



Course EPPS 2302.003
Course Title Methods of Quantitative Analysis in the Social and Political Sciences
Instructor Minh Dao
Term Fall, 2025 (August 25 – December 9)
Meetings M/W 8:30–9:45AM, GR 3.302

Instructor’s Contact Information

Office Location GR 3.314
E-mail Address Minh.Dao@utdallas.edu (preferred)
Please include “EPPS2302” in the subject line & address formally (e.g., Mr. Dao)
Office Hours Monday & Wednesday: 12:00 AM – 1:00PM, or by appointment

General Course Information

Prerequisites, Co-requisites, & Other Restrictions No prerequisites, but comfort with mathematical operations at a college level is strongly encouraged.

Course Description The course introduces basic concepts and methods of statistical analysis used in different social and policy science research fields to understand better human relationships and the impacts of government action on them. Topics include data description, using probability to assess the reasonableness of claims about the world based on sample data, exploring cause-effect interactions through regression models, and applying software to ease visualization and calculation. Students completing this course will be good consumers of statistical information and have a solid foundation for further study of quantitative analysis.

Learning Outcomes

- Describe and visualize data.
- Understand and apply basic statistical concepts such as a population, a sample, a sampling distribution, and a probability distribution.
- Formulate hypotheses and examine them appropriately.
- Understand how to use regression analysis.

Required Texts & Materials

- Sullivan (2025). *Statistics: Informed Decisions Using Data*; 7th ed.; Pearson. This is an electronic text embedded in an online portal. Choose your ISBN Carefully. **You can also purchase online access directly through eLearning, often at a discounted rate.**
- **ISBN 9780138253424. Online Direct with 18 Weeks of Access, including e-Text, MyLab and Mastering, and Learning Catalytics**
- While we won’t be working with large sets of numbers, the involved math will be sufficiently complex to require a calculator. Sophisticated, expensive graphing or programmable calculators are unnecessary and will be useless to you. Any calculator that can take logs, exponents, factorials, and powers should suffice. For example, the TI-36X Pro is widely available and retails under \$30.

Assignments & Academic Calendar

Wk	Class	Date	Topic	Readings (to be read BEFORE class)	Activity
1	#1	8/25	Course Introduction		
	#2	8/27	Data collection; Organizing and Summarizing Data	Chapter 1&2	
2		9/1	Labor Day – No Class		Quiz 1 Due by 11:59PM
	#3	9/3	Organizing and Summarizing Data (continued)	Chapter 2	
3	#4	9/08	Numerically Summarizing Data	Chapter 3	Quiz 2 Due by 11:59PM
	#5	9/10			
4	#6	9/15	Describing the Relation Between Two Variables	Chapter 4	Quiz 3 Due by 11:59PM
	#7	9/17			
5	#8	9/22	Probability	Chapter 5	Quiz 4 Due by 11:59PM
	#9	9/24			
6	#10	9/29	Discrete Probability Distribution	Chapter 6	Quiz 5 Due by 11:59PM
	#11	10/1			
7	#12	10/6	The Normal Probability Distribution	Chapter 7	Quiz 6 Due by 11:59PM
	#13	10/8			
8	#14	10/13	Sampling Distributions	Chapter 8	Quiz 7 Due by 11:59PM
	#15	10/15			
9	#16	10/20	Estimating the Value of a Parameter	Chapter 9	Quiz 8 Due by 11:59PM
	#17	10/22			
10	#18	10/27	Hypothesis Tests Regarding a Parameter	Chapter 10	Quiz 9 Due by 11:59PM
	#19	10/29			
11	#20	11/3	Inferences on Two Population Parameters	Chapter 11	Quiz 10 Due by 11:59PM
	#21	11/5			
12	#22	11/10	Inference on a Categorical Variable	Chapter 12	Quiz 11 Due by 11:59PM
	#23	11/12			
13	#24	11/17	Comparing Three or More Means	Chapter 13	Quiz 12 Due by 11:59PM
	#25	11/19			
14		11/24	Fall Break – No Class		
		11/26			
15	#26	12/1	Inference on Least-Squares Regression Model & Multiple Regression	Chapter 14	Quiz 13 Due by 11:59PM
	#27	12/3			Final Exam Available
16	#28	12/8	Nonparametric Statistics (Last class)	Chapter 15	Quiz 14 Due by 11:59PM
		12/15	(No class)		Quiz 15 Due by 11:59PM
		12/18	(No class)		Final Exam Due by 11:59PM

Course Policies

Class Materials The instructor may provide class materials that will be made available to all students registered for this class as they are intended to supplement the classroom experience. These materials may be downloaded during the course; however, these materials are for registered students' use only. Classroom materials may not be reproduced or shared with those not in class or uploaded to other online environments except to implement an approved Office of Student AccessAbility accommodation. Failure to comply with these University requirements is a violation of the [Student Code of Conduct](#).

