PUAD 6605: Quantitative Techniques

Dr. Keith E. Lee Jr.

Fall 2019

E-mail: keith.lee@gcsu.edu
Office Hours: by appointment
Office: A & S 2-09

Web: keitheleejr.com
Class Hours: Thursday 7:30pm
Class Room: online

Course Description

This course provides an overview of statistical methods and hands-on application to managerial decision-making in public administration. Understanding statistical analysis and being able to work with data are important competencies of professionalism in public administration. Course topics include program evaluation, data collection and measurement in public administration, descriptive statistics, hypothesis testing, processes for selecting statistical tests and assessment of statistical assumptions, measures of association and other bivariate statistics, index variable construction, regression analysis, and an overview of selected other statistical and quantitative methods applied to problems of public administration. Students get hands-on experience through the use of SPSS. Recognizing the social, political, and economic context of data collection, analysis, and reporting practices in the public sector, this course also discusses the ethics of data analysis.

Course Objectives

Student Learning Outcomes:

- Demonstrate an ability to define, frame, think critically about and analyze important problems.

- Demonstrates an ability to utilize analytical tools to analyze, present, and interpret data, including appropriate design, statistical, and evaluative techniques for both organization decision making and policy decisions.

NASPAA Universal Competencies

- To analyze, synthesize, think critically, solve problems, and make decisions (a. demonstrate an ability to define, frame, think critically about, and analyze important problems; b. demonstrate an ability to utilize analytical tools to analyze, present, and interpret data, including appropriate design, statistical, and evaluative techniques for both organization decision making and policy decision).

Course Requirments

Required Textbook Masami Nishishiba, Matthew Jones, and Mariah Kraner. 2014. *Research Methods and Statistics for Public and Nonprofit Administrators*. Sage | CQPress.

Required Software: IBM SPSS Statistics Standard GradPack 26

Available at http://www.onthehub.com/spss/ for $58.99 (6 month rental price)

Supplemental Readings: There will be readings assigned to supplement the textbook. These readings will be journal articles or scanned book chapters. I will post these readings to GeorgiaVIEW and let you know when they become available.

Finally, I strongly encourage students to subscribe to Governing magazine. The subscription is free and is offered in print or digital format.

Course Assignments

Case Study (Due Sept 15 by 9:00 pm): You will draft a case study on your career choice and explore how quantitative data analysis can be used in your field of work. You can either choose your current career or the career you hope to move into once you finish your MPA degree. The report should be 750 - 1000 words.

Review/Discussion Questions and Exercises (Due dates vary; see calendar below): You are to complete the review questions at the end of each chapter. The list of questions to be answered for each set is in the course calendar below.

Research Paper (Due December 4 by 9:00 pm): You must draft an original, complete research paper on a topic of your choice with approval of the professor. You can use this project in the future for an independent research paper or for a capstone level project. *Original* means it cannot be something you have used or are currently using in another course. *Complete* means it has the following components:

1. Introduction
2. Literature Review
3. Research Question
4. Hypothesis
5. Methodology & Research Design

The paper should be no more than 25 pages using standard formatting (12-point font, double spacing, 1" margins, etc.). You should follow the style guidelines in the Chicago Manual of Style, 16th edition, using the Author-Date method of citing and referencing.. The research paper component of the grade includes peer review of two classmates' papers and a paper presentation.

Specification Grading

All of your assignments will be graded as Sat/Unsat and you will know exactly what is required for a passing grade. The purpose for this is to (hopefully) avoid the subjectivity of grading and to save you the urge to email asking why your paper was a 93 instead of a 97 or an 84 instead of a 90. Numerical grading, even with a strong rubric, is challenging and often inconsistent. Therefore, we will use specification grading and you get to determine your final grade in the class by completing one of the following bundles. The bundles must be completed as prescribed, i.e., you do not get to swap assignments. You *MUST* complete the bundle as specified. Note, I will give students the opportunity to revise and resubmit assignments that are borderline (which I realize is subjective, but I am doing my best). Students that receive an "R & R" will be given detailed feedback on how to make their assignment satisfactory and will be given one week to resubmit after the feedback is delivered.

