Statistical Analysis for Public Policy

Last Updated: Thu, 01/08/2026

Course prefix: PUBP

Course number: 3120

Section: EG

CRN (you may add up to five):
30379

Instructor First Name: Ryan

Instructor Last Name: Anthony

Semester: Spring

Academic year: 2026

Course description:

This course serves as an introduction to probability, descriptive statistics, inferential statistics, and spreadsheets. The

focus of the course is the application of basic statistical concepts to public policy and administration. It is intended

for students who have a wide range of methodological backgrounds (e.g. mathematics, statistics, econometrics, and

computer science).

Course learning outcomes:

This course introduces students to the foundational concepts of statistics. The primary emphasis will be on applying

statistics to applications in public policy. Throughout the semester, students will learn how to extract meaning from

statistical data and how to generate conclusions with a critical lens.

This course provides a basic introduction to:

1. Descriptive statistics

2. Probability

3. Inferential statistics

4. Regression

5. Research design

Required course materials:

Course Text

The primary textbook is *Statistical Methods for the Social Sciences 5th Edition* by Alan Agresti (previous editions co-

authored with Barbara Finlay). We will be using the 5th edition, but you can feel free to purchase an earlier version if it is more affordable. You may purchase this book in electronic format or in hard copy. More details on this will be provided on the first day of class.

Additionally, there is an optional book for this class: *Naked Statistics: Stripping the Dread from the Data* by Charles Wheelan. We will be using this book to gain intuition on the concepts we will be discussing in class. You may purchase this book in electronic format or in hard copy. Any additional readings will be made available through Canvas.

Additional Materials

You must bring a laptop to class. We will be using Microsoft Excel throughout the semester to conduct our

computer-based applications. Excel is made available by Tech via Microsoft 365.

Grading policy:

Grading:

Participation:	10%
Problem Sets:	40% (10% each)
Midterm Exam:	20%
Final Exam:	30%

There will be four problem sets spread throughout the semester, each worth 10% of your overall grade (40% total). They will be due on Wednesdays. These assignments will be a mix of statistical and conceptual questions. These problem sets will be due on the following dates:

Problem set #1: February 4, 2026 at 11:59pm

Problem set #2: February 25, 2026 at 11:59pm

Problem set #3: April 1, 2026 at 11:59pm

Problem set #4: April 22, 2026 at 11:59pm

There will be two exams in this class. The first exam, which will cover the material from the first half of the

semester, will be on March 4, 2026 and will count for 20% of your grade. Students will have the opportunity to revise their midterm exam and earn back up to half of the points lost on the original submission.

The second exam will cover material from the entire semester but will focus more heavily on the material that we learned after the midterm exam took place. This exam is worth 30% of your grade and will occur on the date and time assigned by the university (May 1, 2026 at 8 am).

Late work:

Late work will be accepted for 5 days following the due date. On each day that an assignment is late, 10% of the

grade for that assignment will be deducted. An assignment turned in one day late can receive a maximum of 90%,

while an assignment turned in two days late can receive a maximum of 80%, and so on. After 5 days, I will no

longer accept the late assignment.

Grading Scale

A 90-100%

B 80-89%

C 70-79%

D 60-69%

F 0-59%

Attendance policy:

Attendance is required for this class and contributes to the participation component (10%). You will be permitted 3

absences with no questions asked. After that point, only excused absences will be permitted with no cost to your

grade.

Academic honesty/integrity statement:

Students are expected to maintain the highest standards of academic integrity. All work submitted must be original and properly cited. Plagiarism, cheating, or any form of academic dishonesty will result in immediate consequences as outlined in the university's academic integrity policy.

Georgia Tech aims to cultivate a community based on trust, academic integrity, and honor. Students are expected to

act according to the highest ethical standards. For information on Georgia Tech's Academic Honor Code, please

visit the GT Policy Library. Any student suspected of cheating or plagiarizing on a quiz, exam, or assignment will

be reported to the Office of Student Integrity, who will investigate the incident and identify the appropriate penalty

for violations.