

SYLLABUS
PADP 7120 – DATA APPLICATIONS
FALL 2026

CONTACT INFORMATION

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Office hours: Thursday, 2-4 PM, or by appointment

Course page at ELC: <https://uga.view.usg.edu>

COURSE DESCRIPTION

This course will help you better understand key concepts in data applications. You will learn how data helps us make decisions. You will use math to describe data and assess causal relationships.

This course contributes to our MPA program's Competency 3: To analyze, synthesize, think critically, solve problems and make decisions: "Students in the Master of Public Administration program at The University of Georgia will utilize various methods and analytical tools to analyze and interpret data to provide effective reasoning for decision-making and policy creation. Students will learn to effectively and concisely inform the public and other stakeholders of decisions and initiatives through the presentation of data and research findings. Furthermore, they will produce policy papers involving the synthesis of information, evaluation, and analysis of critical questions or problems currently facing the field of public administration and policy."

TEACHING APPROACH

I will help you identify the key concepts discussed in the material. Students often learn best in small study groups, so you will also work in groups.

This course works best if you have completed PADP 7110. I will assume you will have completed it.

This is a homework-intensive course.

COURSE REQUIREMENTS

Problem Sets (PS)

- You will complete 6 problem sets during the term.
- The sets are due at the beginning of class; late problem sets are accepted only by prior arrangement. **Due dates are listed in the Schedule of Topics.**
- You are encouraged to work together on problem sets but you will turn in your own work.
- The sets will be graded on completion, so hand in all your work with each set, including your calculations and explanations of your reasoning.
- Work out problems on lined paper in pencil. You must submit your answers to problem sets on paper in class.
- Your homework must include an affidavit that another student in the class reviewed it.

- Problem sets will be available electronically via ELC.

The first and second assessment will take place in the classroom. They will be open book and notes. Simple calculators required; graphing calculators are not allowed. Because computers are not allowed, you should buy a paperback version of the textbook. **The dates of these assessments are listed in the Schedule of Topics.**

In addition, you will complete a personal reflection on the use and abuse of data in governance. This is a credit/no-credit exercise. This document may prove useful when completing your final portfolio for the MPA program as an illustration of your understanding of data use and abuse in governance. Details about this document (e.g., length, format) will follow. **The due date is listed in the Schedule of Topics.**

EVALUATION

Your final evaluation is based on the components listed above, given the following weights:

<u>Component</u>	<u>Weight</u>
1. First Assessment	35%
2. Second Assessment	35%
3. Problem Sets	20%
4. Personal Reflection on Data Use and Abuse	10%

An A will be awarded to anyone with 93 or more points, an A- to those with 90-92.99 points, a B+ to those with 87-89.99 points, a B to those with 83-86.99 points, a B- to those with 80-82.99 points, a C+ to those with 77-79.99 points, a C to those with 73-76.99 points, a C- to those with 70-72.99 points, a D to those with 60 to 69.99 points, and an F to anyone receiving fewer than 60 points in the course.

SCHEDULE OF TOPICS

See ELC at <https://uga.view.usg.edu>

TEXT AND MATERIALS

- Required:
 - Stephens, Larry J. 2009. Beginning Statistics. 2nd Edition. Schaum. (S) ISBN-13: 978-0071635332.
- I will distribute other readings online at the course home page.

Use of Software The purpose of this class is to provide a foundation of knowledge about the use of statistics in making decisions in the public sector. I do not focus on using statistical software but instead emphasize the meaning and mechanics of statistical decision-making. We complete problem sets by hand – we do not use statistical software.

However, some students with previous training in statistics may find parts of this class too slow. As such, I encourage those students to use this class to reinforce their understanding of the meaning and mechanics of statistical decision-making. If you also want to learn a statistical software package, you may use any extra time for the following:

- Read the relevant sections of this open access textbook:
 - Jenkins-Smith, Hank, et al. 2017. Quantitative Research Methods for Political Science, Public Policy and Public Administration, With Applications in R. University of Oklahoma Libraries.
 - Available at: <https://open.umn.edu/opentextbooks/textbooks/quantitative-research-methods-for-political-science-public-policy-and-public-administration-with-applications-in-r-3rd-edition>
- Install R and RStudio on your computer, as discussed in the book.
- Install R Commander, as shown at <https://socialsciences.mcmaster.ca/jfox/Misc/Rcmdr/>.
- Practice using R to do basic statistics, as shown in the book.
- Alternatively, use R, RStudio, and R Commander on Vlab at <https://vlab.uga.edu/vpn/index.html> (although workspaces may need to be reestablished regularly) or RStudio online at <https://rstudio.cloud> (although you may not be able to run R Commander in this environment).

