS AND READINGS

1. Meier, Brudney and Bohte 2014. **Applied Statistics for Public and Non Profit Administrators: 9th Edition** Cengage Publications (Required) -referred to as MBB

2. Keller, Dana K. 2016 **The Tao of Statistics 2nd Edition** Sage Publications referred to as TS

* SPSS: Access to SPSS is required. The software is available on several computers located in many computer labs throughout campus, including our school's lab located on the 6th floor of the Bellamy building and the graduate student lab in the basement of Strozier library.

* Excel: Access to Excel is required. You should download the Data Analysis Toolpak in Excel. There are 3 ways to use Excel for statistical analysis- function, formula or using the Data Analysis ToolPak. We will be using the last method for this class.

All course materials, homework assignments, class data sets and instructional changes will be posted on the course's Blackboard site. The data sets are also available on the textbook web sites : for MBB (in Excel and SPSS format). We will also be using data sets and examples from the Web.

COURSE REQUIREMENTS AND GRADING

Students are expected to read and reflect upon assigned readings and prepared to discuss them. Grades will be based on the following requirements:

1. Homework Assignments and Class Participation (30%)
2. Midterm Exam (35%)
3. Final Exam or Final Project (35%)

Letter grades will be assigned according to the following point totals: A=94 or higher; A-=90-93.99; B+=87-89.99; B=83-86.99; B-=80-82.99; C+=77-79.99; C=73-76.99; C-=70-72.99; D+=67-69.99; D=63-66.99; D-=60-62.99; F= less than 60.

MAKEUP WORK AND EXAMS

Late homework is NOT accepted without an academically valid and approved FSU excuse. The instructor will NOT give make-up exams.

ATTENDANCE POLICY

Regular attendance is considered essential to achieving a successful course outcome. If you miss a class, it is your responsibility to obtain complete information on that class from another student in the course.

ACADEMIC HONOR POLICY

Students are expected to uphold the Academic Honor Policy published in the Florida State University Bulletin and the Student Handbook. The Academic Honor System of the Florida State University is based on the premise that each student has the responsibility (1) to uphold the highest standards of academic integrity in the student's own work, (2) to refuse to tolerate violations of academic integrity in the university community, and (3) to foster a high sense of integrity and social responsibility on the part of

the university community. Please see the following web site for a complete explanation of the Academic Honor Policy. <http://academichonor.fsu.edu/policy/policy.html>

STUDENTS WITH DISABILITIES

Students with disabilities needing academic accommodation should: (1) register with and provide documentation to the Student Disability Resource Center; (2) bring a letter to the instructor indicating the need for accommodation and what type. This should be done during the first week of class. For more information about services available to FSU students with disabilities, contact the Student Disability Resource Center at 644-9566, sdrc@admin.fsu.edu, or visit the web site at <http://www.disabilitycenter.fsu.edu/>.

WEEKLY SCHEDULE

Week 1	January 11	Introduction and Logistics: Research Design, Data and Measurement Review	MBB Chapters 1 ,2 and 3 TS Chapters 1-5,23-26
Week 2	January 18	MLK Holiday	MBB Chapters 4,5 and 6 TS Chapters 6-12
Week 3	January 25	Descriptive Statistics	MBB Chapters 4,5 and 6 TS Chapters 6-12 ,27 Homework 1 due
Week 4	February 1	Probability Distributions	MBB Chapters 7
Week 6	February 8	Probability Distributions, Sampling and Statistical Inference	MBB Chapter 7,8 and 9
Week 7	February 15	Hypothesis Testing, Point and Interval Estimation	Chapters 10,11 and 12 TS Chapters 13,31-32,37 Homework 2 Due
Week 8	February 22	Mid Term Exam	MBB Chapters 1-12
Week 9	February 29	Difference of Means Tests	MBB Chapter 13 SN pp.92-98

Week 10	March 7-11	Spring Break	MBB Chapters 14,15 and 16 Homework 3 due
Week 11	March 14	Contingency Table Analysis	MBB Chapters 14,15 and 16

			TS Chapter 33
Week 12	March 21	Regression and Assumptions	MBB Chapters 17 and 18 TS Chapters 38-39
Week 13	March 28	Multiple Regression and Assumptions	MBB Chapter 20 and 21 Homework 4 due
Week 14	April 4	Time Series	MBB Chapter 19
Week 15	April 11	Special Topics in Regression and Final Exam Review	MBB Chapter 21 Homework 5 due
Week 16	April 18	Final Exam	MBB Chapters 14-21