Class Attendance The University's attendance policy requirement is that individual faculty set their course attendance requirements. Regular and punctual class attendance is expected. Students who fail to attend class regularly are inviting scholastic difficulty.
In this class, attendance will be taken at most (if not all) class meetings using an online tool called LearningCatalytics. The LearningCatalytics tool is included with your electronic text book. Your final grade includes 150 points for attendance and participation. You will receive a percentage of these points based on your performance on these LearningCatalytics exercises. Credit will be awarded based on 1) your correct answer to the question and 2) your participation in the exercise. You must be present for the attendance and participation activity to receive credit.

Class Participation Regular class participation is expected. Students who fail to participate in class regularly are inviting scholastic difficulty. A portion of the grade in for this course is directly tied to your participation in this class. It also includes engaging in group or other activities during class that solicit your feedback on homework assignments, readings, or other materials. Class participation is documented by the instructor. Successful participation is defined as consistently adhering to University requirements, as presented in this syllabus. Failure to comply with these University requirements is a violation of the [Student Code of Conduct](#).

Class Recordings Students are expected to follow appropriate University policies and maintain the security of passwords used to access recorded lectures. Unless the Office of Student AccessAbility has approved the student to record the instruction, students are expressly prohibited from recording any part of this course. Recordings may not be published, reproduced, or shared with those not in the class, or uploaded to other online environments except to implement an approved Office of Student AccessAbility accommodation. Failure to comply with these University requirements is a violation of the [Student Code of Conduct](#).

The instructor may record meetings of this course. These recordings will be made available to all students registered for this class if the intent is to supplement the classroom experience. If the instructor or a UTD school/department/office plans any other uses for the recordings, consent of the students identifiable in the recordings is required prior to such use unless an exception is allowed by law.

Grading Policy

Item	Points	Total
Best 12 of 15 Quizzes	50 pts	600 pts
Attendance & Participation	100 pts	100 pts
Analysis (Coding - R) (?)	50 pts	50 pts
Career Development Activity	25 pts	25 pts
Final Exam	225 pts	225 pts
Total		1,000 pts

Grading Scale

A+ 97% - 100%	A 93% - 96%	A- 90% - 92%
B+ 87% - 89%	B 83% - 86%	B- 80% - 82%
C+ 77% - 79%	C 73% - 76%	C- 70% - 72%
D+ 67% - 69%	D 63% - 66%	D- 60% - 62%

Course Activities*The Flipped Classroom Model*

This course uses the flipped classroom model. Materials for each week will be made available on the previous Monday at 8:00 AM. Beginning with Chapter 2, you will find three or more 10-minute videos that explain core course concepts. **Please watch these videos before coming to class on Monday.**

We will use our time in class to review the techniques in the videos and apply them to real-world problems. The problems will be made available ahead of time via eLearning. Paper copies of the problem sets will be distributed in class; versions with the solutions are available in eLearning. This will be a hands-on, exercise-oriented class session. If you prepare by watching the videos, you will get more out of your time in the classroom.

Online Quizzes

Our material each week will start on a Monday. The quiz on that material will be **due by 11:59 PM the following Monday.**

1. You may **begin this quiz any time** during the week we cover the material in class.
2. You may make **unlimited attempts** on the quiz. Your highest grade will be recorded.
3. You have as long as you need to complete the quiz, but you **must complete it by 11:59 PM on the due date.**
4. You will be allowed to move back and forth between questions, but if you leave the quiz and come back to it, you will not be able to revisit those questions.
5. Your best 12 of 15 quizzes will count toward your final grade.

Example: In week four, we will cover Chapter 4. The online materials (videos, etc.) for Chapter 4 will be available at the beginning of week 3. We will begin our class periods for Chapter 4 during week 4. The quiz for Chapter 4 will be available on Monday of Week 4 and will be due by 11:59 PM on Monday of Week 5.