Bundle	Satisfactory Grade on:
A	Research Paper, All Homework, and Case Study
B	Research Paper, Homework Chs. 7 - 13, and Case Study
C	Research Paper and Case Study
D	Research Paper
F	None of the above

Course Policies:

- **Office Hours and Contact:** Office hours are stated on the front page of the syllabus. I will be in my office to assist students during the times listed UNLESS an emergency arises in which case I will notify students. This is an online class and many of you are not in the area so I am also able to meet by appointment via phone or WebEx. Students can contact me via email (keith.lee@gcsu.edu) or GeorgiaView, though email is preferred.

- **Late Policy:** No assignments will be accepted after the due date. Every assignment will be posted with ample time to complete them, thus a medical/family emergency on the due date is not an acceptable excuse. Get your work done early and you should not have any issues.

- **Attendance and Absences:** There is not an attendance policy for this course, however it is the student's responsibility to watch all recorded WebEx recordings they miss.

- **Academic dishonesty:** Cheating, either on the exam or in the form of plagiarism, will not be tolerated and will result in an "F" in the course and a recommendation to the MPA coordinator that you be dismissed from the program. This class will use plagiarism detection via GeorgiaView.

- Please read these additional common syllabus statements provided by Georgia College.

Class Schedule

Week 01, 08/19 - 08/25: Course Introduction

- WebEx Session Thursday to Discuss Syllabus & Case Study

Week 02, 08/26 - 09/01: Becoming a Researcher

- Homework Ch 1: Answer questions #1-5
- Homework Ch 2: Answer question #1

Week 03, 09/02 - 09/08: Research Objective, Question, and Design

- Homework Ch 3: Answer questions #1, 2, 5-8
- Homework Ch 4: Answer questions #1-6
- WebEx Session Thursday

Week 04, 09/09 - 09/15: Research Objective and Question

- Case Study due 09/15 at 9:00 pm

Week 05, 09/16 - 09/22: Sample Selection & Data Analysis

- Homework Ch 5: Answer questions #1-5
- Homework Ch 6: Answer questions #1-3, 5, 7
- WebEx Session Thursday

Week 06, 09/23 - 09/29: Descriptive Statistis & Hypothesis Testing

- Homework Ch 7: Answer review and discussion questions #1-4 and statistic exercises Emily's data a-f and Jim's data a-c
- Homework Ch 8: Answer questions #1-6

Week 07, 09/30 - 10/06: Comparing Means

- Homework Ch 9: Answer review and discussion questions #1, 2, 4 and exercise questions #1-3
- Homework Ch 10: Answer questions #1-4
- WebEx Session Thursday

Week 08, 10/07 - 10/13: Bivariate Correlation

- Homework Ch 11: Answer questions #1-4

Week 09, 10/14 - 10/20: Chi-Square Analysis

- Homework Ch 12: Answer questions #1-6
- WebEx Session Thursday

Week 10, 10/21 - 10/27: No Content

- Work on Paper

Week 11, 10/28 - 11/03: Regression Analysis

- Homework Ch 13: Answer questions #1, 2, 4, 7
- WebEx Session Thursday

Week 12, 11/04 - 11/10: Qualitative Data Analysis

- Homework Ch 14: Answer questions #1-3

Week 13, 11/11 - 11/17: Writing Reports

- Submit First Draft of Paper
- WebEx Session Thursday

Week 14, 11/18 - 11/24: Paper Peer Review

- Peer Review two classmates' papers

Week 15, 11/25 - 12/01: Presentations

- Final Paper Edits
- WebEx Session Thursday

Week 16, 12/02 - 12/08: Presentations

- Paper Due
- WebEx Session Thursday (Presentations)

Week 17, 12/09 - 12/15: Presentations

- WebEx Session Thursday (Presentations)