I encourage you to learn a statistics package like R if you have time and energy. However, my first commitment is to help all members of this class understand the meaning and mechanics of statistical decision-making. For this reason, I will not devote time in class to covering R, helping with installs, etc.

COURSE POLICIES AND OTHER INFORMATION

The course syllabus is a general plan for the course; deviations announced to the class by the instructor may be necessary.

Instructor Availability If you would like to speak with me outside of class, feel free to email me to arrange a meeting. Occasionally I have meetings during the day and may be unavailable. To ensure that I am available on a given day, email me at least 24 hours in advance to set a specific time to meet.

Class Attendance/Participation Students are expected to participate through asking questions and answering inquiries raised in class. You cannot participate if you are not physically present. To adequately prepare for class, all assigned readings should be completed by the dates indicated on the course schedule. Not all assigned readings may be discussed in class; nonetheless you are responsible for familiarizing yourself with them.

Prohibition on Recording In the absence of written authorization from the UGA Disability Resource Center, students may not make a visual or audio recording of any aspect of this course.

Students who have a recording accommodation agree in writing that they:

- Will use the records only for personal academic use during the specific course. Understand that faculty members have copyright interest in their class lectures and that they agree not to infringe on this right in any way.
- Understand that the faculty member and students in the class have privacy rights and agree not to violate those rights by using recordings for any reason other than their own personal study.
- Will not release, digitally upload, broadcast, transcribe, or otherwise share all or any part of the recordings. They also agree that they will not profit financially and will not allow others to benefit personally or financially from lecture recordings or other course materials.
- Will erase/delete all recordings at the end of the semester.
- Understand that violation of these terms may subject them to discipline under the Student Code of Conduct or subject them to liability under copyright laws.

Special Needs Students with special needs that require accommodation should notify the Office for Disability Services and me as soon as possible so the appropriate arrangements can be made. All information as well as documentation is considered confidential.

UGA Student Honor Code "I will be academically honest in all of my academic work and will not tolerate academic dishonesty of others." A Culture of Honesty, the University's policy and procedures for handling cases of suspected dishonesty, can be found at honesty.uga.edu.

Religious Holidays Students who are absent from academic or social activities because of religious observances will not be penalized. If you desire to be excused from class to observe a religious holiday, notify me in advance. You are still responsible for any material covered during the excused absence but will be permitted a reasonable amount of time to make up any work missed. If an event is scheduled during the class at which you are excused for a religious observance, you should make arrangements with me as soon as possible for an alternate time or be given a comparable assignment.

Artificial Intelligence The policy regarding the use of artificial intelligence in this course varies by assignment. Please see each assignment for details.

Miscellaneous No "extra credit" will be assigned in this course under any circumstances. Keep in mind that final grades may only be changed in the event of a clerical error (e.g., points summed incorrectly). Also, for privacy reasons, information pertaining to course grades cannot be discussed over the telephone or via email. A final grade of "Incomplete" will only be given in this course under extraordinary circumstances and is solely at the discretion of the instructor. The course syllabus is a general plan for the course; deviations announced to the class by the instructor may be necessary. Please silence devices while in class. Devices and laptops may only be used in-class with my permission. I accept late work after the due date only by prior arrangement. You must type any grade appeals and attach supplemental information as appropriate.

UGA Well-Being Resources

UGA Well-being Resources promote student success by cultivating a culture that supports a more active, healthy, and engaged student community.

Anyone needing assistance is encouraged to contact Student Care & Outreach (SCO) in the Division of Student Affairs at 706-542-8479 or visit sco.uga.edu. Student Care & Outreach helps students navigate difficult circumstances by connecting them with the most appropriate resources or services. They also administer the Embark@UGA program which supports students experiencing, or who have experienced, homelessness, foster care, or housing insecurity.

UGA provides both clinical and non-clinical options to support student well-being and mental health, any time, any place. Whether on campus, or studying from home or abroad, UGA Well-being Resources are here to help.

- Well-being Resources: well-being.uga.edu
- Student Care and Outreach: sco.uga.edu
- University Health Center: healthcenter.uga.edu
- Counseling and Psychiatric Services: caps.uga.edu or CAPS 24/7 crisis support at 706-542-2273
- Health Promotion/ Fontaine Center: healthpromotion.uga.edu
- Accessibility and Testing: accessibility.uga.edu

Additional information, including free digital well-being resources, can be accessed through the UGA app or by visiting <https://well-being.uga.edu>.