Open Book

In the real world, your employer will not ask you to perform statistical calculations "without referring to your notes;" neither will I. Your quizzes and the final exam will be an open note / open book. Resist the temptation to think these will be easy. Open-book exercises are generally more complex because the answer is not in the book.

While you may rely liberally on your notes and text for exams, you may not rely on your classmates or any other external material (see Incorporation of University Policies).

Final Exam

The final exam in this course is cumulative and will be available online at the end of the semester. The final exam will be administered under the same conditions as the weekly quizzes.

	<p><i>Career Development Activity</i></p> <p>Students will choose two from a list of career development activities. The list of available activities will be made available before the third week of courses.</p>
Make-up Exams	You may miss up to three of the 15 chapter quizzes with no penalty; thus, no make-up work is permitted for missed chapter quizzes. Should you encounter an emergency that challenges your ability to meet these dates, be sure to contact me as soon as possible.
Extra Credit	Grades in this class are based on the work that you do. There will be NO end-of-semester extra-credit assignments made on an individual student basis.
Late Work	As a general rule, late work will not be accepted. Should you encounter an emergency that challenges your ability to meet these dates, please contact me as soon as possible.
Special Assignments	There will be no special assignments.
Contacting the Instructor	<p>E-mail communication with any of your instructors should be considered formal, similar to other business-style e-mail correspondence. Unless instructed otherwise, your e-mail should address your instructor by title and name (e.g., Mr. Dao). Please restrict your e-mail correspondence to issues of class business and questions that the syllabus does not address.</p> <p>Please use appropriate capitalization, spell out words entirely, and sign your complete name. I will usually be able to answer your e-mails within 24 hours (except on weekends). I typically will not respond to e-mails between 6 PM and 9 AM. If you have substantive questions about course content, please see me during office hours when we can talk more productively. If you have an urgent matter, please CALL me by phone or Teams.</p> <p>IMPORTANT: When sending an e-mail, please include this course number (EPPS2302) in the subject line. This will flag your message for a prompt reply.</p>
Comet Creed	<p><i>This creed was voted on by the UT Dallas student body in 2014. It is a standard that Comets choose to live by and encourage others to do the same:</i></p> <p><i>“As a Comet, I pledge honesty, integrity, and service in all that I do.”</i></p>
Accommodations for Students with Disabilities	<p>The information contained in the following link lists the University’s policies regarding accommodations for students with disabilities.</p> <p>Please go to: https://coursebook.utdallas.edu/syllabus-policies#accommodations-for-disabilities</p>
Academic Support Resources	<p>The information contained in the following link lists the University’s academic support resources for all students.</p> <p>Please go to http://go.utdallas.edu/academic-support-resources.</p>
UT Dallas Syllabus Policies and Procedures	<p>The information contained in the following link constitutes the University’s policies and procedures segment of the course syllabus. Please review the sections regarding the credit/no credit grading option and withdrawal from class.</p> <p>Please go to http://go.utdallas.edu/syllabus-policies for these policies.</p>
Extra Credit	Grades in this class are based on the work that you do. There will be NO end-of-semester extra-credit assignments made on an individual student basis.
Late Work	As a general rule, late work will not be accepted. Should you encounter an emergency that challenges your ability to meet these dates, please contact me as soon as possible.

Special Assignments	There will be no special assignments.
Contacting the Instructor	<p>E-mail communication with any of your instructors should be considered formal, similar to other business-style e-mail correspondence. Unless instructed otherwise, your e-mail should address your instructor by title and name (e.g., Mr. Dao). Please restrict your e-mail correspondence to issues of class business and questions that the syllabus does not address.</p> <p>Please use appropriate capitalization, spell out words entirely, and sign your complete name. I will usually be able to answer your e-mails within 24 hours (except on weekends).</p> <p>IMPORTANT: When sending an e-mail, please include this course number (EPPS2302) in the subject line. This will flag your message for a prompt reply.</p>
Comet Creed	<p><i>This creed was voted on by the UT Dallas student body in 2014. It is a standard that Comets choose to live by and encourage others to do the same:</i></p> <p><i>“As a Comet, I pledge honesty, integrity, and service in all that I do.”</i></p>
Accommodations for Students with Disabilities	<p><i>The information contained in the following link lists the University’s policies regarding accommodations for students with disabilities.</i></p> <p>Please go to: https://coursebook.utdallas.edu/syllabus-policies#accommodations-for-disabilities</p>

The descriptions and timelines in this syllabus are subject to change at the discretion of the Instructor.